COMMUNITY AND ENVIRONMENTAL EDUCATION IN DISTRICT 5 PAYNE-PHALEN



Report Prepared for District 5 Payne-Phalen Planning Council, Saint Paul Report 1/4

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Executive Summary

This report is designed to help the District 5 Payne-Phalen community create an Area Plan that incorporates environmental education into daily life. It was completed through a partnership between students at the University of Minnesota, College of Natural Resources and the District 5 Payne-Phalen District Council. Environmental education is one of the four parts of the overall project that will aid this community in planning. The project vision is to connect the District 5 Payne-Phalen community through natural resources and acknowledge what makes this District great. The information was then analyzed and recommendations were created to assist in expanding and improving environmental education opportunities within the District 5 Payne-Phalen neighborhood.

To gather information, our group utilized existing literature, the Internet, resident interviews, and public meetings. Initially we attended a public meeting to gain an understanding of community issues and interests. An extensive web search resulted in an assessment of current environmental education programs: the number, location and cost.

Everyone that we interviewed within the community thought environmental education was important for the community. Presently in District 5 Payne-Phalen, there are a few environmental education programs but they are difficult to find without the use of the Internet or telephone. Two schools and two recreation centers offer some environmental education programs which leaves ample room for District 5 Payne-Phalen to expand. Within St. Paul we found many quality environmental education programs that could provide the District 5 Payne-Phalen residents with many opportunities.

The recommendations for enhancing and expanding environmental education within the District 5 Payne-Phalen community are:

- Raise environmental awareness through community newspapers.
- Enhance collaboration between Environmental Education providers.
- Create a model for environmental responsibility in the community through business involvement.

Introduction

The City of St. Paul and the District 5 Payne-Phalen Planning Council will soon begin developing a Payne-Phalen Area Plan to update the community assessment completed in 1970. Through a partnership with the University of Minnesota's College of Natural Resources, students from the *Problem Solving and Planning in Natural Resources* course are working on a contribution to this planning process with preliminary reports on critical natural resource issues affecting the District 5 Payne-Phalen neighborhood.

The Payne-Phalen Area Plan will involve many components, one of which is environmental and natural resource issues. Though the Area Plan will take many months to complete, this report will help identify and focus the efforts of later planning and development within District 5. Working with District 5 staff and University faculty, students identified areas of concentration which include: environmental education within District 5 Payne-Phalen, public participation in community planning, parks and trails in District 5, and natural areas and green space for the surrounding area.

This project's vision is to connect the Payne-Phalen community through natural resources and acknowledge what makes this District great. We want to empower the community by providing them with a planning framework to enhance their natural resources while raising citizen's awareness of the benefits associated with their environment. Environmental education is crucial to the viability of this vision, which aims to heighten awareness about the environment we live in and how we impact that environment. This type of education supports the interconnectedness of humans and the Earth, which translates into a closer connection with one's surroundings. Once this understanding is formed, citizens can take an active role in maintaining and improving the environment in which they live. Overall, environmental education is "a process that aims to develop an environmentally literate citizenry that can compete in our global economy; has the skills, knowledge and inclinations to make well informed choices; and exercise the rights and responsibilities of members of a community" (Porterfield, 1999).

To achieve the specific report goal of providing a planning framework for increasing awareness of and connection to the citizens' environment through education, a number of objectives were established:

- Inventory existing and previous Environmental education programs and natural features.
- Assess the needs and opinions of citizens within the area about environmental education.
- Develop recommendations for educational opportunities that can be modified or added by the community to enhance community involvement and health.

Site Characteristics

The District 5 Payne-Phalen neighborhood is one of 17 districts in the City of Saint Paul (Figure 1). In Ramsey County, District 5 is located east of downtown Saint Paul. The borders for this neighborhood are, to the west, Interstate Highway 35E, to the north, Larpenteur Avenue, to the east, Ramsey County Regional Trail and to the south, Grove Street (Figure 2).

Payne-Phalen has a long history of development and change as a part of the Twin Cities Metropolitan area. This area was always an attraction for immigrants from all over the world, resulting in a diverse population over time. Resident's diversity in the District sets the community apart as a neighborhood rich in culture. District 5 Payne-Phalen is composed of nearly 21% recent immigrants with 65% being able to speak English (Census Facts 2000). This also explains the high diversity in languages, which are spoken in District 5 Payne-Phalen (Figure 3). Moreover, the area is changing because of the overall number of residents moving into the Payne-Phalen neighborhood each year. The neighborhood population increased by 18.1% from 1990 to 2000, bringing the number of residents from 26,692 up to 31,519 (Census Facts 2000).

Residential buildings dominate the Payne-Phalen area, but there are also old industrial developments, many of which are not currently in use. Because of this history of aging industries and in response to growing population, the Phalen Corridor was created to bring back large industry and develop more housing for the area (A Community Report Saint Paul, Minnesota, 2004). It is the hope that this comprehensive community reinvestment will restore economic, physical, and social prosperity to District 5 Payne-Phalen neighborhood. By incorporating bike trails, parks, and recreation areas, the corridor has the potential to provide numerous opportunities for residents to connect with the natural environment.

Methods

A variety of methods were used to evaluate the environmental education needs of the Payne-Phalen neighborhood. First an inventory of current environmental education opportunities was needed, as well as an inventory of potential environmental education opportunities. Second, an assessment of community members' desires and hopes for the future was needed. We completed these objectives through a public meeting, interviews, site visits, as well as website and literature reviews.

Public Meeting

A public meeting was held on September 14, 2004, to introduce our class to some of the key stakeholders and community members from District 5 Payne-Phalen and other bordering districts. This introduction provided the students with a chance to hear from the residents about the positive aspects of District 5, as well as some of the concerns they had. The meeting was held at the John A. Johnson Achievement Plus School, and Leslie McMurray and Gary Johnson facilitated the discussion.

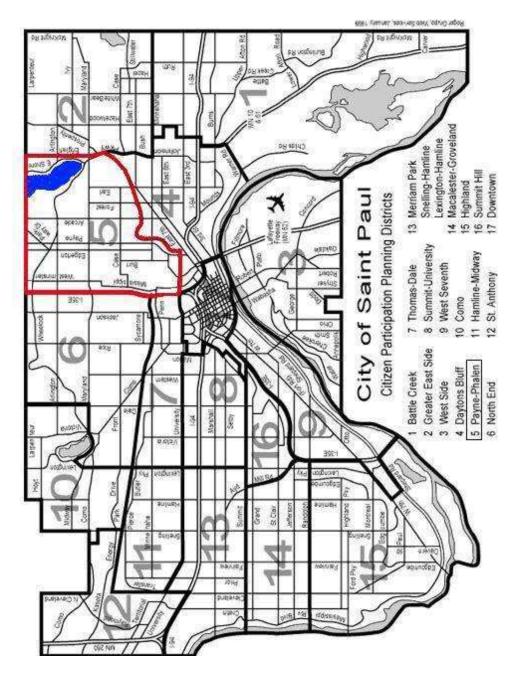


Figure 1. Saint Paul District Councils Map, District 5 Payne-Phalen highlighted. (Source: City of Saint Paul webpage, 2004)

