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## **1. Sign**

### **Recommended Actions:**

The appropriate health or government agency (Douglas County Health Department or City of Superior) should post "No Swimming" signs at Hog Island Inlet and Newton Creek. Signs should carry warnings about contamination problems present in these areas to discourage unauthorized use by children and adults.

### **Implementors:**

City of Superior, Douglas County Health Department.

### **Actions Taken:**

9/93: Presentation to Superior City Council.

10/93: Approved by City Council.

8/94: Sign installed. First sign didn't last; second sign put up.

9/00: One sign was present at Newton Creek where it enters Hog Island Inlet. "No Swimming" Douglas County Health Dept. No information about contamination on sign.

10/19/00: Meeting to present 1999 studies. WDNR, Douglas County Department of Health, and Lake Superior Research Institute were involved. WDNR intends to complete an environmental investigation during the next 9-12 months. Following the investigation the Department will work with responsible and interested parties on the remedial design and its implementation. Douglas County Health Department said generic "No Swimming" signs are all that can be put up until studies are completed to show the type and extent of contamination. They have put up two signs.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **2. Land Acquisition**

### **Recommended Actions:**

- (1) Wisconsin DNR should acquire lands owned by WERCO along the Red River, and along and near the St. Louis River in Douglas County.
- (2) The St. Louis River Board should acquire lands along the St. Louis River that meet the high priority acquisition criteria set forth in the St. Louis River Management Plan. Once acquired, the St. Louis River Board, MDNR, and others should prepare site management plans.

### **Implementors:**

WDNR and the St. Louis River Board.

### **Actions Taken:**

Wisconsin:

5/94: Wisconsin land acquisition approved by Governor.

9/94: WERCO Wisconsin signs option to sell 6,000 acres to WDNR.

12/94: Wisconsin Governor signs purchase agreement for WERCO property.

1/95: Property transfer complete.

6/95: WDNR hosts Stewardship Celebration for WERCO purchase.

Minnesota:

2/95: St. Louis River Board purchases 3,060 acres along St. Louis River below Brookston, with another 22,000 acres planned for acquisition.

4/98: Follow up letter sent to MDNR. 22,600 acres were acquired from Minnesota Power on 6/97. Of the 22,600 acres, Minnesota Power donated 5,640 acres. This exceeds land Minnesota Power originally agreed to donate by 1.5%. Recommended state acquisition of 395 acres leased by Minnesota Power. Minnesota Power will probably donate most of this property to the state with the goal of protecting it from future development.

### **Project Status:**

Complete.

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### **3. Golf**

**Recommended Actions:**

Existing turf management education efforts of the Minnesota Extension Service and UW-Extension should be coordinated to make these courses more available to Twin Ports residents. In addition, courses should contain more information on the alternatives to, and environmental implications of, using pesticides and fertilizers.

**Implementors:**

Minnesota Extension Service, Duluth; University of Wisconsin-Extension, Spooner.

**Actions Taken:**

4/10/98: Letter sent to Minnesota Extension Service.

10/00: Work plan, Task 1, to be assigned to intern: Spring 2001.

5/01: Working with local environmental studies students, the CAC identified the 13 golf courses within the lower St. Louis River. Both phone and mail contacts were made with golf course managers. The CAC provided information to them about ways to reduced maintenance costs. A part of this program stresses the management of rough areas and ways to significantly reduce labor and fertilizer costs. And how it is good for the environment. The program promotes sound land management and conservation of natural resources. All in a way that beautifies the golf course and increases wildlife habitat. Information was mailed to the golf course managers. Contact was also made with two programs currently underway – Audubon International and the Green Thumb Project. Some of the local golf courses were interested in more information about these projects, and one, the Nemadji Golf course was already participating in the Green Thumb Project.

**Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **4. Ship Waste**

### **Recommended Actions:**

The U.S. Coast Guard should enforce the fecal coliform and suspended solids standards and consider requiring additional standards for the wastewater discharge from Type I & II marine sanitation devices on commercial vessels.

### **Implementors:**

United States Coast Guard.

### **Actions Taken:**

4/8/98: Letter sent to USCG.

5/98: Reply letter from USCG received stating the USCG worked with Lake Carriers' Association, the Canadian government, the Canadian industry, and two Seaway organizations to test the operability of MSD. US vessels were in 100% compliance. Canadian vessels had some problems with UV monitoring strips. The USCG began working with the Canadians to bring their systems into compliance. Foreign vessel agents were hesitant to commit to a testing program. They say there is no documentation showing there is a problem and the Coast Guard has no evidence to refute their claims.

9/00: USCG: There have been no changes since the 5/98 letter.

11/00: The amount of fecal coliform waste generated from incoming and outgoing ships is negligible.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **5. Fish Pathology**

### **Recommended Actions:**

Conduct a pathological/histological study of non-migratory fish populations (i.e. bullhead, channel catfish, sucker) in the St. Louis River/harbor. In addition, conduct a fish health assessment in the AOC as part of a comprehensive long-term monitoring program.

### **Implementors:**

University of Illinois Envirovet, WDNR, EPA (possibly collaborate with local organizations i.e. UM-Duluth Natural Resources Research Institute, US EPA Laboratory, or UW-Superior Lake Superior Research Institute).

### **Actions Taken:**

8/95: MDNR and WDNR summary report.

9/00: MDNR: No study has been done. Coordinator of Envirovet: Two studies have been published from fish collected in 1992: "Folia Parasitologica 44:7-11" and "Journal of Parasitology 80:476-478." Envirovet has done studies in Duluth Harbor in 91, 92, 94, 98. They feel a combination field/lab study should be conducted developing a risk model and prioritizing risk. They have a student with qualifications to do a study and will help with recommendations if someone proceeds with this recommendation. PCA: Some catfish, walleyes and white suckers collected summer 2000, near Superfund sites, by DNR & PCA to be looked at by pathologist from DNR.

11/00: WDNR: "Assessment of Toxicological Impacts of Pollution at Hog Island Inlet Using Caged Channel Catfish" - a summary.

11/00: Letter sent to MDNR.

12/00: Meeting with WDNR, Douglas County Forestry, Carlton County SW, ABDI Land Commission, UWS, CAC, US Forest Service, NRCS to facilitate partnerships.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **6. Fish Tainting**

### **Recommended Actions:**

The Minnesota DNR, Minnesota Department of Health, or the Fond du Lac Reservation could conduct a study of fish tainting/smell in the Fond du Lac and Thompson Reservoirs; however, it is questionable whether abnormal smelling fish would be found. Caged fish could be placed at various locations in the two reservoirs to determine if they are tainted after a specified time. However, if the compound that gives the fish the abnormal smell were isolated to a few spots or episodic in nature, it would be luck if the fish cages were placed in the contaminated spots or were put in the water at the right time.

