

CITY OF DULUTH RESIDENTS PITCH IN TO KEEP THEIR WATERS CLEAN

July 2006: The results are in –

Citizen sand collection and storm drain programs are successful!

In 2005, the City of Duluth initiated two projects to involve residents in protecting the high-quality waters of the Duluth Region. The projects were funded through a grant from the Great Lakes Basin Soil and Erosion Program.

THE SAND SWEEP-UP PROJECT

Each year the City of Duluth applies as much as 10,000 cubic yards of sand to roads to insure that residents can drive safely during heavy winter storms. The amount of sand needed varies depending on temperature changes and frequency of snow fall.

Each spring as the snow melts, the sand reappears in piles on roads, sidewalks, resident driveways, and boulevards. In the past, many residents simply pushed the material back into the road, assuming that street sweepers would take care of the problem. However, despite an active street sweeping program there is no way the City can clean nearly 600 miles of roads before the heavy rains of spring wash the grit away into local creeks, the St. Louis River and Lake Superior.

The sand washed off residential boulevards, sidewalks, and streets becomes a sediment problem that pollutes our waters. As the sand moves down gutters and through storm drains towards the water, it picks up hitchhikers like oils, grease and other pollutants from the streets and carries them along. When the sand reaches creeks, it adds these pollutants to the water. In addition, sand muddies the water, interfering with sun penetration. It also settles into the stream bottom, filling areas where fish breed.

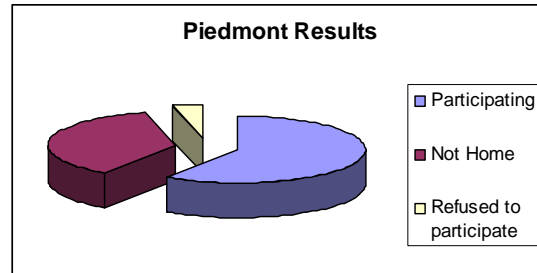
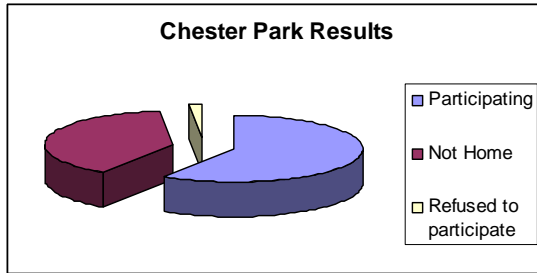


In 2005, City sediment traps collected 55 cubic yards (5 ½ truck loads) of sand from our streams. Street sweepers recovered over 6,000 cubic yards of sand from roads. City Utility crews estimate that as much as 1,000 cubic yards of sand builds up at the mouth of Miller and Coffee creek each year. Obviously, despite on-going efforts, City crews cannot collect all the material and help from residents is need.

Pilot Project

In Spring 2005, the City of Duluth and the South St. Louis SWCD began a pilot program in two neighborhoods (Piedmont and Chester Bowl) to encourage residents to sweep up winter sand and other material and deposit it at collection sites. A campaign that included letters, door-to-door visits and distribution of 3-gallon buckets to participating residents was completed in April and May.

A total of 274 people participated in the Chester Park and Piedmont area pilot Sand Sweep-up Programs. Participation in both Chester and Piedmont neighborhoods was high (59.1% and 59.5% respectively). The majority of those who did not participate were simply “not home” during the multiple visits made by Minnesota Conservation Corps (MCC) crew members. Only 4 residents in Chester Park and 9 in Piedmont were visited by the MCC and responded negatively to the program. Of residents who had direct contact with MCC, refusal made up only 4% of visits in Chester Park and 2% of visits in Piedmont. In effect, those who did not participate in the Sand Sweep-Up were simply not home.



We received phone calls from many folks across the City of Duluth outside of the Sand Sweep-up pilot neighborhoods who wanted to know where to bring their sand. This prompted us to establish 5 more road sand collection sites across the City. The support for having a sand collection yearly was obvious with residents. The project filled a need that residents have for dealing with leftover winter sand on their sidewalks, boulevards and even in their curb/gutters.



The total volume of sand material prevented from getting into storm drains and eventually the neighborhood Creeks and Lake Superior was 27 cubic yards (2.5 truck loads). This value is likely an underestimate of the amount of sand kept from storm drains, as many people said they would re-use the sand on their own yards, alley, driveways, or gardens.

In 2006 the program was opened up to the entire City; through the establishment of 13 neighborhood collection sites.. Through a flyer in Utility bills, several press releases and TV ads, residents were encourage to sweep-up sand instead of dumping it back in the street. A strong positive response was seen; over 37 cubic yards of material was deposited at neighborhood road sand collection sites. In addition, many residents used the material as fill in their alley driveways or yards, and in some cases actually requested permission to remove material from the collection sites to use in yard projects. The project will be repeated in 2007.