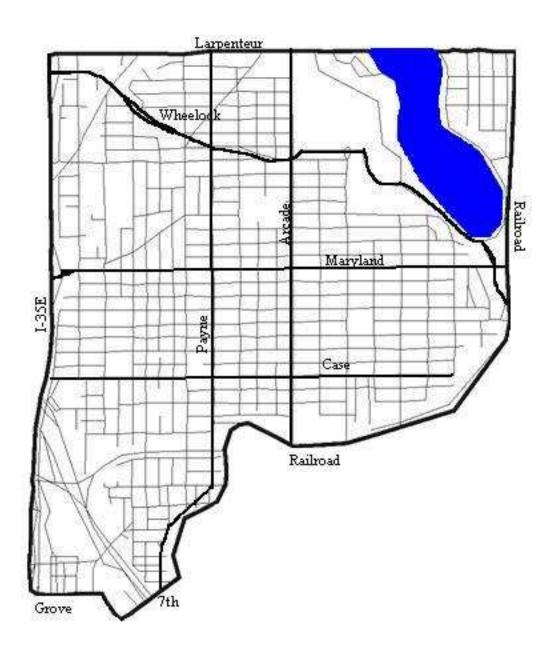


Figure 2. District 5 Payne-Phalen Borders. (Source: Community DataWorks, 2004)

District 5 Payne-Phalen Languages Spoken At Home

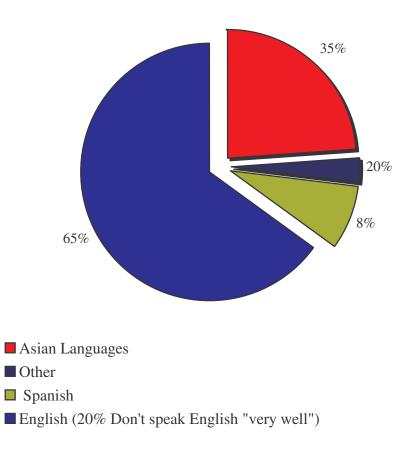


Figure 3. District 5 Payne-Phalen Languages Spoken at Home. Source: Wilder Research Center, 2000.

An open discussion lasted for about 45 minutes where concerns and ideas were discussed and noted on poster paper to allow for easy comprehension by all in attendance. By first moving around the room in an orderly fashion, all community members in attendance had an opportunity to voice their thoughts. After the 45- minute brainstorming session we broke up into our separate groups and the community members were able to talk with the group that best represented their interests and concerns. The four breakout groups included environmental education within District 5 Payne-Phalen, public participation in community planning, parks and trails in District 5, and natural areas and green space for the surrounding area. By making direct contacts with community members, we were able to set up interviews to further explore their desires and hopes for the future of this neighborhood.

Interviews

We conducted twelve semi-structured interviews with key informants to understand the communities' current status concerning environmental education and suggestions for proceeding. We used contacts made at the public meeting, as well as those provided by Leslie McMurray, the District 5 Executive Director. These key informants were knowledgeable and willing to work with us when called upon. They provided information on community members in District 5 who would be helpful with this project. First, fifteen-minute interviews were conducted over the phone about how they perceive environmental education within the community. The respondent was contacted at their place of employment. They were also asked what they would like to see environmental education accomplish within the community. Five in-person interviews, lasting approximately an hour were conducted. Most of these interviews were done in small groups, two or three interviewers, and the interviewee. A simple question was used to open the interview, "What type of environmental education do you think is important: improving natural resources, awareness and sustainability, or bringing the community together through natural resources?" We used this question to begin the interview, but then the conversation evolved as guided by the interests of the informants. The focus of the interviews was to let the community member explain what they felt was important for their community regarding environmental education. Analysis of the interviews took place briefly after each interview. The interviewers discussed the interviews to share recurring themes that emerged from the interviews. Further analysis was done by the individual interviewers to gain a better understanding of what key points and patterns are found.

Site Visits

In some cases, site tours were conducted concurrent with the interviews. During these site tours interviewees showed us places they felt were of importance for a natural resources project. We saw numerous areas that showcased the features that were specifically unique to the District 5 Payne-Phalen area. Others represented areas of opportunity that in the future could become positive aspects of the community.

Web Search

Extensive web searches provided an inventory of information about St. Paul Recreation Centers in the Payne-Phalen neighborhood. The following items were recorded for each

recreation center - name, main contact person, environmental education programs offered, program type, accessibility by public transportation, and possible fees charged for the programs. Environmental education opportunities for the greater St. Paul area were also assessed to get a better understanding of the types of programs available in the city. This information was compiled into a Microsoft Word spreadsheet. Spreadsheets were also generated to inventory potential environmental education sites within District 5 and places environmental education is carried out in the greater metropolitan area.

Findings

District 5 Payne-Phalen opportunities.

Environmental education programs are available within District 5 Payne-Phalen, but they are limited. (Appendix A). The three main locations that offer programs in the District are recreation centers, a small number of schools, and the Community Design Center. In addition, Ramsey and Washington Watershed District, the Saint Paul Park and Recreation Department, Friends of Swede Hollow, Eureka Recycling, Como Zoo, and others provide occasional environmental education programs close to the district, and collaborate with each other on such programs.

There are four recreation centers scattered throughout District 5 Payne-Phalen and two located close to the District (Figure 4). The two centers that offer programs with an environmental focus are Dayton's Bluff and Margaret recreation centers. These programs may take place outdoors, use natural resources for art projects, or have an environmental theme, but many times they do not incorporate environmental education in the program. The environment is used as a medium for the program and not as an educational focus. A listing of all the programs that the recreation centers coordinate is sent out in a seasonal newsletter with dates, times, location, and program details. It can be obtained by email, on the web, or through the mail (Appendix B).

Two schools in the district provide environmental education opportunities (Figure 5 and Appendix C). Johnson Senior High School has various courses that students choose in their third year. Their Natural Resources and Environmental Sciences Academy offers career exploration, community service opportunities, and a senior project that are all focused on natural resources and the environment. Further, Johnson offers an environmental science class and an ecological education class in which the students assess the environmental needs of the local community, choose a local environmental issue to address, and suggest solutions to that issue. Examples of previous issues explored include air pollution and neighborhood up-keep.

Cleveland Quality Middle School also has environmental education offerings. Eighth graders can take part in the Ames Lake Project, which was started in 1997, and is enhanced by community partnerships with organizations such as the Ramsey and Washington Watershed District, the Community Design Center, and Friends of Swede Hollow. Four years ago the Ames Lake Project received a National Science grant that allowed them to expand the project with a coordinator as well as new and enhanced technology. The project involves 60 students broken into five teams each with their own goal.

District 5 Payne-Phalen Recreation Centers

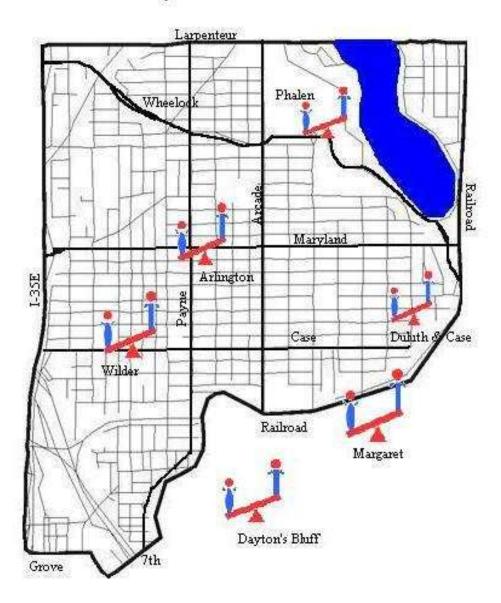


Figure 4. District 5 Payne-Phalen Recreation Centers.