### **Implementors:**

N/A

### **Actions Taken:**

A study of fish tainting in the reservoirs is not recommended unless an episode of abnormal smelling fish is reported by a resource management agency.

### **Project Status:**

Complete.

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## **7. Lawn Education**

### **Recommended Actions:**

The following public education activities should be undertaken: the "Don't Dump" program of labeling storm sewers should be completed in Duluth and pursued in Superior and an education effort should be started to educate citizens about the proper "disposal" of yard wastes and the proper use and application of lawn chemicals.

### **Implementors:**

BWSR, MPCA, South St. Louis County SWCD, WLSSD, WDNR, City of Superior and its Public Works Department, Superior Recycling Coordinator, Minnesota Power, Duluth Water and Gas Department and/or Superior Water Light & Power, volunteers.

### **Actions Taken:**

4/8/98: Letter sent to WLSSD.

5/95: About 95 stormdrains were stenciled. "Paint the Town" project flyers and 50 "Stormie" fact sheets were distributed. Students and volunteers from Duluth and Superior participated. CAC funding came from Grant 102.

9/00: WLSSD sponsors "The Green Thumb" project. Educational literature on Pesticide Free Lawns, Weeds and Other Pests, Basic and Advanced Lawn Maintenance are available to the public.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **8. Nemadji**

### **Recommended Actions:**

Minnesota and Wisconsin should secure funding in order to implement recommendations from the Nemadji River Basin Project.

### **Implementors:**

Along with project leader NRCS, cooperators include federal, state and local units of government, plus universities, organizations and special interest groups. Implementation funds should be sought by MDNR and WDNR.

### **Actions Taken:**

8/95: MDNR summary report in file.

4/8/98: Letter sent to MDNR, WDNR.

7/98: Executive Summary Report: Erosion and Sedimentation In The Nemadji River Basin.

9/00 MN Ext. Service: A 319 work plan for Clean Water Partnership Grant, Nemadji River Basin Project Phase II.

11/00: Letter sent to MDNR.

12/00: Meeting with WDNR, Douglas County Forestry, Carlton County SW, ABDI Land Commission, UWS, CAC, US Forest Service, and NRCS to facilitate partnerships.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

## 9. Ruffe

### Recommended Actions:

Limit success of ruffe by restoring and maintaining a healthy, resilient, and diverse aquatic ecosystem.

- (1) MDNR/WDNR should focus on water quality, aquatic habitat, and the food web.
- (2) No action recommended to eradicate ruffe.
- (3) Continue research on biology and behavior; may lead to effective control.
- (4) Begin research on effects in Europe, with predictive models.
- (5) State/federal government should continue to develop regulations to prevent transport to new areas.

### Implementors:

MDNR, MPCA, NBS, USFWS, and WDNR.

### Actions Taken:

1/95: Recommendations presented to USFWS at meeting on ruffe control.

4/95: USFWS announces that states must initiate any ruffe eradication measures, due to opposition USFWS received from plan to eradicate ruffe in South Shore tributaries of Lake Superior.

6/95: WDNR says it has no plans to poison ruffe on South Shore. WDNR/USGS study in South Shore estuaries of the Iron and Sand Rivers provides evidence that a single chemical treatment in an estuary would be ineffective in controlling ruffe population reproduction because: 1) All reproducing ruffe are not in the estuary at any one predictable time. Many are still in Lake Superior. 2) The habitat and temperatures are within acceptable ranges within Lake Superior proper during the spawning period so movements into tributaries may not be required for successful reproduction. Horns, W.H. et al. 2000. "Seasonal Changes in Ruffe Abundance in Two Lake Superior Tributaries: Implications for Control." North American Journal of Fisheries Management. 20: 822-826.

8/95 MDNR summary report in file.

4/98: Follow up letters sent to MDNR, MPCA, and WDNR.

9/00: MN Sea Grant: 1994: Envirovet study published in Journal of Parasitology 80:476-478 about a native parasite infecting ruffe. 1996 Ruffe Control Plan was finalized. To date two of its six objectives have been met. 1996: Estimated 6 million ruffe in Lake Superior, population is thought to have stabilized. 1997: International Ruffe Symposium held with 5 European Countries; consensus was ruffe would not be a major problem in US. 2000: Discovery of a potent pheromone released by ruffe could be useful in controlling them. Round goby may be a bigger problem than ruffe.

11/00: Letter sent to MDNR.

### Project Status:

Project not completed, but there are one or more agencies currently working on it.

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## **10. Herons**

### **Recommended Actions:**

Locate and protect the current heron rookery and manage public lands in the AOC to ensure that appropriate habitat exists for at least one Great Blue Heron rookery.

- (1) WDNR should investigate reports of a new rookery on Dwight's Point.
- (2) Once located, MDNR or WDNR should initiate appropriate management protection.
- (3) Superior should manage appropriate areas in the Superior Municipal Forest to provide trees and structure required for rookeries.
- (4) Superior should, through special designation, protect natural values of the Municipal Forest.

### **Implementors:**

Superior Municipal Forest Committee, Superior City Council, MDNR and WDNR.

### **Actions Taken:**

8/95: MDNR summary report in file.

1997: WDNR designates part of the Superior Municipal Forest a State Natural Area. (Natural area in City of Superior that includes Dwight's Point.)

4/98: Follow up letters sent to MDNR, WDNR, and City of Superior.

9/00: To date, no one has looked for new rookery that may have replaced one lost because of a housing development. No known heron rookeries on Dwight's Point or in Superior Municipal Forest.

11/00: Letter sent to MDNR. CAC is working with USFW Service and UWS on a feasibility study for creating an area with structures for a new rookery.

3/01: Intern from UWS assigned to project.

### **Project Status:**

A course of action has been established. It will be implemented at a future date.

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## **11. Fish Stranding**

### **Recommended Actions:**

Minnesota Power should continue to improve operating procedures at dams on the St. Louis River to prevent stranding of fish and eggs.

- (1) Minnesota Power should continue to modify operating procedures of Fond du Lac dam to prevent recurrence of conditions that caused the most recent fish stranding event.
- (2) Minnesota Power conducts on-site physical observations throughout the spawning season. Results will be reported to MDNR and WDNR Area Fish Managers annually, with abnormal conditions reported immediately.
- (3) Minnesota Power and MDNR should develop ramping rates for Thompson and Fond du Lac dams that are operationally feasible and reduce potential for fish stranding. (General guidance = 10% change over six hours).
- (4) Minnesota Power, MDNR and WDNR should establish a system to monitor and evaluate current and future modifications of operating procedures so info is available to continually improve operations.