The City of Duluth would like to thank our residents for taking on this responsibility – by working together we can reduce can reduce the sediment and pollutants reaching Lake Superior

THE STORM DRAIN ADOPTION PROJECT

The City of Duluth has over 9,000 storm drains (or catch basins). With such a large number catch basins, each one can only be cleaned once every five years unless they are identified as a problem area. When catch basins fill with debris, water cannot drain off the roads and flooding occurs. The material that blocks catch basins eventually travels to our waters and increase pollution. In the fall, leaves and debris often block catch basins. When spring melt occurs, the catch basins are blocked and do not drain.

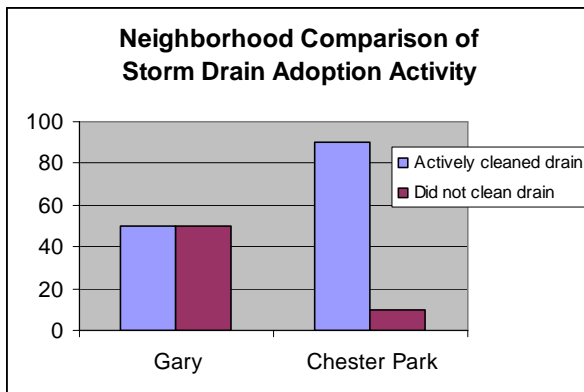
The best eyes and ears to address this problem are Duluth residents.

Pilot Project

In 2005, the City began a voluntary “Adopt a Storm Drain” program. Once again, two neighborhoods were selected for the pilot program (Chester Bowl and Gary). Residents that agreed to participate signed a pledge and were supplied with a rake and bags for collecting material. Home Depot partnered with the City of Duluth and provided the pilot project with rakes at a reduced cost. Collection sites were set up and the amount of material collected was tracked. In response to press coverage, residents outside of pilot neighborhoods requested the opportunity to participate. These residents also signed pledges and were supplied with rakes.



Over 500 storm drains were adopted throughout the City of Duluth. All 216 storm drains were adopted within the pilot neighborhoods, (56 in Gary and 160 in Chester Park). The MCC made contact at 257 homes, of which 114 were not home or did not want to participate, and 143 said yes and the majority of these signed a pledge. Participation rates for the pilot areas, estimated from direct observations of field crews, were around 55%, lower than the 59% for the Sand Sweep-up pilot. The MCC crew reflected that the Adopt a Storm Drain was a much harder “sell” to folks than the sand sweep up, possibly because they saw storm drains as public property and as the City’s responsibility.



Most people who volunteered to adopt a storm drain were willing to take a few drains in the same area. In fact, even though participation was harder to come by, 216 storm drains within the pilot neighborhoods were adopted by only 143 people.

In addition, 58 volunteers from outside the pilot neighborhoods adopted storm drains in their neighborhood. In fact, at least two people requested multiple copies of the letter to give to their neighbors and club members, to encourage them to participate. Also outside the pilot project area, approximately 50 storm drains were adopted by two local school programs (Woodland FOCUS group and Kenwood Edison School after school program). Originally, we thought we might have a better participation rate from the neighborhoods who already participated in the Sand Sweep-up, as they may already see themselves as stream protectors and might be willing to go another step. This did not seem to be a factor in *participation* in the program, but it can be seen in the true *actions* of the neighborhoods.



Bags of material collected from storm drains

It was clear that neighborhoods differed in the rate of adoptees which actively cleaned their adopted storm drains. In Gary, the MCC observed only 50% of the catch basins adopted were actively being cleaned by adoptees. In contrast, the Chester Park adoptees were observed to have actively cleaned 85-93% of storm drains adopted. The material left in collection sites also differed by neighborhood: MCC estimated 10-15 bags in the Chester Park collection site (most of which were our clear bags) compared to only 8 bags in the Gary neighborhood (of which only 2-3 of which were our clear bags).

Overall, acceptance of storm drain adoption was marginal. There is a definite view that storm drains are public areas and should be maintained by the City. One way to overcome that view was to explain the sheer number of storm drains in the City; after that, many residents began to understand that the City needs help from residents as well. A few of the residents who were willing to participate were already actively maintaining their storm drain to prevent flooding, or to simply remove garbage from their neighborhoods. Additionally, some residents agreed to adopt storm drains, but would not sign a pledge form and did not want their names listed in the newspaper.

Duluth plans to continue the program on a more informal basis. Residents interested in adopting a storm drain may contact the City at 730-4130. A limited number of rake and bags are still available.

Duluth would like to thank those residents that have chosen to take a leadership role and help maintain our storm drains.