The teams are media and website, water quality, ecology, art, and public policy. Teachers and teacher assistants from social studies, science, art, and math lead the various teams.

Seventh Graders at Cleveland can participate in a program at the Belwin Outdoor Research Center in which they design a scientific experiment. A scientist then collects the data and students analyze the data to find results. Due to recent school budget cutbacks, it was impossible to hire substitute teachers to replace the teachers that lead the field experience, thereby drastically scaling back the project this year and allowing only a limited number of students with a shortened field experience.

The Community Design Center has many environmental education opportunities including a conservation core and a garden core that employ students from Johnson and Cleveland schools in local environmental and ecological service projects. They have a teaching garden from which they teach cooking, nutrition, local environmental science, and environmental art. Again, they partner with many of the other environmental education providers in the area to offer and enhance their programs.

There are also many valuable environmental education opportunities throughout the city of St. Paul. The Science Museum of Minnesota offers BioInvestigators, a summer program for fourth to sixth graders. Como Park Zoo and Conservatory has environmental education opportunities including, the Japanese Garden and EdVentures. The Raptor Center, at the University of Minnesota, also offers various environmental education programs. Eco Education has program offerings for schools with children in the fifth through twelfth grade. The Bell Museum of Natural History in Minneapolis offers guided tours and other programs that focus on natural history and science for school groups or other organizations.

We conducted twelve interviews with community members including teachers, non-profit organization leaders, business owners, elected officials, and community environmental education providers. The goals of the interviews included, identifying existing environmental education programs, identifying the environmental education needs of the community, and identifying the challenges for environmental education in the District 5 Payne-Phalen neighborhood.

In response to, "What type of environmental education do you think is important, understanding of natural resources so that the resources are protected, or building a sense of community through natural resources?" those interviewed had mixed answers. Some respondents stated that the most important outcome of environmental education in this area was building a strong community, while others said that protecting the environment was most important, and some said that they were equally important.

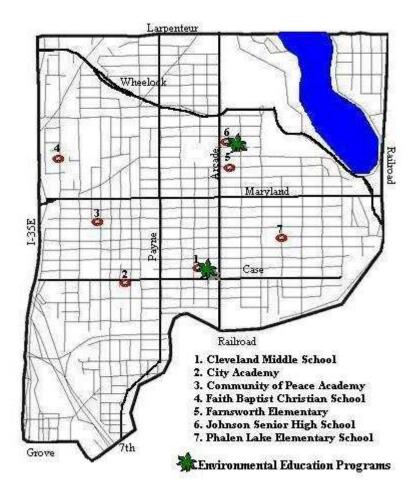


Figure 5. District 5 Payne-Phalen Schools.

One respondent stated that because children, especially preteens and teens, wanted to make a mark on the world by doing something important, learning about the environment and using that knowledge to help protect the environment was the perfect vehicle for them to accomplish this desire. Reasons for building the community through environmental education were supported by the argument that a lot of the environmental problems in this community can be attributed to a lack of strong community bonds. All of the interviewees, though stressing the importance of one choice, also included some portion of the other choice in their answer, suggesting that the two are interconnected and equally important considerations for planning.

Most respondents said environmental education for children in the school curriculum was important as well as environmental education for everyone in the broader community, including for adults. Many interviewees brought up the need for very specific, locally based environmental education. As one respondent indicated students know a lot about the rainforest, but nothing about the ecology of their own neighborhood. Others commented that knowing about local history, natural history, and ecology could help individuals that live in the community feel connected to and a sense of responsibility for the environmental health of their neighborhood.

Teachers and environmental education providers stressed the need for hands on environmental education, field experiences, and local environmental projects. Partnerships between environmental educators and other organizations were seen by many as vital to the success of most environmental projects done in this area. This is important because this is how accurate information can be exchanged from one organization to another organization looking to learn more. Some existing partnerships mentioned were between schools, the Washington/Ramsey Watershed District, Community Design Center, Friends of Swede Hollow, Ramsey County Environmental education providers, and several others.

Business and community group leaders expressed the importance of a year-round environmental education experience. Ethnic group members expressed the need to be connected with the Payne-Phalen neighborhood as a member of that community, rather than always as a member of the ethnic group. Though the cultural heritage of everyone is important, many felt they were seen as Latino or Hmong and not American. One interviewee commented that one week out of the year, the communities are asked to come together and celebrate their common grounds and cultural uniqueness, but the rest of the year, they are profiled by their race and the lack of acceptance creates divides. Several respondents felt environmental education may be a unique means of connecting the community. Whether through a community fair or through environmental programs, the commonality of protecting our water and air can be demonstrated to all groups and help to bridge those divides.

While many respondents were concerned about the traditional environmental issues, such as pollution, waste, and lack of green space, many brought up less traditional environmental issues. These less traditional environmental issues reflect that this is an urban area with unique needs. Some of these other environmental issues included crime,

drugs, garbage, gangs, safety, and upkeep of homes, rental units, businesses, and parks. While some of these may not be standard environmental issues they are no less valid than any other environmental issue, especially in the hearts and minds of the District 5 residents.

From these interviews, it became apparent that community members want environmental education programs and events to occur. The structure of such programs should be tailored to the community in approaches that may be very different then how environmental education is traditionally conducted. Cultural and language barriers may exist that need to be addressed in order for the programs to reach a large portion of the community in an effective manner. Connecting environmental education with children is one way that many expressed as a means of furthering the environmental awareness of the family and then the community.

Recommendations

Becoming aware of the unique and special natural history in the community can help people feel more connected and proud of their neighborhood. Increased pride and participation in creating and maintaining a healthier and aesthetically pleasing natural and built environment can improve the quality of life for all residents. This improved quality of life includes not only increased neighborhood pride and aesthetic beauty, but it can also raise property values, contribute to reducing crime, and create economic opportunities for businesses. To do this in a diverse neighborhood it is important to reach all ethnic and cultural groups. This diverse population can be reached through previously established lines of communication, such as local newspapers and local businesses. To reach children, local environmental education can be expanded in schools and recreation centers, through collaboration with established environmental education providers. Finally, a coordinator could help facilitate all of the different environmental education opportunities. All of this would support a stronger neighborhood and a better quality of life for residents.

Recommendation 1

Raise Environmental Awareness through Community Newspapers

Presently in the District 5 Payne-Phalen community there is a general lack of awareness pertaining to local environmental issues and environmental education opportunities. After interviewing several community members it became apparent that local environmental issues were not well known. It was also clear that if residents were interested in participating in environmental education programs, they would have to conduct their own research on where programs were held.

Based on community member recommendations, community newspapers may be the best vehicle for raising general environmental awareness of residents. There are numerous newspapers distributed throughout the neighborhood. These papers are geared towards specific cultural groups (e.g. *Hmong Times*), as well as broader papers that address the issues of the entire community (e.g. *East Side Review*). These local newspapers can serve as a channel to raise awareness concerning local environmental issues. Examples

of local environmental issues that have been presented in local papers, such as *Avenues*, include: Buckthorn management in the Twin Cities and the oil spill clean up on West 7th Street. Articles in community newspapers could convey information on a broad range of environmental issues that are important and pertinent to local community members. Some examples of possible article topics include local ecology, natural and human interactions and ways for community members to be environmentally friendly. These articles should be available in different languages. (See Appendix D for examples).