### **Implementors:**

Minnesota Power, MDNR and WDNR.

### **Actions Taken:**

- 8/95: MDNR summary report in file.  
4/98: Follow-up letters sent to MDNR and WDNR.  
11/00: Letter sent to MDNR.

### **Project Status:**

The CAC office is in the process of researching the status of this recommendation.

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## **12. Dam Relicensing**

### **Recommended Actions:**

In developing the Environmental Impact Statement (EIS) for relicensing the St. Louis River dams operated by Minnesota Power, FERC should define optimum aquatic habitat in all sections of the river, including the bypass reaches, and evaluate and quantify the impact of all level of flows through the bypass reaches on aquatic habitat, social and economic considerations.

(1) FERC should:

- (a) Determine the optimum aquatic habitat possible.
  - (b) Assess impacts of reductions from optimum aquatic habitat.
  - (c) Evaluate impacts of flow regimes on power generation.
- (2) Minnesota Power, MDNR, and WDNR should continually improve operations.
- (3) Evaluate flow rates and their effects on fish habitat.

### **Implementors:**

FERC, Minnesota Power, MDNR and WDNR.

### **Actions Taken:**

5/94: Recommendations sent to FERC.

8/94: FERC holds public hearing on EIS.

2/95: Final EIS issued.

8/95: MDNR summary report in file.

4/98: Follow up letter sent to MDNR.

11/00: Letter sent to MDNR.

11/00: MDNR is best suited to address aquatic habitat issue. Minnesota Power's St. Louis River dams were relicensed in July 1995 and will expire in 2035 (40 years). This is being appealed by Minnesota Power and MDNR. FERC licenses dams for 30-50 years. Minnesota Power wants a 50 year license. St. Louis River Dams are considered one project. This is unique. Most dams are considered separately. The state wants the FERC to address this because of the cumulative impact of multiple dams. The MPCA can revoke certification if necessary but FERC does not like to reopen a license. There would have to be a very serious reason.

### **Project Status:**

Needs evaluation. Can anything be done at this time since the dam license will not expire until 2035?

## 13. Point

### **Recommended Actions:**

The cities of Duluth and Superior and the states of Minnesota and Wisconsin should protect all of the undeveloped and natural areas of Minnesota Point (Park Point) and Wisconsin Point, and should restore natural plant communities to provide optimum habitat for breeding and migrating wildlife. The jurisdictions should also protect and maintain the conditions that sustain the natural geophysical dynamics associated with these bay-mouth bar ecosystems.

- (1) Superior should protect Wisconsin Point through special designation and education.
  - (a) The Superior Waterfront Redevelopment Commission should pursue actions in Waterfront Plan, including designation as a Natural Sand Dune Ecosystem Preserve.
  - (b) The Superior Waterfront Redevelopment Commission and City of Superior should educate users and the public about Wisconsin Point's unique ecosystem.
- (2) City of Superior, with WDNR, should initiate a habitat management program to encourage (protect, increase, expand, reestablish) native plant communities.
- (3) City of Duluth and other landowners should provide permanent protection to undeveloped portions of Minnesota Point. This could involve special designations (Minnesota Point a Sand Dune Ecosystem Preserve, etc.), a land trust, or conservancy group.
- (4) Residents of Minnesota Point are encouraged to assume active stewardship.
- (5) MDNR and City of Duluth should initiate a habitat management program on Minnesota Point and Hearing Island to encourage (protect, increase, expand, reestablish) native plant communities.
- (6) Duluth and Superior should develop and implement a management plan to protect and restore the Minnesota-Wisconsin Point bay-mouth bar ecosystem, with property owners and HTAC.

### **Implementors:**

City of Duluth, City of Superior, MDNR, WDNR, owners of public and private lands on Wisconsin and Minnesota Points, and the Metropolitan Interstate Committee's Harbor Technical Advisory Committee.

### **Actions Taken:**

5/94: Recommendations sent to eight listed implementors.

4/98: Follow up letters sent to cities of Duluth and Superior.

6/99: Minnesota Point Environmental Management Plan was completed. Copy available at library and CAC office.

9/00: Superior Water, Light & Power donated land from the airport to the entry on Minnesota Point to the Minnesota Land Trust. They are waiting for a cabin to be removed so it can be designated a scientific and natural area. The Corps of Engineers land by the piers is in the process of being sold.

11/00: The US Fish & Wildlife Corps of Engineers is holding on to Minnesota side of the pier but they plan to surplus the Wisconsin side. The General Service Administration (GSA) will contact federal then state agencies to see if they have an interest in the area. The USF&W will work with WDNR to explore making it a scientific and natural area.

11/00: Letter sent to MDNR.

### **Project Status:**

This project does not appear to have a plan in place to address the problems stated. A plan of action needs to be established.

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## **14. Duluth Inflow/Infiltration**

### **Recommended Actions:**

- (1) Building codes should be amended to require that existing homes be brought up to current plumbing code.
- (2) The City of Duluth should prioritize neighborhoods to define areas with the most severe inflow problems and immediately begin to eliminate the I & I problem with available resources. They should also vigorously pursue funding to deal with the problem of inflow from residential sanitary systems.
- (3) The City of Duluth should set up a mechanism to ensure that homeowners do not dismantle sump pump, roof, and footing drain connections that are in compliance with building codes in order to illegally connect them back to the sanitary system.
- (4) The City of Duluth should continue maintaining the sanitary sewer system to minimize infiltration problems.

### **Implementors:**

City of Duluth.

### **Actions Taken:**

4/10/98: Letter sent to City of Duluth.

9/00: Inflow / Infiltration is a major problem in Duluth. Overflow sites have been identified and additional money will be needed to correct the problem, as it is more complex than a previous study indicated in Minnesota. A new stormwater utility was created in Duluth. A needs assessment has been developed. The city is working with a surface water contractor who is working with stakeholders to address the city stormwater problems: an inventory of all outflows to streams, starting with Chester Creek, additional creek studies conducted over the next 7 years, and storm water permits will be developed.

10/00: WLSSD: Issue Paper Concerning Wet Weather Flow Issues: Sanitary Sewer Overflows Developed For the WLSSD Effluent Quality Master Plan Project.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **15. Boating Practices**

### **Recommended Actions:**

Inform the public about environmentally safe boating practices through education and inspections activities.

### **Implementors:**

LSRI (UWS), USCG, USACOE, marinas, boat launch operators/owners, sporting goods stores.

### **Actions Taken:**

4/98: Letter sent to USCG. Response received on 5/98.

12/98: USCG efforts: USCG Auxiliary programs include Sea Partners (later Sea Keepers), school programs, displays, demonstrations. LSC developed a CD. USCG held a marina program in Superior in 1997 and has a local brochure on marina disposal practices.

