Cleanup Review

News and information for participants in the Minnesota Adopt-a-River Program.

Storm Drain Stenciling

By Alyssa Hawkins, Watershed Education Coordinator at Friends of the Mississippi River

In 2001, over 3,000 stewards in the Twin Cities worked to protect the Mississippi River, local lakes and streams. That's a lot of people. Multiply that number by ten and you get the number of people touched by the efforts of these dedicated volunteers. Now *that's* a lot of people.

Friends of the Mississippi River (FMR) has worked for almost ten years to develop the citizens of the Twin Cities into river stewards. Through our Storm



Urban storm drain labeled with a stenciling message

Drain Stenciling program, concerned citizens and students have painted the message, "Please Don't Pollute! Drains to River!" near many of the storm drains in our local area. These volunteers have diligently gone out into their neighborhoods armed with spray paint and literature to educate their neighbors about what goes down storm drains, and where it ends up – in our local lakes, rivers and streams.

If you live, work or drive on a street with storm drains, it is likely that those drains lead to the nearest body of water. Anything that goes down those drains *is not treated* but instead goes directly to our local lakes, streams and rivers. We are talking about more than just rain and snow – that water carries with it sand, dirt, fertilizers, pet waste, chemicals, grass clippings, leaves, garbage and more. We call this *non-point source pollution* and it's one of the biggest problems facing our state's waterways.

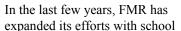
FMR is working to educate people about non-point source pollution. Volunteers, adults and youth alike, spend time from April through October painting the messages near the storm drains and distributing information in their neighborhoods. With the

"Stenciling...." continued on page 4

CONTENTS:

Commissioner's Comments.	2
Celebrating Water	
Automobile care	
Veteran Adopt Groups	6
Plant Page	
News & Calendar	

generous support of sponsors like the City of Saint Paul, the Minneapolis Park and Recreation Board and the Minnehaha Creek Watershed District, we are able to provide volunteers with educational programming, equipment and assistance to make this project possible. The efforts of these sponsors and volunteers are what will change the conditions of our lakes, rivers and streams.





Susan Shaw Stenciling during Earth Week at the Department of Natural Resources April 20, 1994

groups to provide more in-class time around the stenciling event, as well as making connections to graduation standards and providing teacher workshops. We do this project with classrooms that are talking about water quality issues and some that are not. We work with elementary, middle and high school students in geography, science or even English classes. This project is used to meet graduation standards, promote teamwork skills, and fulfill community service requirements. In all these cases, the stenciling program is used to foster a respect in the students for our local water resources.

At FMR we believe that the key to limiting non-point source pollution is through education. We believe that giving students information about the world around them allows them to become responsible adults. During the stenciling activity we work to connect students to their local water resources – the water they drink, swim and fish. We show them what causes non-point source pollution and what affects it can have. We do this by conducting reconnaissance missions in their neighborhoods and through class-room experiments. We then empower them to make a change – we provide them with the equipment and assistance to put their knowledge into action. This stewardship of the environment is what they will carry with them; it's what they will return to when they later make decisions that affect water quality. Students perform this project with enthusiasm no matter what their age or ability level, and they amaze us with their determination, respect and commitment to the work.

Students love to stencil. Teachers love it too. Not only is this project free to classrooms in our area, but more importantly it gives students a simple, visual way to show their community what they know. By participating in this fun activity, students are becoming stewards of their local water resources. Through simple action they are creating a more knowledgeable public, one that will hopefully see their messages and heed them. They will then truly become Friends of the Mississippi River.

For more water quality service-learning and stewardship ideas for your classroom visit http://cgee.hamline.edu/watershed/action. For more information about Friends of the Mississippi River visit www.fmr.org. For more information about Storm Drain Stenciling visit www.fmr.org/stencil.htm.

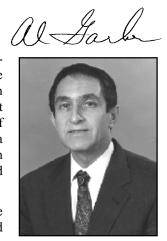
Commissioner's Comments

Big River Cleanup Releases Great Energy

Allen Garber, DNR Commissioner

The DNR had the opportunity to be involved in a citizendriven, agency-supported volunteer river cleanup on June 22-29. It was along 43 miles of the Mississippi River, from Saint Anthony Falls in Minneapolis to the mouth of the Saint Croix River in Prescott, Wisconsin. It involved a flotilla of boats, barges, and many hundreds of people. The last time a big, multi-agency volunteer cleanup occurred in the Twin Cities was nearly 15 years ago, when 185 volunteers cleaned Lilydale Regional Park on June 29, 1988.