Newspapers can also be a source of advertising for current environmental education events. They can provide an easily accessible calendar of events in existing environmental education programs. Thereby, reducing a resident's reliance on the Internet or phone to find out where to participate in local environmental education programs.

To reach the broadest base of community members as possible, media sources that are specific to diverse groups should be used (Minnesota Green Print for Environmental Education, 2000). The fact that community members mentioned that newspapers are a convenient channel of information, along with the newspapers' willingness to advertise public issues that are priorities for residents makes this recommendation ideal for the community. A good example of a local newspaper that incorporates local environmental issues is *Avenues*, which distributes to West St. Paul. They consistently advertise for local recreation centers, information from District meetings, and have written numerous articles pertaining to local environmental issues. Community members have even written letters about the timeliness of the environmental articles in the paper. These letters demonstrate that some residents are engaged and interested in environmental issues affecting the community. By creating a series of articles for District 5 newspapers, residents will be informed about and become involved in environmental issues that are pertinent to their neighborhoods.

This recommendation presents is fair share of challenges related to coordination with the newspapers. However, this is an effective way to reach a diverse group of people and if implemented properly it can be very successful. In smaller local newspaper operations the editor does most of the writing and chooses the article topics. These articles have to pertain to the audience that the newspaper is targeting. For example, a *Hmong Times* representative said that if a topic captures the attention of the Hmong audience then they would be more than willing to run a story on it, or advertise for it. The *North End News* editor said she needs to feel it is of interest and pertinent to the community.

There are several routes District 5 Payne-Phalen could take to implement this recommendation. One option is to have a representative of the community inform the local newspapers of environmental issues that arise. They do not have to write the article but inform the different community newspapers so that they can write the articles in a way that is captivating to their own audience. Another option is to keep the environmental education providers in touch with the local newspapers so that the newspaper staff can be aware of and advertise for local environmental education events. A third route would be for the District Council to encourage the citizens of the Payne-

Phalen community to contact the local newspapers and encourage the newspapers to advertise environmental education programs, and inform residents about local environmental issues, highlights, and concerns.

By working with local newspapers, a diverse audience can be informed about local environmental issues as well as environmental education opportunities. This helps to increase the residents' knowledge as well as community participation in local environmental education programs. This in turn can foster a sense of pride in one's community. There are challenges in making this recommendation work, such as convincing editors that a certain issue is of concern for their paper's core audience, or narrowing the articles to a point where they become trivial. However if the newspapers, community and environmental educators work together this recommendation can help to build a stronger community with a solid understanding of their surrounding resources.

Recommendation 2

Enhance Collaboration between Environmental Education Providers

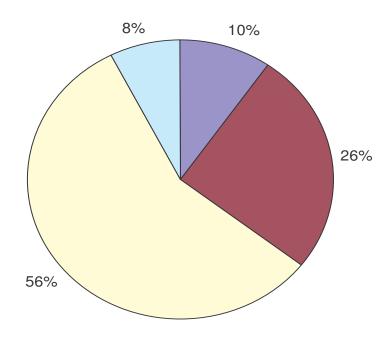
There are several reasons we suggest increased collaborations between District 5 Payne-Phalen Environmental Education programs and others in the Twin Cities area. Recreation center programs in the District could offer Environmental Education, but currently do not because there are no trained staff members for Environmental Education. There is a wealth of Environmental Education programming in the Twin Cities but only two of the seven schools currently offer programs (Figure 5). Furthermore, due to a lack of communication small collaborations that do exist in the District are not well publicized.

Many different community leaders agreed that environmental education is important and should be integrated in school and recreation center programs. As the U.S. Environmental Protection Agency report on environmental education pointed out, it is a life long process.

"Environmental education should be a life-long learning process for Americans - both young and old. To be a life-long learning process, environmental education must be better integrated in the nation's schools, colleges, and universities as well as an integral part of business transactions and community-based activities. Environmental education is needed to provide community groups, government officials, business and industry, and private citizens with the awareness, knowledge, and problem-solving skills needed to work together to actively and successfully address this nation's environmental challenges and to ensure a healthy and sustainable environment for present and future generations" (U.S. Environmental Protection Agency, 1996).

The District recreation centers already have existing programs, facilities and staff that could be used for environmental education, once collaboration is established with Environmental Education providers (Figure 4). Furthermore, 26% of the residents of District 5 Payne-Phalen are children between 5 and 17, attending local schools (Figure 6). Schools are a very important place to reach young people through environmental education. Schools and recreation centers already have the infrastructure to support environmental education during class or in after-school programs. Moreover, District 5

District 5 Payne- Phalen Age of Population in 2000



■ Ages 0-4 ■ Ages 5-17 □ Ages 18-64 □ Ages 65+

Figure 6. District 5 Payne-Phalen Age of Population in 2000.

Source: Wilder Research Center, 2000.

Payne-Phalen is located in the Twin Cities area, making public transportation available to most environmental education organizations or museums.

One barrier for many schools, as they consider integrating environmental education in their programs, is time. Teachers are already on a tight schedule to integrate all the material they have to teach for testing, leaving very little time for anything else. This problem could be solved if environmental education would be put into small units based on testing skills, which then could be integrated into the everyday class. For example, calculating the volume of trash produced during one day in Saint Paul could be integrated into a math lesson. Environmental education students from the University of Minnesota, and other colleges could develop programming or teach for schools through internships. The programs can be tailored to meet the needs for specific classrooms or teachers. This would be a simple approach to integrate environmental education and the collaboration between schools and other organizations could develop examples from neighborhood issues.

Another barrier often confronted in environmental education is the lack of funding. But environmental education does not have to be expensive; the first steps can be small, such as integrating environmental education units in the normal lesson plan. Another option is having organizations come in with a program for the whole school, which would reduce the cost. For example, the Raptor Center of the University of Minnesota visits schools with their programs. In addition, targeted funding is available for schools, teachers and students in need of financial support for their Environmental Education programs (Appendix E).

A barrier for recreation centers is the lack of training for the staff. This could be addressed by connecting the centers with environmental education organizations that offer training for staff or provide their own staff for programs. Existing programs could be modified to fit environmental education standards. Dayton's Bluff Recreation Center offers a class on soy wax candle making. If the instructor were to explain where soy comes from and how it is used, how it is grown and local issues that involve soy, then the program would have an environmental component. Moreover, interns could be used to think about appropriate ways to improve these existing programs.

Collaboration between education programs within the Twin Cities area and District 5 Payne-Phalen can produce many effective environmental education programs creating "the awareness, knowledge, and problem-solving skills needed to work together too actively and successfully address this nation's environmental challenges, ensuring a healthy and sustainable environment for present and future generations" (U.S. Environmental Protection Agency, 1996). The interactions children experience when they are young have a direct correlation with their actions as adults. Raising children to care for and take interest in the natural spaces around them will help ensure that natural resources are used wisely and will be available for generations to come.