9/00: Increased presence on waterfront and monitoring of oil transfers on bigger ships has had positive results. Oil spills continue to be on a downward trend since 1997. Programs detailed on 5/98 response have been effective and are still being implemented. They have a receptacle for used oil and monitor the marina closely for illegal dumping. There is no literature available to educate the public, but the marina would be happy to distribute something if it were available.

9/1/01-4/1/02: Marine Safety Office Duluth is visiting all marinas along the coastal area to document information about the marina operations and to educate the marina operators and resident boaters on pollution prevention practices and spill response procedures, exotic species prevention, etc. Handouts are being provided to marina operators.

### **Project Status:**

A course of action has been established. It will be implemented at a future date.

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## **16. Feedlot**

### **Recommended Actions:**

The South St. Louis County and Carlton County SWCDs and the ABDI-LCD should increase their efforts to assist farmers with feedlot management and animal waste control.

### **Implementors:**

The South St. Louis County & Carlton County SWCDs (in Minnesota) and the ABDI-LCD (in Wisconsin).

### **Actions Taken:**

4/10/98: Letter sent to ABDI-LCD.

9/00: MPCA is holding a meeting at end of month to explain revised feedlot management. Carlton County is considering using this info to hold more localized training for feedlot owners. A feedlot inventory was done in 1997 which identifies and prioritizes feedlots on the watershed. 1999 made \$100,000 of loans available for feedlot owners. Feedlot inventory done in 1996 by St. Louis County. No priorities were made. Feedlot owners come to the county; the county does not go to them.

10/00: St. Louis County provides technical assistance to feedlot owners and updates 2 - 3 systems a year. Letter sent to ABDI.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **17. Livestock Access**

### **Recommended Actions:**

St. Louis, Carlton, and Douglas counties should enact ordinances requiring that any pasturing or watering of cattle on the banks of a stream be addressed in an approved conservation plan. Minnesota and Wisconsin should consider protecting the most sensitive riparian areas by direct purchase or by acquiring conservation easements.

### **Implementors:**

St. Louis, Carlton, and Douglas counties, South St. Louis and Carlton County SWCDs, ABDI-LCD, MDNR, WDNR, NRCS, St. Louis River Board.

### **Actions Taken:**

4/10/98 Letter sent to ABDI, Douglas County, MDNR, WDNR. Response was received from MDNR and Douglas County.

10/00: Letter sent to ABDI and Douglas County Zoning Administrator will attend 1/01 EC meeting.

11/00: Letter sent to MDNR.

### **Project Status:**

This project does not appear to have a plan in place to address the problems stated. A plan of action needs to be established.

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## **18. Shoreline Forestry**

### **Recommended Actions:**

Education efforts should be undertaken to educate riparian landowners, loggers, and the public about shore land ordinances that deal with forestry practices and vegetative cutting.

### **Implementors:**

RAP staff, county zoning officials, county and state forest managers, the Minnesota and Wisconsin Foresters Associations, private forestry consultants, MPCA Public Information Office, WDNR Information and Education Office.

### **Actions Taken:**

8/95: MDNR summary report in file.

4/10/98: Letter sent to Douglas County, MDNR, WDNR.

9/00: (GEIS) Generic Environmental Impact Statement cost millions of dollars and took 3-4 years to complete. The Forest Resource Council in St. Paul was formed to implement GEIS recommendations. They work with other agencies. Two handbooks available to the public have been published; Best Management Practices, one for forest lands and one for wetlands. On going education includes conferences held at forestry centers in Cloquet, Grand Rapids, and International Falls with timber producers and forest industries of Minnesota. Conferences include seminars and field days where on-site training takes place.

10/00: Letter sent to Douglas County Zoning Administrator to attend 1/01 EC meeting.

11/00: Letter sent to MDNR.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **19. Forest Diversity**

### **Recommended Actions:**

Forest managers should manage forests in the St. Louis River watershed on a subwatershed basis, and diversify age classes to reduce peak flows in streams and rivers.

### **Implementors:**

Minnesota and Wisconsin state foresters; Carlton, Douglas, and St. Louis county foresters; large industrial forest landowners; private forest consultants. (Consultant names could come from the American Association of Foresters, BWSR, or foresters with MDNR, WDNR and/or ABDI-LCD).

### **Actions Taken:**

8/95: MDNR summary report in file.

4/8/98: Letter sent to Douglas County, MDNR, WDNR.

11/00: Letter sent to MDNR.

### **Project Status:**

This project does not appear to have a plan in place to address the problems stated. A plan of action needs to be established.

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## **20. Mailing List**

**Recommended Actions:**

Mailing lists should be developed for the Nemadji and St. Louis River watersheds.

**Implementors:**

Carlton County Board, Carlton County SWCD, Douglas County Board, Duluth/Superior Metropolitan Interstate Committee, local governments.

**Actions Taken:**

10/00: CAC to apply for grant. Nemadji River Coordinator to begin work on directory.

**Project Status:**

A course of action has been established. It will be implemented at a future date.

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## **21. Foam**

**Recommended Actions:**

Determine the content and source of the accumulations of foam on the St. Louis River downstream of Cloquet.

**Implementors:**

MPCA, plus a testing lab willing to analyze samples without charge.

**Actions Taken:**

Spring 1995: MPCA willing to collect foam samples if a lab will analyze them without charge.

4/98: Letter sent to MPCA.

9/00: MPCA is not aware of a press release ever being issued stating that the foam was from a naturally occurring source. They will check to determine if there is enough citizen concern to warrant a press release. Otherwise they feel that removing this RAP from active recommendations is appropriate.

**Project Status:**

Complete.

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## **22. Agricultural Erosion**

### **Recommended Actions:**

State and county land management agencies and the state Extension Services should promote the use of agricultural BMPs, through development of ordinances and continuation and expansion of educational efforts, in order to reduce NPS nutrient and sediment loading to the St. Louis River, harbor and, ultimately, Lake Superior.

### **Implementors:**

NRCS, sponsors of the Nemadji River Basin Project (Douglas County Board, Carlton County Board, Carlton County SWCD, Duluth/Superior Metropolitan Interstate Committee), Minnesota and Wisconsin State Extension Services, St. Louis County, South St. Louis County SWCD and, in Wisconsin, the ABDI-LCD.

### **Actions Taken:**

4/10/98: Letter sent to Minnesota Extension Service, NRCS, ABDI.

10/00: Letter sent to ABDI and Douglas County Zoning Administrator to attend 1/01 EC meeting.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **23. Construction Erosion**

### **Recommended Actions:**

Construction site BMPs should be used at all new development projects and redevelopment projects to control erosion and minimize sediment and nutrient loading to water bodies.