The Mississippi River Relief – Big River Cleanup of June 2002 was noteworthy in that it was spread over eight days and 43 miles of river. It involved removing about 92 tons of man-



made material from the Mississippi River shores, about 20 projects in all. Over 1,300 volunteers worked for 6,500 hours. The goal of this cleanup was to clean those areas that were too difficult to get to with more conventional approaches. For 13 years, DNR's Adopta-River groups on this stretch of river had already removed 283 tons of rubbish. These ten years of cleanups varied widely, from small-scale efforts yielding only two pounds of rubbish, to large projects producing up to 36 tons. Previous efforts had focused primarily on those areas where volunteers could reach cleanup zones with a minimum of logistics.

The success of this year's big cleanup was attributable to the fact that resources and expertise were made available to go where no one had gone before. Volunteers went to islands and backwaters where remoteness had prevented past efforts. A flotilla of flat-bottom boats and drivers was needed and, through partnerships, they were recruited. A highly experienced river cleanup group was brought in to spearhead a new kind of river-cleanup campaign. Over 50 groups partnered together to offer a whole spectrum of expertise to accomplish what could never happen alone. Things started happening that were hard to believe. Individuals with special river talents stepped forward to offer their unique services. Heavy equipment moved in when the limits of hand labor had been reached. Private donations furthered the energies of public agencies. Public agencies opened doors that private individuals could not open. Radio, television and newspapers began covering aspects of the event, and by the time the cleanup concluded, the media had picked up the story nearly 50 times. Hundreds of volunteers responded either to their own company's appeal for help, or they responded to media appeals to join in.

Camaraderie and the feeling that something good was being accomplished gave energy to hot, sweaty volunteers in the midst of high heat and humidity. The next big river cleanup has not yet been scheduled, but what was certain during this cleanup was that hundreds of people who may have felt somewhat detached from the river can now relate to it in a personal way. If you missed this river cleanup, or want to organize your own anywhere on the state's 92,000 miles of flowing water or 22,000 lakes and basins, please get in touch with us. Contact Paul Nordell, Adopt-a-River Coordinator at 651-297-5476.

Celebrating the Importance of Water:

Historical Moment: April 15, 1872 The River Crossing at Brainerd

Brainerd, like other places, had a moment in history when it was on the cutting edge in the development of a national transportation system linking water and rails. For many river towns in Minnesota, a railroad line contacting or crossing the river either created or re-defined the townsite. For example, in June 1862, the first train trip was made between the effective head of navigation in St. Paul, and the developing heavy industrial waterpower site of Saint Anthony Falls. Another such moment was in August 1870, when a rail line began service between the Mississippi River in St. Paul and the Great



Lakes port of Duluth. The connection put Duluth on the map. This is illustrated by the fact that the city was incorporated earlier that same year, on March 5, 1870.

Even before the railroad service began to Duluth, another water-linking venture had begun. On February 15, 1870, the Northern Pacific Railroad (NP) began construction of a line from the Great Lakes to the Pacific Ocean. Work began at Northern Pacific Junction, a place just outside of Duluth, later known as Carlton, where the line linked to the nearly completed line between Duluth and St. Paul. The *Brainerd Tribune*, beginning on February 10, 1872, had much to say about this new development's impact on the Brainerd area. It reported that, although the first house was built in October 1870, that the place's only real claim to significance was borne out in its original name, "The Crossing." This was where the Northern Pacific Railroad had chosen to cross the Mississippi River. The newspaper reported that the population, by early 1872, had grown to 1,300 people. On March 2, the paper reported that the *Duluth Herald* claimed the work was "progressing finely" on the Northern Pacific steamboat wharfs on Lake Superior, with a dock at least 1400' long to be completed in two weeks.

The *Brainerd Tribune* report of **April 15, 1872** (published on April 20th) says it all: ...no town on the line of the Road presents more attractive features or impresses one more with a sense of its future greatness than yours. Be the first harbor of the lumber borne upon the sweeping current of the Mississippi, it must supply mainly the prairies of the West with this indispensably necessary article. Already the energetic and worthy contractor, Lyman Bridges, is in process of construction of fifty Station Houses, of the latest style of architecture, made from materials obtained here.