Recommendation 3 Create a Model for Environmental Responsibility in the Community through Business Involvement

Environmental education is in the eye of the beholder. Though many point to the inschool activities and field trips that attempt to provide education to school age children, there is also an important component that works to connect community members and businesses. District 5 Payne-Phalen is an ideal community that can attempt to provide an environmentally literate citizenry through the connection between businesses and community members.

The first links exists between awareness of environmental issues and action on the part of business owners in District 5 Payne-Phalen. Being proactive in efforts for green, or environmentally friendly, business practices can increase the quality of the neighborhood by reducing waste and preventing pollution. It can increase the prestige of local businesses and general morale throughout the community, with an increased sense that the community is working together.

Many homeowners lack incentive to take part in the greening of their community. Business involvement can create a model for homeowners and citizens throughout the neighborhood that will increase community appeal, safety, and health. By involving the entire community, bonds between citizens and business will be strengthened, resulting in greater connection and community empowerment. Businesses can illustrate the financial importance of waste reduction and recycling to homeowners as well as help to foster a sense of responsible property ownership by demonstrating the benefits of an aesthetically pleasing community.

Litter and unwanted waste can prove to be major problems in metropolitan areas. Community members want to live in a clean city and be able to appreciate their surroundings. From maintaining a clean storefront and side walk to adding trash receptacles outside of the business, small steps can be taken to increase the aesthetic appeal in the business corridor of the community. In addition, business sponsorship of community clean-up days helps increase business name recognition and helps connect citizens to their local business owners, which in turn can increase local support of the business.

Partnerships between community or environmental groups and businesses have proven to be ecologically and economically feasible. A recent study by the Alliance for Environmental Innovation found that good environmental performers most often are good financial performers (Alliance for Environmental Innovation, 1999). Businesses in District 5 Payne-Phalen can benefit from such partnerships and provide a gift to the community that will continue to give back in enhanced health and beauty.

A recent community meeting illustrated the importance the community residents' places on economic development and the need to keep the streets and avenues clean and appealing. Citizens voiced their concern over vacant storefronts and unclean streets.

Litter and empty buildings can pose potential safety hazards as well as a feeling of apathy from the community. Interviews with various community members revealed the need for year-round initiatives that seek to include all community groups. Environmental business initiatives can create this year-round program for all ages to provide community appeal and improve the quality of life in District 5.

For example, one community greening program in Baltimore, Maryland added value to the community. As the Community Resources organization demonstrates through its work in many metropolitan areas throughout the country including Chicago, Detroit and Cleveland, "there is a clear relationship between the quality of the community environment and the housing prices in that neighborhood. Community greening brings people out of their homes where they interact with their neighbors and in many cases greening activities can help break down race and age barriers that often exist both within and between communities. Finally, those who invest physically in their community are more likely to care for it" (Community Resources, 2004).

A recent program in New York City asked businesses to give back to the city by picking up costs for new garbage cans in city neighborhoods. Each container featured the sponsor's logo, along with the logo of the local economic development council and the Department of Sanitation. The receptacles were placed near the sponsor's business, organization, or residential building. District 5 Payne-Phalen can be a model for the rest of the east side and St. Paul. Communities across the country are beginning to develop programs that combine private and public resources to help in enhancing the environment in a time when government budgets are being cut and financial assistance is limited.

The East Side Neighborhood Development Corporation (ESNDC) and the Community Council can provide the planning resources to enhance already existing community clean-up days. Holding additional semi-annual clean ups can help to connect the community more. Local businesses could sponsor the advertising for the event, as well as provide information to their customers and employees, or help pay for the trash bags or snacks for volunteers. In addition, businesses could provide free or reduced price goods or services for community members who take part in the days clean up.

Local businesses and storefront owners can help to enhance community appeal by making sure their sidewalks and green space are kept clean. Flowerpots could be added in front of buildings or local artists could be asked to paint murals on buildings to increase the aesthetic appeal of the neighborhood.

A community business organization already exists that could be a logical means of connecting available environmental resources to the business community. Through monthly updates or seminars, business owners can learn of the benefits of taking part in environmental responsibility. The ESNDC currently provides funds for storefront restorations, cultural activities to attract shoppers, and interior renovations to aid in attracting business investment and creation. ESNDC is a wealth of information on business development and sustainability for new or existing businesses on the east side.

The District Council's partnership with ESNDC can be enhanced through the combination of environmental initiatives and aid in furthering both groups' missions.

Employee participation will be critical to the success of the environmental initiative within businesses. In larger businesses, creating a team of employees to promote environmentalism in the workplace will help to strengthen effectiveness. A group of employees can head up the recycled-product purchasing effort; educate co-workers on environmental issues, and track environmental accounting for their department. Creating incentives for employees who help with greening the workplace could help recognize them for their efforts (Greenbiz, 2004).

From capital assistance grants to loans, the Minnesota Office of Environmental Assistance (MOEA) provides financial and technical support for businesses wishing to enhance their environmental initiatives. (Information about MOEA's programs can be found by calling 800-657-3843 or visiting www.moea.state.mn.us.)

By serving as role models for the community, business owners can create environmentally responsible business practices that will increase revenue, boost community morale, enhance the aesthetics of the community, and minimize public health threats. Business owners will serve as responsible role models continuing to increase community support and engagement. An environmentally literate citizenry and bustling business sector can help promote healthy living and provide a community connection that will benefit the Payne-Phalen community for years to come.

Conclusions

By enhancing existing programs and creating more environmental education opportunities within the District 5 Payne-Phalen community, an understanding of natural areas and a pride in community can be created. By promoting environmental education within the community a better understanding of their natural resource base can be attained by community members. If this happens, a certain sense of pride in one's area starts to develop which in turn opens people up to more improvements that make the community a better place to live.

These recommendations were created based on current environmental education programs and community input, in an effort to enhance this sense of place within the community and appreciation for the natural resources. It must be remembered that these recommendations are only a guide for District 5 Payne-Phalen during the planning process. Through environmental education, the community members will be able to understand the truly unique characteristics of the community. This community is rich with history that is still being written today. Environmental education is one tool that can help to preserve this rich history by connecting it with the local landscape and the people that make this community great.

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Appendix A: Environmental Education Opportunities in the Saint Paul Area

Table 1. Environmental education Opportunities in St. Paul and Surrounding Areas.

Program Provider/ Program Name	Program Type					5	Progran	n Age	Fees	Public Transport	
St. Paul Parks and Recreation	entertainment	physical activity	arts	educational	Single class	ongoing	youth	teen	adult		
Eco Partners	•			•		•	•	•	•		•
Spring Clean Up				•	•	•	•	•	•		•
Monitor And Surveying Volunteer						•		•	•		•
On the Spot	•			•		•	•	•	•		•
Forestry and Tree Guide				•		•		•	•		
Community Gardens	•	•	•	•		•	•	•	•		•

Program Provider/ Program Name	Program Type			Sessions		Program Age			Fees	Public Transportation	
Recreation Centers	entertainment	physical activity	arts	educational	Single class	ongoing	youth	teen	adult		
Dayton's Bluff							_				
Follow The Footsteps To Fire Safety				•	•		•	•			•
Storm Dance For Teens	•	•			•			•			•
Tamarack Nature Center Soy Wax Candle Making				•	•		•	•			•
Soy wax Candie Making			•	•	•					•	•
Teen Club/Teen Council	•			•		•	•				•
Story Telling With Animals and Santa Soak Your Troubles Away	•				•			•	•	•	•
Herb Pillows For Yoga, Dreams and			•	•	•			•	•	•	•
Relaxation	•				•					•	•
Margaret											
Teen Club/Teen Council Margaret Book Club	•			•		•		•			•
	•			•		•		•	•		•
Arlington											
Duluth/Case											
Wilder											