### **Implementors:**

In Minnesota, SWCDs are leading agencies for promoting erosion control ordinances and offering related educational programs. In Wisconsin, leading agencies are the ABDI-LCD, UW-Extension, DILHR and WDNR. In addition, the cities and counties on both sides of the AOC have responsibility for adopting ordinances, sending staff to educational programs, and seeking authority to implement state programs.

### **Actions Taken:**

4/10/98: Letter sent to ABDI, City of Superior, Douglas County, WDNR.

10/00: Letter sent to ABDI and Douglas County Zoning Administrator to attend 1/01 EC meeting. Intern to be assigned Work Plan, Task 3, Spring 2001. No new construction zoning ordinances have been passed in the last five years. MPCA responsible for NPDES.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **24. Ditch Design and Maintenance**

### **Recommended Actions:**

State, county, township, and municipal highway departments should minimize roadside ditch erosion by using BMPs for ditch design and maintenance.

### **Implementors:**

South St. Louis County SWCD; Carlton County SWCD, ABDI-LCD; county, township, and municipal highway departments.

### **Actions Taken:**

4/10/98: Letter sent to ABDI, Douglas County.

10/00: Letter sent to ABDI.

11/00 MN Erosion Control: EPA NPDS Phase II Program will be implemented in two sessions. Any city over 10,000 people OR any city that has a stormwater discharge to a sensitive water body will have to comply. First session will be city, county engineers, and zoning. A model will be developed for a stormwater ordinance for the community based on the "best of the best" models already in use in other areas. Second session will be field engineers, inspectors to review plans and implementation. Goal is to get everyone involved working together. They are working with BWSR. They invited the CAC to participate. Head of Environmental Services at MDOT: the Hydraulics Manual has been updated but not distributed. Roads that get state aid are required to follow standards and money is available. The problem is low volume roads that do not qualify for state funding. Townships and counties have inadequate funds to apply high standards even though these roads may have ditches that flow into sensitive waterways. A research project is underway that will result in a product. BMP Erosion Control for Low Volume Roads started as a Minnesota state project and has become a national project with emphasis on Minnesota. The project will take a survey of practices currently being followed, then develop a guide for proper construction and maintenance. Completion in 2 years.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

**DRAFT**

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## **25. Stockpiles**

### **Recommended Actions:**

MPCA and WDNR should require NPDES stormwater permits for the material handling facilities in the Twin Ports and encourage industries with stockpiles to use storage pile best management practices.

### **Implementors:**

MPCA, WDNR.

### **Actions Taken:**

4/8/98: Letter sent to MPCA, WDNR.

10/00: Since the City of Duluth does not yet have a NPDES stormwater permit, there are no regulatory measures that MPCA can take to require anything. The City of Duluth is in the process of developing a stormwater management plan. Wisconsin has developed a BMP for taconite, coal, wood, salt, snow stockpiles. Received a list of facilities in the City of Superior with storage sites that have stormwater discharge permit coverage which requires a pollution prevention plan to minimize pollutants from stormwater run off. EPA sets standards for facilities that need permits. These facilities include manufacturing with industrial class 2000-3900 series, including those with mineral storage piles, generating plants, salvage yards, and transportation facilities that do vehicle maintenance.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

**DRAFT**

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## **26. Water Birds**

### **Recommended Actions:**

WDNR should coordinate information available on birds affected by toxic contaminants and assess the feasibility of using birds to identify toxic hot spots and monitor uptake of chemical contaminants in the food web of the AOC.

(1) WDNR should consolidate and assess data.

(2) WDNR, with Minnesota/federal agencies should explore resampling gull and tern contaminant levels (Niemi et al.) to compare current and historical levels.

(3) Based on results in (2), these agencies should develop and implement a monitoring program for periodic resampling and assessment of bird contaminant levels.

(4) These agencies should explore a monitoring program to assess uptake of chemical contaminants by birds, including dose-response relationships.

### **Implementors:**

WDNR.

### **Actions Taken:**

4/98: Follow up letters sent to MPCA and WDNR.

01/01: No additional studies have been conducted. If money were available, this would be a good research project.

### **Project Status:**

The CAC office is in the process of researching the status of this recommendation.

## 27. Raptors

### **Recommended Actions:**

The Wisconsin and Minnesota DNRs should coordinate monitoring efforts and consolidate data to evaluate the factors that potentially limit the population growth of Bald Eagles and other raptors in and near the St. Louis River AOC.

- (1) WDNR should include all Bald Eagles that nest in and near the AOC in ongoing research projects and monitoring of blood contaminant levels.
- (2) WDNR, with Minnesota/federal agencies, should investigate contaminant uptake routes in Bald Eagles and their prey, including pigeons and other birds that eat grain from rail tracks.
- (3) WDNR and MDNR should minimize eagle exposure to contaminated prey and reduce contaminant uptake by prey species. Upon acceptance of the Great Lakes Bald Eagle Biosentinel Protocol by the IJC, WDNR, MDNR, and MPCA should actively implement it.
- (4) USEPA, WDNR, and MPCA should establish and enforce water quality regulations that eliminate discharge of persistent, bioaccumulative toxic substances.
- (5) USFWS should coordinate data assessment of contaminant accumulation and raptor die-offs in the AOC.
- (6) Agencies and universities should do research about identification and assessment of potential indicators of ecosystem health.

### **Implementors:**

MDNR, MPCA, and WDNR's Water Quality Division and Bureau of Research, USEPA (GLNPO).

### **Actions Taken:**

4/98: Follow up letter sent to MDNR.  
01/01: No progress at this time.

### **Project Status:**

This project does not appear to have a plan in place to address the problems stated. A plan of action needs to be established.

**DRAFT**

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## **28. Piping Plovers**

### **Recommended Actions:**

The Minnesota and Wisconsin DNRs should continue to monitor potential Piping Plover nest sites. No narrowly targeted management activity is recommended at this time.

- (1) Monitoring should include Piping Plovers.
- (2) MDNR and WDNR should continue to provide Piping Plover nesting habitat when possible within the guidelines of Common Tern habitat management.
- (3) If Piping Plovers return to the AOC, management alternatives should be reconsidered by the Piping Plover Recovery Team, MDNR, and WDNR.

### **Implementors:**

MDNR, WDNR, and the Piping Plover Recovery Team.

### **Actions Taken:**

- 8/95: MNDR response in file.
- 4/98: Follow up letters sent to MDNR and WDNR.
- 11/00: Letter sent to MDNR.
- 11/00: Letter sent to USFWS.

### **Project Status:**

The CAC office is in the process of researching the status of this recommendation.