Railroads and water ports generally work together to strengthen the local economy. Brainerd was one of those towns where, because of its water location, it was built into a transportation center. Brainerd suddenly became a market for any products and services transported by river. This rail development on the Mississippi would permanently change the face of northern Minnesota. It all began in the spring of 1872.

Written and researched by Paul E. Nordell. Primary source: *Brainerd Tribune*, February 10, 1872; March 2, 1872; April 20, 1872.

Veteran Adopt Groups Share Their Secrets

By Melanie Boyd MCC /Americorps member



Izaak Walton League of Wabasha Mississippi River Cleanup Adopted June 3, 1990

The Adopt-a-River program is ever changing and the very nature of the program causes it to be in a constant state of flux. Running on volunteer efforts, the program has a two-year required commitment, and year after year new adopt groups join while others leave. Troop leaders end their term, teachers retire, kids grow up and move away, companies dissolve, there are endless reasons why an adopt group might call it quits. According to our adopt groups, however, there are also many reasons to keep going.

Since the program began over a decade ago, hundreds of groups have participated either by becoming a full fledged adopter or by doing a onetime cleanup. Many who joined the program in 1989 and the early 1990s have moved on, however there are a select group of Adopt-a-River veterans who have stood the test of time and persevered for the last ten years, cleaning consistently and methodically the same stretch of shoreline. Cleanups are hard work as anyone who has been out there can agree, so what is the secret of these long term adopters success and how do they manage to beat the odds? Recently we asked a few of these adopt groups how they do it, what makes them tick and what keeps them going back year after year after year.

In 1989 Camp Sunrise and Matt Lind joined the Adopt-a-River program. Since then, they have removed over 12,400 pounds of rubbish from the St. Croix River and have involved over 3,000 students. When posed the question "what keeps you motivated?", as with the other veteran adopt groups who were asked, the answer was an easy one. For Camp Sunrise, their motivation comes from children. Teaching children about the river, stewardship and community involvement is very important to this group and Adopt-a-River cleanups are a perfect way for them to teach these valuable lessons.

Many other adopt groups agree that children are the main reason they do their cleanups. Whether it is simply to set a good example or to involve kids first hand in river stewardship, young people are a very important part of this program. "Ole" and the Kiwanis club in Brainerd have been getting children involved since 1991. He feels that when a

child is out there picking up other people's litter, they will be much less likely to litter themselves. The Kiwanis Club has had plenty of opportunity to test their theory over the years. They have held thirteen cleanups along the Mississippi River, removing almost 10,000 pounds of debris and involving hundreds of children.

Like many other aspects of the program, the reason these long-term groups keep returning to their adopted sections varies significantly, however there seems to be some underlying trends. Ten-year-or-more adopters all seem to have a deep love of their environment and want to do something to help preserve and protect it for future generations. They spend time enjoying their adopted sections of river, lake, ravine or wetland, and often recreate in these beautiful natural areas. Allan Laumeyer and his family love to fish for trout. Every year since they first adopted their stretch of the Whitewater River in 1991 they have gone out and cleaned, pulling everything out of the river from a newspaper dispenser and car seat to the typical bait containers, beverage bottles and cans. For the Laumeyers, their love of the river is so strong that they travel one hundred miles at least once a year to do their cleanup and fish on their adopted section.

Getting out every year to clean up the same stretch of waterway isn't an easy task, even for our experienced veterans. While none of the ten-year adopt groups we spoke to had ever seriously considered quitting, most have felt some discouragement at least once in the ten years of doing cleanups. In an ideal world, one cleanup would be sufficient to eliminate rubbish from a cleanup site. Unfortunately, that is usually not the case. The most discouraging thing adopters face is persistent litter, the same type of rubbish showing up year after year. For some adopters the culprit is aluminum cans and plastic bottles, for others it is fishing line and bait containers. Sometimes however, there are entirely different problems.