Program Provider/ Program Name	Program Type	Sessions		Progra	m Age		Fees	Public Transportation			
Other Opportunities	entertainment	physical activity	arts	educational	Single class	ongoing	youth	teen	adult		
BioInvestigators Summer Program		•		•		•	•	•	•	•	•
Eco Education				•	•	•	•	•		•	•
Eureka Recycling			•	•	•	•	•	•	•		•
Bell Museum	•			•	•	•	•	•	•	•	•
Raptor Center	•			•	•	•	•	•	•	•	•
Science Museum	•			•	•	•	•	•	•	•	•
Children's Museum	•		•	•	•	•	•	•		•	•
Community Design Center											
Garden Corps		•	•	•		•	•	•			•
Conservation Corps		•		•		•		•			•
Como Park Zoo and Conservatory											
Japanese Garden	•	•	•	•	•	•	•	•	•	•	•
Como EdVentures	•		•	•	•		•	•	•	•	•
Botanical Arts and Illustrations	•		•		•			•	•	•	•
Aromatherapy Classes Rise and Shine Adult Series	•			•	•			•	•	•	•
Parent/Child Preschool Classes	•		•	•	•				•	•	•
Family Classes	•		•	•	•		•		•	•	•
School/Group Programs	•		•	•	•		•	•	•	•	•
Home School Courses	•			•	•			•		•	•
Como Zoo	•		•	•	•		•	•		•	•
	•	•		•		•	•	•	•	•	•

Appendix B: Recreation Center Addresses

Programs of the Recreation Centers can be obtained by calling directly or going to the Saint Paul Parks and Recreation website.

http://www.ci.stpaul.mn.us/depts/parks/recprograms/

Other environmental programs, that are organized by the Saint Paul Parks and Recreation, can also be found on their website.

http://www.ci.stpaul.mn.us/depts/parks/environment/

Arlington Recreation Center



Directions: Arlington Recreation Center is located between Maryland Avenue East and Rose Avenue East at Greenbrier Street.

Address:

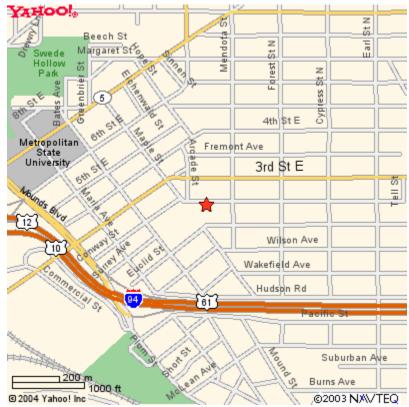
665 East Rose Avenue Saint Paul, MN 55106 651-298-5701 651-266-6378 TTY

You can also subscribe to receive new editions of Arlington Recreation Center Seasonal Program by e-mail.

http://www.govdocs.com/service/document.html?code=STPAUL_139

Mike Waldorf, Recreation Center Director Kathy Korum, Service Area Coordinator Mike Hahm, Recreation Services Manager

Dayton's Bluff Recreation Center



Dayton's Bluff Recreation Center is located at the corner of Conway Street and Bates Avenue.

Address:

800 Conway Street Saint. Paul, MN 55106 651-793-3885 651-266-6378 TTY

You can also subscribe to receive new editions of Dayton's Bluff Recreation Center Seasonal Program by e-mail.

http://www.govdocs.com/service/document.html?code=STPAUL_143

Jody Griffin, Recreation Center Director Kathy Korum, Service Area Coordinator Mike Hahm, Recreation Services Manager

Duluth & Case Recreation Center



Directions: Duluth & Case Recreation Center is located at the corner of Lawson Avenue and Duluth Street.

Address:

1020 Duluth Street Saint. Paul, MN 55106 651-298-5709 651-266-6378 TTY

You can also subscribe to receive new editions of Duluth & Case Recreation Center Seasonal Program by e-mail.

http://www.govdocs.com/service/document.html?code=STPAUL_145

Fernando Fuentes, Recreation Center Director Kathy Korum, Service Area Coordinator Mike Hahm, Recreation Services Manager

Margaret Recreation Center



Directions: Margaret Recreation Center is located between Frank Street and Earl Street on Margaret Street.

Address:

1109 Margaret Street Saint. Paul, MN 55106 651-298-5719 651-266-6378 TTY

You can also subscribe to receive new editions of Margaret Recreation Center

Seasonal Program by e-mail.

http://www.govdocs.com/service/document.html?code=STPAUL_164

Kate Ross, Recreation Center Director Kathy Korum, Service Area Coordinator Mike Hahm, Recreation Services Manager

Phalen Recreation Center



Directions: Directions: Phalen Recreation Center is located approximately 1/2 mile east of the Wheelock Parkway and Hwy 61 intersection.

Address:

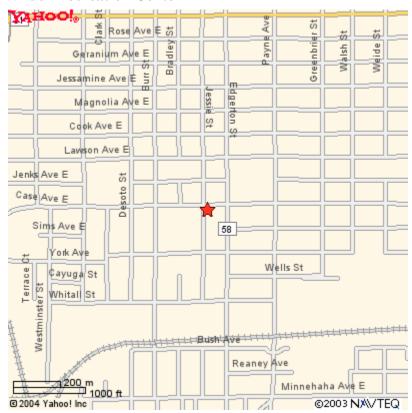
1000 East Wheelock Parkway Saint Paul, MN 55106 651-793-6600 651-266-6378 TTY

You can also subscribe to receive new editions of Margaret Recreation Center Seasonal Program by e-mail.

http://www.govdocs.com/service/document.html?code=STPAUL_152

Mike DeVilliers, Recreation Center Director Kathy Korum, Service Area Coordinator Mike Hahm, Recreation Services Manager

Wilder Recreation Center



Directions: Wilder Recreation Center is located at the corner of Jessie Street and East Case Avenue.

Address:

958 Jessie Street Saint Paul, MN 55101 651-298-5727 651-266-6378 TTY

You can also subscribe to receive new editions of Wilder Recreation Center Seasonal Program by e-mail.

http://www.govdocs.com/service/document.html?code=STPAUL_184

Mary Ann O'Keefe, Recreation Center Director Kathy Korum, Service Area Coordinator Mike Hahm, Recreation Services Manager

Source:

Saint Paul Parks and Recreation. 2004.

http://www.ci.stpaul.mn.us/depts/parks/recprograms/recreationmap.html

Appendix C: Addresses of Schools in District 5 and Surrounding Areas

Elementary School

Ames Elementary School (not in District 5) Principal: Ms. Betty Erickson (651) 293-8970 1760 Ames Place Saint Paul, MN 55106

Community of Peace Academy Principal: Ms. Karen Rusthoven (651) 776-5151 471 Magnolia Avenue East Saint Paul, MN 55101

East Consolidated Elementary School Principal: Mr. Darrel Rivard (651) 293-8685 409 Case Avenue Saint Paul, MN 55101

Farnsworth Elementary School Principal: Mr. Darrel Rivard (612) 293-8675 1290 Arcade Street Saint Paul, MN 55106