## 29. Common Terns

### **Recommended Actions:**

The Minnesota and Wisconsin DNRs should continue to provide high quality nesting habitat for common terns and should enhance the quality and quantity of habitat for terns that breed in or migrate through the St. Louis River and Nemadji River watersheds.

- (1) WNDR and MDNR should continue to manage for Common Terns and enhance natural nesting sites.
- (2) Efforts to reduce competition by Ring-billed Gulls should be continued and enhanced.
- (3) Management agencies should seek 1-3 additional nesting areas for Common Terns, including possibility of building islands with clean dredge materials.
- (4) Vegetation control in Common Tern areas should be continued and better methods investigated.
- (5) Common Tern nesting on islands in reservoir lakes should be encouraged. Management activity to control vegetation on these islands should be evaluated; if helpful, it should be continued, and the feasibility of expanding it to other islands evaluated.
- (6) Exposure of Common Terns to contaminants via the food chain should be reduced, through efforts to eliminate toxic contaminants in the watershed.

### **Implementors:**

MDNR, WDNR, the Metropolitan Interstate Committee, USACOE, SPAD, MPCA, USEPA, Minnesota Power, and regional research institutions (UMD and UW-S).

### **Actions Taken:**

4/98: Follow up letters sent to MDNR, MPCA, and WDNR.

12/00: WDNR and MDNR have been managing common tern nests located on Interstate Island in an attempt to increase tern populations. String grid fences are being used to try to prevent gulls from invading the tern nesting areas. Gull nests found within the fenced area are destroyed each year to prevent competition with terns. Counts of nests, number of eggs, number of chicks hatched, and number of chicks fledged are done each year to evaluate how the tern population is doing. Each year juvenile terns are banded to help with the determination of the tern survival rate. Vegetation is trimmed each year to aid the nesting terns and the banding process. Common Tern nesting habitat located on Wisconsin Point Wildlife Management Area was also managed in 2000, but no terns were found nesting there.

### **Project Status:**

The CAC office is in the process of researching the status of this recommendation.

**DRAFT**

**DRAFT**

## **30. Septic**

### **Recommended Actions:**

Reduce the amount of inadequately treated septic system wastewater reaching the St. Louis River and other water bodies through adoption and enforcement of county point-of-sale ordinances for on-site septic systems.

### **Implementors:**

St. Louis County Environmental Services, Douglas County Zoning Office and Health Department, Carlton County Zoning Office, St. Louis River CAC.

### **Actions Taken:**

5/94: Minnesota passed Individual Sewage Treatment System Law requiring repair or replacement of failed septic systems when selling or improving a home.

1/95: Recommendation presented to South St. Louis County SWCD.

10/98: Letter sent to Duluth Citywide Citizen Advisory Committee for Community Development.

12/98: Committee says Douglas, Carlton, and St. Louis counties have such a requirement.

9/00: St. Louis County: New ordinance as of 8/1/01 will require a certificate of compliance issued by a company licensed through the PCA for any property transfer. Certificate requirement will be temporarily waived for sales 11/1 - 4/30. Reinspection must occur by 6/1 with certificate issued by 9/30 from Douglas County Private Sewage System. New regulations from Department of Commons.

10/00: Letter sent to Douglas County Zoning Administrator for update on 8/95 response. He will attend 1/01 EC meeting.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **31. Silvicultural BMPs**

### **Recommended Actions:**

State and county land management agencies and the state extension services should promote the use of silvicultural BMPs, and audit BMP compliance, in order to reduce NPS nutrient and sediment loading to the St. Louis River, harbor, and ultimately Lake Superior.

### **Implementors:**

Implementors in both states include NRCS, USFS, state DNRs and state extension services. It includes SWCDs in Minnesota and county foresters in Wisconsin. There are numerous cooperators in Minnesota; these include the Private Woodlands Committees. In Wisconsin, they include the Northwest Regional Planning Commission, Forest Products Council, the Paper Council, the Governor's Council on Forest Products, the PRI-RU-TA and Lumberjack Rural Conservation and Development Groups, and the Timber Producers' Association.

### **Actions Taken:**

4/10/98: Letter sent to Douglas County, MDNR, WDNR, Minnesota Extension Service.

### **Project Status:**

The CAC office is in the process of researching the status of this recommendation.

**DRAFT**

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## **32. Ballast Water**

### **Recommended Actions:**

Research to assess potential technologies for preventing introduction and spread of undesirable exotic species in the Lake Superior watershed via ballast water should be accelerated. Results of this research should be used to establish regulations for ballast water management.

### **Implementors:**

USCG, Canadian Coast Guard, USFWS, the maritime industry, Aquatic Nuisance Species (ANS) Task Force, and public and private research institutions.

### **Actions Taken:**

7/95: HR 3360 (referenced in recommendations) did not get out of committee.

4/98: SPAD is working on a committee to determine an acceptable method to prevent transport of ANS in ballast water; no letter sent.

11/00: Seaway Port Authority: Since 1993 the EEZ, 200 mile perimeter, mid-ocean exchange has been highly effective (over 95% effective). A voluntary discharge has been effective in keeping ruffe from spreading in Lake Superior. Proposed legislative initiatives are on hold until next session. At this time the technology does not exist to filter out anything below 50 microns so Zebra Mussels cannot be controlled with filters. Testing is being done on new technology. What is most needed at this time is a set standard. See document: "Great Lakes Maritime Industry Voluntary Ballast Water Management Plan for the Control of Ruffe in Lake Superior Ports 1997".

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **33. Exotics Transport**

### **Recommended Actions:**

Efforts to educate users of the St. Louis River System about the importance of preventing the spread of ecologically harmful exotic species should be enhanced and coordinated between the states of Minnesota and Wisconsin. Additional regulatory measures to restrict the transport of these species into uninfested areas should be evaluated and enacted if feasible.

### **Implementors:**

Great Lakes Panel on Aquatic Nuisance Species, MDNR, State of Minnesota, WDNR, and State of Wisconsin.

### **Actions Taken:**

4/98: Follow up letter sent to WDNR.

11/00: MDNR Exotic Species Coordinator: MDNR has rotating watercraft inspections at access sites to educate boaters. A field guide is handed out the first time. For future reference, a sticker is placed on the boat to indicate that the boater has received the guide. Signs are posted at access sites that state:

1. The area is infested.
2. How to prevent the spread of exotics.
3. Reminder to stop and remove exotics from watercraft.