Bruce Lamar and his pals with the CFUMS (Citizens For Undeveloped Minnesota Shorelines) adopted a section of the Mississippi river in 1990. Their cleanup area is located near a favorite secluded fishing hole, offf the road and under a bridge. So far, they have spent over 85 hours over the last twelve years cleaning up along the river. One day, while out enjoying the river with a friend, Bruce was startled by a large black object falling from the sky only to land a few feet in front of him, right in his favorite fishing spot.

"The black continued on page 8



Inver Grove Heights Parks & Rec Mississippi River Cleanup 7/12/1992 Adopted September 26, 1991

object turned out to be your typical heavy duty garbage bag, filled to the brim with dirty diapers and other household hazardous waste. Being a long time adopter Bruce knew what he had to do. First he checked through the bag to see if he could come with an address for the culprit, then he disposed of the trash at a proper disposal site, thereby preventing it from getting into the water and reducing the chances of copycat dumping occurring. The CFUMS have removed a total of over 1,000 pounds of rubbish from the Mississippi River.

By now, our veteran adopt groups seem to have worked out the kinks when it comes to planning and organizing cleanups. Angela Dreis and the Stillwater Jaycees adopted a section of the St. Croix River in 1990. When the group disbanded after a few years, Angela knew she didn't want to give up her adopted section and leave it to get trashed again, so she decided that, with the help of her family, she would keep on cleaning. While there are currently fewer people cleaning that particular stretch of the river, there has remained a lasting, stable presence in that area that has been equally valuable.

The good news is that the persistence of our adopt groups is paying off. People take notice that an area is being cared for and that they are littering less and less. Not to mention the sheer number of pounds of trash that have been taken out of our waterways over the past ten years. Since 1989 almost four million pounds of trash have been removed from Minnesota's lakes, rivers, ravines and wetlands. Most of the adopt groups who have been around for ten years or more say that their adopted section is better than when they first started and they are generally optimistic about the future of Minnesota's



Ol' Man River Clean Rivers Team Mssissippi River Cleanup Adopted April 4, 1990

waterways. Certain trash items like tires, that were once such a dominant feature in our public waters, are now appearing less and less, and tire recycling efforts have greatly improved since the early nineties.

With ten or more years of experience cleaning up shorelines, our adopt groups have a wealth of information to share and advice to give. Being dedicated is key they say, and making sure you know what you are getting in to is important. Other advice they give is to make cleaning a long-term

commitment, it is very rewarding to watch your adopted section improve over the years. Hang in there even if it seems daunting and most of all take time to enjoy yourself and the beauty of the river, lake, wetland or ravine you are cleaning.

Thank you and congratulations to all of our veteran adopt groups who have been cleaning Minnesota's lakes, rivers, ravines and wetlands every year for over a decade.

Driving Towards Better Public Waters

By Melanie Boyd MCC/Americorps member



Runoff, or non-point-source pollution, is the single greatest threat to our public waters. Toxic chemicals and household trash from agricultural, industrial, and urban runoff flow into our public waters via storm drains every time it rains, and there is no easy way to solve this problem. It requires modification of human behavior at many levels. As Adopt-a-River volunteers remove used oil containers and other household hazardous waste from the river bank, they are helping to eliminate harmful products that destroy the value of our waterways. How can we go a step further in taking responsibility for the health of our public waters?

Petroleum products such as oil and grease are particularly harmful to wildlife and water ecosystems. In the environment, these products stunt growth and lead to disturbed respiration rates in organisms. Automobile oil, grease and similar pollutants are some of the more common products dripping onto our streets. In the United States alone there are over 200 million automobiles on our roadways. With our auto-dependent society, we need to manage our automobiles in such a way as to have the least impact on the environment. Below is a list of easy things that can be done year-around to minimize the amounts of petroleum and other harmful products getting into our waterways from the use of automobiles.

10 Tips to Reduce Automobile Runoff

- 1. Recycle used motor oil properly. Never use storm or sanitary drains to dispose of used motor oil.
- 2. Check your automobile regularly for fluid or oil leaks. Don't let your automobile add to all those oily spots on the road.
- 3. When changing the oil in your car, place cardboard or a tray under the oil pan to prevent spills and always use a funnel. After you have done any work on your vehicle, always check your work area for possible spills.
- 4. Make a "spill kit" with kitty litter or some other absorbent material and have it ready in case a spill occurs. Dispose of this soiled material along with household garbage.
- 5. Recycle your antifreeze and never pour it directly onto the ground or down drains.