Frost Lake Magnet School (not in District 5) Principal: Ms. Annemarie Erbes (651) 293-8930 1505 East Hoyt Avenue Saint Paul, MN 55106

Faith Baptist Christian School Principal: Rev. Frank Whitcomb (651) 771-5567 1365 Westminster Street Saint Paul, MN 55101

East St Paul Lutheran School (not in District 5) Principal: Ms. Barb Fallert (651) 774-2030 674 Johnson Parkway Saint Paul, MN 55106

Phalen Lake Elementary School Principal: Dr. Mary Chorewycz (651) 293-8935 1089 Cypress Street Saint Paul, MN 55106 Prosperity Heights Elementary School (not in District 5) Principal: Mr. John Ashmead (651) 293-8695 1305 Prosperity Avenue Saint Paul, MN 55106

Middle School

Cleveland Quality Middle School Principal: Mr. Aaron Rupert (651) 293-8880 1000 Walsh Street Saint Paul, MN 55106

Hazel Park Mid School Academy (not in District 5) Principal: Ms. Nadya Parker (651) 293-8920 1140 White Bear Avenue Saint Paul, MN 55106-3004

Washington Middle School (not in District 5) Principal: Ms. Patricia McHugh (651) 293-8830 1041 Marion Street Saint Paul, MN 55117

High School

Arlington High School (not in District 5) Principal: Mr. William Dunn (651) 293-6900 1495 Rice Street Saint Paul, MN 55117

St Bernard High School (not in District 5) Principal: Ms. Jennifer Cassidy (651) 489-1338 170 Rose Avenue West Saint Paul, MN 55117

Harding High School (not in District 5) Principal: Ms. Nan Mizuhata (651) 793-4700 1540 East 6th Street Saint Paul, MN 55106

City Academy Principal: Ms. Milo Cutter (651) 298-4624 958 Jesse Street Saint Paul, MN 55101 John A Johnson Senior High School Principal: Ms. Kay Arndt (651) 293-8890 1349 Arcade Street Saint Paul, MN 55106

Agape Center (not in District 5) Principal: Ms. J Ashley Anderson (651) 228-7746 1919 University Avenue West Saint Paul, MN 55104

K-8 School

Bethlehem Lutheran Church School (651) 771-6982 655 Forest Street Saint Paul, MN 55106

St. John Evangelical Lutheran School (not in District 5) (651) 776-8861 771 Margaret Street Saint Paul, MN 55106

Unified School

St Paul Open School (not in District 5) Principal: Ms Ruth Pechmann (651) 293-8670 90 Western Avenue South Saint Paul, MN 55102

Public Area Learning Center

A.L.C. Face to Face Principal: Mary K. Boyd (612) 772-2539 1165 Arcade Street. Saint Paul, MN 55106

Source:

Neighborhoodlink. 2004 http://www.neighborhoodlink.com/stpaul/payne-phalen/schools.html

Appendix D: Example of Articles for District 5 Payne-Phalen Newspapers.

Payne-Phalen Environmental News Fall Leaves

It's fall and that means the leaves are falling. So what should you do with all of those leaves in your yard? You can't throw them away with your regular garbage; garbage trucks won't pick them up. But, if you live in Ramsey County you can take them to one of Ramsey Counties Yard Waste Sites. There are seven of these sites, including one on Frank St. and Sims in St. Paul. The Frank and Sims site accepts yard waste as well as brush.

Yard waste includes leaves, grass clippings, and other soft-bodied plant materials. Brush includes all brush and tree waste except for stumps.

All users of Ramsey County Yard Waste and Brush Sites will need to present proof of residence. Identification with a Ramsey County address such as a driver's license, a state issued identification card, or utility bills are acceptable.

Hours of Operation*:

April 3 – November 29, 2004

Saturdays: 9am – 5pm

Sundays: 11am – 5pm

Mondays, Wednesdays, and Fridays:

11am – 7pm

*Weather permitting

For recorded messages on site hours (including closure due to severe weather), locations, and materials

accepted call:

English: 651.773.4455 Hmong: 651.773.4490

Spanish: 651.773.4492

For additional information call:

651.633.3279

http://www.co.ramsey.mn.us

Payne-Phalen Noticias del medio ambiente Las hojas de otoño

Es otoño y eso significa que las hojas se están cayendo. ¿qué hacer con todas esas hojas que están en su jardín? No las puede tirar con la basura habitual; los camiones de basura no las recogerán. Pero si usted vive en el Condado de Ramsey las puede llevar a uno de los rellenos sanitarios para la basura generada en los jardines del Condado de Ramsey. Existen siete sitios para este propósito, incluyendo uno en las calles de Frank y Sims. El local en Frank y Sims acepta los desperdicios de su jardín y también la maleza.

Los desperdicios de jardín incluyen hojas, pasto, y otros materiales blandos generados por las plantas. La maleza incluye todos los deshechos generados por los árboles exceptuando los troncos.

Todos los usuarios de los locales para desperdicios generados por el jardín y la maleza del Condado de Ramsey necesitarán presentar un comprobante de domicilio. Una identificación con la dirección del condado de Ramsey como licencia, tarjeta de identificación emitida por el estado, o un recibo de luz o teléfono son aceptables.

Horario*:

3 de abril – 29 de nov., 2004

Sábados: 9am – 5pm Domingos: 11am – 5pm

Lunes, Miércoles y Viernes: 11am -

7pm

*Si el clima lo permite

Para escuchar mensajes grabados acerca del horario (incluyendo cierre por mal tiempo), ubicación, y materiales aceptables llame al:

Inglés: 651.773.4455 Hmong: 651.773.4490 Español: 651.773.4492

Si necesita información adicional llame

al: 651.633.3279

http://www.co.ramsey.mn.us

Environmental News Save Water & Save Money

The human body is about 70 % water. Water is very important to our body's health, so it's important that we drink enough water everyday to stay healthy. We should all drink at least 8 glasses of water a day, more on hot days or when we're working hard.

Water is so precious to us that we must make sure that we don't waste it. Only one percent of the water on Earth is usable for drinking. Some countries and states are already experiencing water shortages. So that means we must learn to use our water wisely, so that our children and grandchildren still have usable drinking water when they grow up. Plus saving water means saving money on our water bill.

What can you do to help save water? You can take shorter showers. A 5-minute shower takes 10 to 25 galloons of water.

You can install water-saving faucets and showerheads.

You can turn off the water when you're brushing your teeth.

Only wash full loads in your dishwasher and washing machine. Washing machines can use 40 or more gallons a load.

You can have leaks fixed right away. A toilet leak can waste 60 gallons of water a day and a slow faucet drip can leak 20 gallons a day.

These are just a few of the things you can do to save water. So remember that saving water today will help protect future generations from water shortages and it can save you money on your water bill, today!

For more information on how you can save water go to http://www.ci.st.paul.mn.us/depts/water/pages/conserva.htm

Payne-Phalen Noticias del Medio Ambiente Ahorre agua y ahorre dinero

Aproximadamente el 70% del cuerpo humano está compuesto por agua. El agua es muy importante para la salud de nuestro cuerpo, por lo que es muy importante que tomemos suficiente agua todos los días para mantenernos sanos. Todos debemos tomar por lo menos 8 vasos de agua diariamente, más cuando hace calor o cuando trabajamos intensamente.