Information about exotics is included in boating and fishing regulation booklets that are given out when people apply for licenses. Radio and TV spots have been run in Duluth as well as billboards and press releases on the ruffe. Work with Minnesota Sea Grant and use of their exotics information cards. MDNR can issue tickets for violations at road checks and boat launches, but they have not done this in the Duluth area. Any transport of water on public roads from an infested waterway requires a permit regardless of the amount.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **34. Purple Loosestrife**

### **Recommended Actions:**

Populations of purple loosestrife in the St. Louis River AOC should be reduced primarily by using biological organisms currently approved for use by the USDA.

(1) MDNR and WDNR should initiate release and monitoring of approved biological control organisms ASAP.

(2) State DNRs and Departments of Agriculture should educate retailers and consumers about purple loosestrife (i.e., with "Purple Loosestrife Alert"). If still sold, the feasibility of enforcement under noxious weed programs should be assessed.

(3) State DNRs, with GLIFWC, should use best available technology (BAT) to remove small populations in the estuary.

(4) State Departments of Transportation should use BAT to remove small populations from road margins in the AOC and develop procedures to reduce survival at roadside sites disturbed by maintenance and construction activities.

(5) Interstate transport via mail should be investigated. USFWS, with state agencies, should determine feasibility of pursuing federal legislation.

### **Implementors:**

Minnesota and Wisconsin Departments of Agriculture, Natural Resources, and Transportation; GLIFWC, USFWS.

### **Actions Taken:**

9/94: Funding proposal to GLNPO rejected.

7/95: MDNR released 3,500 beetles at Grassy Point to control purple loosestrife.

WDNR released beetles at the base of the Bong Bridge.

4/98: Follow up letters sent to MDNR and WDNR.

5/99: CAC anticipates funding from EPA to work on problem.

10/00: Sea Grant: Five years after beetle release at Grassy Point, they feel they were successful in reducing Purple Loosestrife in the area. Intern project to begin Spring 2001.

01/01: Brock Woods WDNR planning to visit Superior in spring to check on foliage beetle and weevil sites. In his experience placing weevils out as eggs hasn't been very successful, so he's not expecting to find many of those.

07/23/01: Beetle Mania Day at Smithville Landing in Duluth. Beetles (*Gallericella*) released at four locations along the St. Louis River by 4-H kids.

08/01: Brook Woods checked wetlands south of Bong bridge. Beetles have dispersed from a release site.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **35. Grain**

### **Recommended Actions:**

Determine the extent of remnant grain near the elevators and educate the grain elevator personnel on potential effects to air and water quality.

### **Implementors:**

WDNR, LSRI (UWS), MPCA.

### **Actions Taken:**

4/98: Letter sent to MPCA, MDNR, WDNR.

8/95: Reply from MPCA.

11/00: WDNR has issued air operations permits to all elevators except Harvest States which is in process. Elevators must install a particulate emission device where transfers occur. If inspection is not passed, a letter of non-compliance is issued. If not corrected, it is referred to the Department of Justice. WDNR inspectors are not authorized to issue citations. WDNR has an on-going ambient air-monitoring network. Particulate matter on filters is analyzed by the state Lab of Hygiene. If general air standards are not met, the source of the problem can be identified.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **36.1. Fond du Lac Septic**

**Recommended Actions:**

Reduce the amount of inadequately treated wastewater reaching the St. Louis River by correcting the failing septic system problems in Fond du Lac, Minnesota.

**Implementors:**

St. Louis County Health Department, City of Duluth, Western Lake Superior Sanitary District, Fond du Lac residents, MPCA.

**Actions Taken:**

Letter sent to Duluth Citywide Citizen Advisory Committee for Community Development. Two letters sent more recently.

9/00: City of Duluth to get grant funding to connect Fond du Lac to WLSSD. Should be completed soon.

**Project Status:**

Project not completed, but there are one or more agencies currently working on it.

**DRAFT**

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## **36.2. Oliver Septic**

**Recommended Actions:**

Reduce the amount of inadequately treated wastewater reaching the St. Louis River by correcting the failing septic system problems in Oliver, Wisconsin.

**Implementors:**

Douglas and St. Louis County officials, WLSSD, Oliver residents, MPCA, WDNR.

**Actions Taken:**

Pipe laid under the St. Louis River, connecting Oliver, Wisconsin, to WLSSD. The project completed at the end of 1996, hook up began beginning of 1997.

**Project Status:**

Complete.

**DRAFT**

**DRAFT**

## **37. Chlorination**

### **Recommended Actions:**

- (1) WLSSD should proceed with plans to discontinue chlorination for a period of time to conduct studies of the alternatives to the use of free chlorine for disinfection.
- (2) The City of Superior should examine alternatives to chlorination at their wastewater treatment plant.

### **Implementors:**

WLSSD, MPCA, City of Superior.

### **Actions Taken:**

4/8/98: Letter sent to City of Superior, MPCA, WLSSD.

11/00: Superior Wastewater Treatment Plant: At this time chlorine gas is being used. There are no regulations that prohibit its use. In anticipation of future regulations the Assistant Supervisor for Operations is gathering information on alternatives such as UV radiation.

11/00: WLSSD: A temporary variance was issued and expired in 1995. A permanent variance to continue the non-chlorination project was granted in 1996 and will remain in effect for the life of the permit (5 years) and will be requested for the next permit.

9/01: WLSSD is not chlorinating or disinfecting at this time. WLSSD's variance allows the District to discontinue disinfection unless conditions trigger the need, in which case WLSSD will resume chlorination. The triggers include high bacteria counts downstream, plant upset, high turbidity in the effluent, and bacteria detected in drinking water intakes.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

**DRAFT**

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## **38. Habitat Plan**

### **Recommended Actions:**

Design and implement a coordinated comprehensive plan for the protection and furtherance of biodiversity and ecological diversity within the AOC, without seeking to restore the estuary to its presettlement condition, through the creation, restoration, reclamation, enhancement, and management of a desired mix of ecosystems and habitat.

- (1) The CAC should support and participate in a citizen-based process to develop a biodiversity plan for the AOC, and to identify an institutional structure, based on citizen participation, to work for implementation of the plan.
- (2) State DNRs, federal and local governments should actively participate in the plan.
- (3) Superior, WDNR, and NWRPC should develop a Port Plan for the Superior side of the harbor.

### **Implementors:**

MDNR, WDNR, cities of Duluth and Superior, Douglas County, St. Louis County, St. Louis River CAC, and federal government.

### **Actions Taken:**

9/94: Funding proposal rejected by GLNPO.

4/98: Follow up letters sent to City of Duluth, City of Superior, and WDNR.

5/99: CAC receives \$50,000 in USEPA funds to implement this recommendation and is in process with TNC, NSTW, CGIS.

### **Project Status:**

A course of action has been established. It will be implemented at a future date.