- 6. Wash your car on an unpaved surface or take it to a commercial car wash. Left over soapy water should not be allowed to flow into storm drains.
- 7. Walk, skip, jump, car pool, take the bus or ride your bike to reduce pollution from automobile use.
- 8. Don't walk away from the gas pump when filling your tank. If the pump malfunctions and your gas tank overflows, a large spill can be prevented if you are there to stop it.
- 9. When adding fluids to your car, never overfill reservoirs.
- 10. Follow your car's maintenance recommendations for oil changes. The quality of oil used in today's automobiles is far superior to the oil used in the past. Oil changes may not need to be done as frequently.

Plant Page:

Eastern Cottonwood: Populus deltoides

There are many benefits to having the Cottonwood around. They provide shade to people, wildlife and plants, wind reduction, evaporative cooling, pollution filtration, wildlife habitat, and beauty. In addition, because of its extensive root system, it plays a major role in soil erosion control along the rivers, lakes and streams it populates.



The Eastern Cottonwood or Poplar as it is sometimes called, is one of the most common trees found along our waterways in Minnesota. It is easily one of the largest eastern hardwoods, growing to heights over 100 feet. You can distinguish it from other trees by its broad spreading crown, its impressive heights and by its cottony fruit.

Eastern Cottonwoods live relatively short lives, seldom living longer than 80 years. However, they make up for their lack of longevity by their rapid growth rates. This tree is one of the fastest growing forest species in North America. They typically grow about five feet a year, but a young tree will grow up to ten feet in a single season. Anchoring these enormous trees are a network of roots that can extend over 200 feet from the trunk. Most of the roots are in the uppermost, best aerated layer of soil which has caused problems in some cities due to roots clogging sewer drains and heaving sidewalks.

The Cottonwood is dioecious, in other words, there are both female and male trees. Both flower, but only the female tree produces fruit. Most Minnesotans become very familiar with this fruit when they are emptying out their storm gutters. It is the cottony-coated seed from which the tree gets its name. Seed production starts when the tree is 5 to 10 years old, and a single tree can have as many as 48 million seeds. In Minnesota seed dispersal occurs typically from June through mid-July. A good current of wind can carry a fluffy white seed several hundred feet, and by water a seed can travel an even greater distance. The Eastern Cottonwood grows best on moist, well drained sands or silts. In the Mississippi Valley, the best sites for cottonwoods are in the land between the levees and the river. They are frequently found in river bottoms, and on the lowest slopes bordering the small water-courses emerging from the bluffs. The Cottonwood is particularly resistant to flood damage making it an ideal tree for Minnesota valley living.

The MN DNR has been keeping a record of the state's largest native trees through the Native Big Tree Registry. Minnesota's record Cottonwood can be found in Nicollet County. It measures 124 feet high and has a circumference of 344 inches. If you think you have seen a bigger one contact the DNR's Big Tree Registry at 651-296-5958.



Adopt-a-River and Big River Journey Wins a National Award

In April, 2001 the National Park Service and the National Park Foundation awarded the Big River Journey with the Partnership Award for Education in Washington D.C. This award honors outstanding public-private partnerships that further the mission of the National Parks Service. Big River Journey is a riverboat classroom for fourth through sixth graders in the Twin Cities metropolitan. The Adopt-a-River lab class is one of six stations aboard the boat that offers kids the opportunity to learn about the beauty and magic of the Mississippi. Since 1995 more than 10,000 students have been on board these trips.

Girl Scout Troop featured in Pockets Magazine

Girl Scout Troop #1067 was featured in a story by Roberta Brown in the May 2001 issue of *Pockets Magazine*. Troop #1067 joined the Adopt-a River program in 1997 and since then has participated in 15 cleanups removing over 1,000 pounds of rubbish from South Trout Brook. *Pockets* is a monthly magazine for children. To obtain a copy or to get a subscription call 1-800-925-6847.