El agua es tan preciada para nosotros que debemos asegurarnos de no desperdiciarla. Sólo el uno por ciento del agua en la Tierra se puede utilizar para beber. Algunos países y estados ya están experimentando escasez de agua. Esto significa que debemos aprender a utilizar el agua sabiamente para que nuestros hijos y nietos aun tengan agua para beber ahorrar agua ahora ayudará a proteger a las generaciones futuras de padecer escasez de agua y además le permitirá ahorrar dinero al pagar su cuenta de agua, ¡ahora mismo!

cuando crezcan. Además ahorrar agua se traduce en ahorros significativos de dinero en nuestra cuenta de agua.

¿Oué puede usted hacer para ahorrar agua? Puede reducir el tiempo que pasa en la regadera. Un regaderazo de 5 minutos consume alrededor de 10 a 25 galones (38 a 95 litros) de agua. Puede instalar grifos y regaderas ahorradoras de agua. También puede cerrar el grifo mientras se lava los dientes. Únicamente utilice la lavadora de platos llenándola hasta su máxima capacidad. Las lavadoras de platos pueden llegar a utilizar 40 o más galones (150 litros) en cada lavada. Puede arreglar las goteras de inmediato. Una gotera en el retrete puede gastar 60 galones (227 litros) de agua por día y un gotera en el grifo puede desperdiciar 20 (75 litros) galones por día.

Estas son sólo algunas cosas que usted puede hacer para ahorrar agua. Recuerde que

Para obtener más información acerca de como puede ahorrar agua llame al: http://www.ci.st.paul.mn.us/depts/water/pages/cosserva.htm

Appendix E: Environmental Education Grants Resources

EELink North American Association for Environmental education. 2004. http://www.eelink.net/grants-generalinformation.html

U.S. Environmental Protection Agency. 2004. http://www.epa.gov/enviroed/grants.html

Wisconsin Environmental education Board. 2004.

http://www.uwsp.edu/cnr/weeb/application/program%20overview.htm

Captain Planate Foundation. 2004. http://www.captainplanetfdn.org/appProcess.html

Environmental Grantmaking Foundations. 2004. http://www.environmentalgrants.com/

Green Works! Grants. 2004. http://www.edutech.nodak.edu/plt/greenw.html

The Home Depot Foundation. 2004.

http://www.homedepotfoundation.org/hfus/enus/initiatives.html

Department of Ecology. 2004. http://www.ecy.wa.gov/programs/wq/links/funding.html http://www.ecy.wa.gov/programs/swfa/terryhusseman.html

Melinda Gray Ardia Environmental Foundation. 2004. http://www.mgaef.org/

Environmental Grant resource. 2004.

http://www.co.pierce.wa.us/xml/services/home/environ/ed/Environmental%20Grant%20Resources%20for%20Schools.pdf

Appendix F: Environmental Education Opportunities in Minnesota and Twin Cities

Minnesota

Audubon Center of the North Woods

PO Box 530 (mailing address)

54165 Audubon Dr. (shipping address)

Sandstone, MN 55072 Phone: 320-245-2648 Toll Free: 888-404-7743

Fax: 320-245-5272

Email: audubon1@audubon-center.org http://www.audubon-center.com/

Courage Environmental Learning Center

8046 83rd Street NW Maple Lake, MN 55358 (320) 963-3121

fax: (320) 963-3698 eecccourage@yahoo.com http://www.courageelc.org

Deep Portage Conservation Reserve

2197 Nature Center Drive N.W.

Hackensack, MN 56452 Email: portage@uslink.net Phone: 218-682-2325

http://www.deep-portage.org/

Eagle Bluff Environmental Learning Center

1991 Brightsdale Road Route 2 Box 156A Lanesboro, MN 55949

Phone: 507-467-2437

Toll Free: 888-800-9558 (in Minnesota, Wisconsin, and Iowa)

Fax: 507-467-3583

http://www.eagle-bluff.org/

Laurentian Environmental Center

8950 Peppard Road -- Britt, MN 55710 888-749-1288 or 218-749-1288 or 218-749-2750(fax) lec@rangenet.com

http://www.laurentiancenter.com/

Long Lake Conservation Center

28952 438th Lane

Palisade, Minnesota 56469 Local: 1-218-768-4653 Toll Free: 1-800-450-5522

Fax: 1-218-768-2309

llcc@llcc.org

http://www.llcc.org/

Prairie Wetlands Learning Center

602 State Highway 210 East Fergus Falls, MN 56537 Phone: (218) 736-0938 Fax: (218) 736-0941

prairiewet@fws.gov

http://midwest.fws.gov/pwlc/

Wolf Ridge Environmental Learning Center

6282 Cranberry Road Finland, MN 55603 (218) 353-7414 Fax 218-353-7762 http://www.wolf-ridge.org

http://www.wolf-ridge.org/index.html

Twin Cities Area Eureka Recycling

2828 Kennedy St NE Minneapolis, MN 55413 Phone: 651-222-7678

Fax: 612-623-3277

http://www.eurekarecycling.org

Bell Museum of Natural History

10 Church Street SE Minneapolis, MN 55455 Phone: 612-624-7083

http://www.bellmuseum.org

Raptor Center

College of Veterinary Medicine University of Minnesota 1920 Fitch Ave Saint Paul, MN, 55108

Phone: 612-624-4745 Fax: 612-624-8740

http://www.raptor.cvm.umn.edu

Science Museum of Minnesota

120 West Kellogg Blvd Saint Paul, MN 55102 Phone: 651-221-9444 Fax: 651-221-4777

http://www.sci.mus.mn.us

Children's Museum

10 West Seventh St Saint Paul, MN 55102 Phone: 651–225–6000 http://www.mcm.org

Community Design Center of Minnesota

731 East 7th St Saint Paul, MN 55106 Phone: 651-228-7073

http://www.comdesignctrmn.org

Como Park Zoo and Conservatory

1225 Estabrook Drive Saint Paul, MN 55103 Phone: 651-487-8200

http://www.comozooconservatory.org

Minnesota Zoo

13000 Zoo Boulevard Apple Valley, MN 55124 Phone: 952-431-9200

Fax: 952-431-9300 http://www.mnzoo.com

Appendix G: Interviewees

Bierscheid, B. 2004, Personal Communication, November 4.

Briseno, A. 2004, Personal Communication, September 21.

Cogshell, N. 2004, Personal Communication, October 5.

Fourniea, S. 2004, Personal Communication, October 25.

Kipka, K. 2004, Personal Communication, October 7.

Korum, K. 2004, Personal Communication, September 29.

Mata, T. 2004, Personal Communication, September 22.

Murphy, R. 2004, Personal Communication, September 21.

Ojeda, J. 2004, Personal Communication, September 15.

Ramos, M. 2004, Personal Communication, October 6.

Schlecht, J. 2004, Personal Communication, September 21.

Smith, A. 2004, Personal Communication, September 21.

Information about newspapers was provided by the following Twin Cities Newspapers:

- Avenues Newspaper
- North End News
- *Hmong Today*
- Hmong Times
- East Side Review

Avenues 651-699-1462 www.mnnews.com/newspapers/avenues.html

North End News 651-488-8828

Hmong Times 651-224-9395 www.hmongtimes.com

Hmong Today 651-489-0021 www.hmongtoday.com

East Side Review 651-777-8600