**DRAFT**

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## **39. Superior Inflow/Infiltration**

### **Recommended Actions:**

- (1) The City of Superior should continue its efforts to eliminate Category I bypasses by developing an approved facilities plan.
- (2) In the long term, the City of Superior should develop solutions to minimize Category II bypasses resulting from inflow and infiltration.

### **Implementors:**

City of Superior.

### **Actions Taken:**

4/10/98: Letter sent to City of Superior.

Stormwater management planning was begun as part of the three state Lake Superior stormwater study in the mid 1990s. As part of Superior's stormwater permit requirements, they have done extensive dry weather sampling to test for illicit discharges and have prepared detailed maps of the existing stormwater infrastructure. They are currently in the process of preparing plans to deal with flooding and bypassing during larger rain events and are preparing stormwater management plans to address pollutant, volume, and velocity concerns associated with existing and potential new development. To assist with this effort, the City has allocated funds for a stormwater engineering position and has filled this position. One of the projects that the City of Superior would like to tackle next is an extensive public information, education, and involvement campaign to provide citizen input into the stormwater management plan. This would be a priority project to receive funding if any funds were available. This project would meet several high priority implementation items in the St. Louis River RAP as well as the Lake Superior LaMP.

11/16/00: A list of facilities in the City of Superior with storage sites that have stormwater discharge permit coverage which requires a pollution prevention plan to minimize pollutants from storm water run off was provided to the CAC.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **40. Erie Pier Capacity**

### **Recommended Actions:**

Indefinitely extend the life of the Erie Pier Dredged Materials Processing Facility by processing and reusing as much dredged material as possible and, if necessary, relocating non-reusable dredged materials to an inland disposal facility.

### **Implementors:**

US Army Corps of Engineers and the Seaway Port Authority of Duluth with assistance and advice from the Harbor Technical Advisory Committee (HTAC) of the Metropolitan Interstate Committee (MIC)

### **Actions Taken:**

8/95: Response from MIC and US Army Corps of Engineers.

11/00: The Corps did a 20 Year Dredged Materials Management Plan that recommended dredged materials be used to create habitat enhancement at the 21st Avenue West slip area. In reviewing the project proposal, the MPCA identified a number of water quality concerns and issues that need to be addressed prior to issuing an approval (401 Certification) for the project. The Corps environmental assessment for the project did not adequately address these issues and further assessment will be necessary by implementors before the MPCA can consider 401 Certification. The biggest issue related to existing contamination in the project area and whether creating a wetland habitat in the area would sufficiently address the contamination. If Erie Pier capacity is reached dredging will have to stop. This will result in lake carriers being forced to lighten their loads which will greatly increase their shipping costs. The Port Authority has removed some dredged materials for projects. A pilot study by the Corps has used the nutrient rich dredged materials to reclaim mining sites on the Iron Range. The cost of transporting the dredged material to the Range is high. One suggestion being explored is putting the dredged material in the empty taconite railroad cars for transport back to the Range. Also, Hallett Dock Company has started a "pilot" processing facility at Erie Pier to produce topsoil. They will investigate the feasibility/profitability of an on-going operation and have had a lot of inquiries and interest in the product (mixture of dredged materials with peat).

### **Project Status:**

This project does not appear to have a plan in place to address the problems stated. A plan of action needs to be established.

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## **41. Habitat Enhancement**

### **Recommended Actions:**

Reduce the need for dredged materials processing and disposal capacity by utilizing suitable dredged materials to restore, enhance, and recreate fish and wildlife habitat.

### **Implementors:**

US Army Corps of Engineers, Seaway Port Authority of Duluth, HTAC, MIC, and RAP committees, MPCA, MDNR, WDNR.

### **Actions Taken:**

4/98: Letter to MPCA, MDNR, WDNR.

8/95: Received response from MDNR and MPCA and MIC and US Army Corps of Engineers.

11/00: Letter to MDNR.

11/00: US Corps of Engineers: The corps did a 20 Year Dredged Materials Management Plan that recommended dredged materials be used to create habitat enhancement at the 21st Ave West slip area. MPCA will not issue a 401 certificate until they can do additional sediment testing at the site. This will take approximately two years.

### **Project Status:**

This project does not appear to have a plan in place to address the problems stated. A plan of action needs to be established.

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## **42. Zebra Mussels**

### **Recommended Actions:**

Under development: Continue to work with the shipping industry on finding ways to eliminate importation of zebra mussels into the AOC and continue to educate the boating public about the preventative measures that should be practiced to avoid further introductions of this serious pest. Ongoing research and monitoring related to zebra mussels should determine conditions controlling their population growth in the AOC.

### **Implementors:**

Great Lakes Panel on Aquatic Nuisance Species, MDNR, State of Minnesota, WDNR, State of Wisconsin.

### **Actions Taken:**

4/98: Follow up letters sent to MDNR and WDNR, Minnesota Extension Service.

4/00 Ninth International Zebra Mussel and Aquatic Nuisance Species Conference in Duluth hosted by Minnesota Sea Grant.

9/28/00: News Release, "Major Zebra Mussel Infestation in Harbor Impacts Native Mussels, Boaters."

9/11/00: MDNR: Zebra mussels in the St. Louis River.

11/00: MDNR Exotic Species Coordinator: MDNR has rotating watercraft inspections at access sites to educate boaters. A field guide is handed out the first time. For future reference, a sticker is placed on the boat to indicate that the boater has received the guide. Signs are posted at access sites that state:

1. The area is infested.
2. How to prevent the spread of exotics.
3. Reminder to stop and remove exotics from watercraft.

Information about exotics is included in boating and fishing regulation booklets that are given out when people apply for licenses. Radio and TV spots have been run in Duluth as well as billboards and press releases. Work with Minnesota Sea Grant and use of their exotics information cards. MDNR can issue tickets for violations at road checks and boat launches but they have not done this in the Duluth area. Any transport of water on public roads from an infested waterway requires a permit regardless of the amount.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.

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## **43. Riverwatch**

### **Recommended Actions:**

Student and citizen activities that inform the public about the St. Louis River System Remedial Action Plan (RAP) and garner support for the RAP should be continued and expanded in the St. Louis River watershed.

### **Implementors:**

MPCA, WDNR.

### **Actions Taken:**

1995-1998: MPCA collected data two times a year and sent the results to the schools.

1998: Fond du Lac Tribal and Community College obtained funding through a Department of Agriculture grant and River Watch Coordinator was appointed.

Spring 1998: 14 schools participated

Fall 1998: 23 schools participated from the entire watershed (179 miles). Some schools have added River Watch to their curriculum.

Spring 2000 to present: There has been no River Watch coordinator.

### **Project Status:**

Project not completed, but there are one or more agencies currently working on it.