Adopt-a-River wins 2001 Minnesota Environmental Initiative award

Minnesota Environmental Initiative (MEI) is a member-supported nonprofit organization that works with business, government and advocacy groups to promote sound environmental policy. Each year MEI presents awards to innovative projects that embrace partnership and improve our environment. The awards are given in categories that parallel the organization's program including environmental education, energy efficiency, environmental management, environmental policy and land use and community development. Adopt-a-River was honored with the MEI environmental education award in April for its work in promoting environmental education and stewardship which has resulted in the removal of millions of pounds of rubbish from Minnesotas waterways. To learn more about the awards check out the MEI website at www.mn-ei.org.

Purple Card Alert!!

Now is the time, if you haven't already done so, to turn in your purple reporting cards with the results of your latest cleanups. The purple card is our sole method of tallying progress on all the cleanup you do. Our tally for last year (2001) reports a record number of 175 cleanups on over 600 miles of shoreline. 3,011 volunteers spent almost 1,000 hours collecting 133,655 pounds of trash. Please send in your results as soon as possible or contact us by email at paul.nordell@dnr.state.mn.us.

You have cleaned everything from ravines to public accesses to storm-water detention ponds. As these areas are cleaned, adopters have often removed such household hazards as motor oil, chemical containers, aerosol cans, batteries, and discarded paint. In addition to hazardous substances, one of our groups recently reported 30 grapefruit!



The 2002 Adopt-a-River Calendar of Events.

This calendar includes events that will help you better appreciate rivers, lakes and wetlands, or will provide community service, learning and discussion opportunities relating to watersheds. Call to verify times and locations.

August 22nd – Sept. 2nd: Adopt-a-River Sculpture and Booth at the Minnesota State Fair Just beyond the fish pond at the DNR building you can see the "found objects" Adopt-a-River sculpture. For information call (651) 297-5476.

August 25th: C.U.R.E Annual River Revival

Music, canoeing, food, education and celebration! Lagoon Park in Montevideo. 12:00 p.m. – 5:00 p.m. A cleanup will be held on October 5th. Contact C.U.R.E at (320) 269-2984.

September 7th: Annual Eagle Cliff Campground and Lodging Cleanup

Help cleanup the Root River from Torkelson Creek to Eagle Creek Campground in Lanesboro, Minnesota. Volunteers will be cleaning from canoes provided by the campground and dinner will be provided Saturday evening. Bags and gloves will also be provided. For more information call (507) 467-2598.

September 14th: H.A.R.T. Crow River Cleanup

Join the Hanover Area River Team to help cleanup the Crow River. In conjunction with Delano and Rockford cleanups. Picnic in Rockford at 2:00 p.m. For more information contact Tim Torgrimson at (763) 497-1901.

September 14th: Annual Kutzky Park Cleanup

Help cleanup Cascade Creek with the Kutzky Park Neighborhood Association. 10:00 a.m – 1:00 p.m. Bags and gloves will be available for volunteers and treats and prizes will be provided. For more information contact Stephanie Kilen at (507) 529-9043.

September 21st: Great Lakes Beach Sweep – International Coastal Cleanup

In conjunction with the Center for Marine Conservation's 17th Annual International Coastal Cleanup, the Great Lakes Aquarium in Duluth is sponsoring the Beach Sweep cleanup. Since the International Coastal Cleanup began in 1986, over one million people have taken action to clean the ocean and shores of our planet. Contact Jay Sandal at (218) 740-3474 ext 1038 or check out the website at www.glaquarium.org.

September 21th: Rapids Riders Cleanup Help cleanup the Vermillion River in Hastings. 10:00a.m. - 2:00p.m. Call the hotline at 952-985-1111.

October 5th: C.U.R.E River Cleanup

C.U.R.E (Clean Up the River Environment) will be hosting a cleanup on the Lac Qui Parle and Minnesota Rivers. For details contact Lynn Lokken at (320) 269-2984.

Cleanup Review is published by the Minnesota Department of Natural Resources for the Adopta-River Program in the Trails & Waterways Division.

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Please direct your comments, questions, and suggestions to the editor of *Cleanup Review* at (651) 297-5474 or to the Adopt-a-River Coordinator, Paul Nordell at (651) 297-5476; MN Toll Free 1-888-646-6367; FAX (651) 297-5475; e-mail: paul.nordell@dnr.state.mn.us or write to: MN DNR, Trails & Waterways Division, 500 Lafayette Road, St. Paul MN 55155-4052. See our web site at www.dnr.state.mn.us Search "Adopt a River".

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