

# **Community Assistantship Program**

**Food Sovereignty in Northern Minnesota;  
Building a Sustainable and Accessible Food System  
in This Region**

Prepared in partnership with  
Headwaters Food Sovereignty Council

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December, 2009

CAP Report 151

December 2009

CAP is a cross-college, cross-campus University of Minnesota initiative coordinated by the Center for Urban and Regional Affairs.

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**Food Sovereignty in Northern Minnesota;  
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**Food Sovereignty in Northern Minnesota;  
Building a Sustainable and Accessible Food System in This Region**  
A Report for the Headwaters Food Sovereignty Council  
By Dawn Plumer,  
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For Indigenous Environmental Network

**Introduction**

This project began in 2007 when the Indigenous Environmental Network worked with other local community entities interested in creating better food systems for the region. They started the Food Sovereignty, Security and Health Project which spawned the Headwaters Food Sovereignty Council (HFSC), the active organization in implementing many of the project goals. The main goal of this research project is to create a food council which will then develop a mapping system of the food shed. The council will work to build partnerships between food producers, distributors, and consumers that will improve the health of our communities in relation to food consumption. They will work to develop education and outreach programs that coincide with existing tribal, state and federal programs.

This report focuses specifically on how to utilize existing state and federal food programs as well as state and federal funding to increase access to healthy foods for low-income families and tribal communities in north central Minnesota. We will examine the history of the region, the health of its people, current socioeconomic data, and innovative programs that are reconnecting community with local food traditions and practices. It will address how one community in northern MN is working to create a food system based on local healthy food. It will determine the steps that need to be taken, the challenges, and where the opportunities will be.

The project is focused on ten counties within north central MN. Those counties are Becker, Beltrami, Cass, Clearwater, Hubbard, Itasca, Mahnomen, Pennington, Polk, and Red Lake. Within those ten counties are three Indian Reservations; Red Lake, Cass Lake, and White Earth, which are some of the poorest areas of the state.

### **Background**

**“The mission of the Headwaters Food Sovereignty Council is to provide a foundation for food sovereignty and security by developing leadership in the ten county/three Reservation food shed, to build partnerships and connections between local growers, businesses, and consumers with an emphasis in sustainable food production, improving local economies, increasing access to underserved and at risk communities, and creating a healthy and just food system for everyone within the Headwaters Food Shed Region.”**

Food Sovereignty is a term used to refer to a policy framework advocated by a number of farmers, peasants, pastoralist, fisher folk (fishermen), indigenous peoples, women, rural youth, and environmental organizations, namely to claimed “right of peoples to define their own food, agriculture, livestock, and fisheries systems,” in contrast to having food largely subject to international market forces.<sup>1</sup>

Food sheds are the agricultural equivalent of watersheds: the "agro-ecological footprint" necessary to feed a community or a region. Food shed analysis uses a variety of data sources and disciplines to develop a map of food production and consumption. Using this map, producers and consumers can begin to modify their regional food ecology to make it healthier, more equitable, economically stronger, increasingly dependent on renewable resources, less wasteful, and more resilient in the

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<sup>1</sup> Wikipedia: The Free Encyclopedia.

face of disaster. Usually this means regional food ecology and agriculture becomes more diverse and more local, and strengthens farms and communities in many ways. Food sovereignty is not only the right to healthy and culturally appropriate food, but also the right of the people to define their own food and agriculture system.<sup>2</sup>

A food system is comprised of all the entities and activities related to our food supply including agricultural production, food processing, distribution, retail, and consumption. The primary goal of any food system is nourishment, in a sustainable food system, food is available and accessible to all persons through local non-emergency resources. Food system experts describe the food and nutrition system as the transformation of raw materials into foods, these foods are consumed and their nutrients influence health outcomes, within biophysical and sociocultural contexts. For example, our food system includes water, gardening, agriculture, hunting, gathering, home canning, food safety, fast food restaurants, fad diets, the grocery store clerk, food banks, preparing dinner, refuse collection, and obesity. These entities and activities can be grouped into five food system “sectors,” 1) production, 2) transformation (processing, packaging, labeling), 3) distribution (wholesaling, storage, transportation), 4) access (retailing, institutional food service, and emergency food programs), and 5) consumption (preparation and waste management).

Sustainability is the capacity of being maintained into the foreseeable future while meeting the needs of the present without compromising the ability to meet the needs of future generations. Sustainability is built on the foundation of human, natural, and economic resources. Each of the food system sectors depends on these resources or “inputs.” The functionality of the food system is influenced by socio-cultural trends and

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<sup>2</sup> Declaration of Nyeleni, World Forum on Food Sovereignty.

values; economic factors; local, state, federal and international policies; research and education; and technological advances. Outcomes of the food system impact the viability and stability of each of the food system sectors as well as natural resources and the health of individuals, communities, and populations.

A sustainable food system exists when production, processing, distribution, and consumption are integrated, and related practices regenerate rather than degrade natural resources, are socially just and accessible, and supports the development of local communities and economies. Sustainable food systems also require that communities or regions achieve a degree of self-reliance in food, and explore the extent to which they can and should meet their own food needs.

A food system that is economically sustainable requires that each sector provide livelihoods that support families, that local food system activities contribute to economic development, and that no one entity holds a disproportionate share of economic control over food production, transformation, distribution, access, or consumption.<sup>3</sup>

The ideas of food security, public health, and the quality of ecosystems have been found to be profoundly interrelated. As the smaller and mid-sized farms are disappearing, the large agricultural production are becoming the commodity suppliers, therefore making entire regions more dependent on importing foods from greater distances. Despite the availability of food from all over the world, many public health agencies are concerned with the rapid increase in rates of obesity, diabetes, and heart disease in this country.<sup>4</sup> These chronic health concerns are linked to nutritional factors, and are preventable through lifestyle choices.

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<sup>3</sup> American Dietetic Association.

<sup>4</sup> Centers for Disease Control.

## **Health Component**

Health disparities manifest on a range of issues. These disparities range from preventable behavioral risk factors including tobacco use, diet and physical activity to screening for detection and treatment of disease. The unique pattern of diseases among Native Americans reflects the interaction of environmental and genetic factors. Genetic susceptibility plays a significant role in some diseases, such as diabetes. For others, the generally lower socioeconomic status, higher prevalence of certain health risk behaviors and lower utilization of preventive services in the Native American population are important determinants of health. Interestingly, a recent NIH (National Institute of Health) study concluded that Native Americans are four times more likely to report not having enough food to eat than other U.S. households.<sup>5</sup> Native Americans born today have a life expectancy that is 2.4 years less than the U.S. all races population. Indians have long experienced a lower health status when compared with other Americans. These broad “quality of life” issues are found to be rooted in economic adversity and poor social conditions. American Indians are on average three times more likely to develop diabetes and two times more likely to develop heart disease.<sup>6</sup>

There is a total of \$3,440,833.82 given out by the federal government through Food Support and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) each month in the food shed region.<sup>7</sup> These programs are very much needed, as seen in communities in our food shed region, hunger is not limited to class, race, or gender. It is circumstantial and can affect whole communities at once. There is

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<sup>5</sup> National Institute of Health.

<sup>6</sup> Indian Health Services Facts on Indian Health Disparities.

<sup>7</sup> Data was collected from Reports and Forecast Division Minnesota Department of Human Resources authored by Jill Hiatt (651-431-2943) for the month of January 2009; Minnesota Department of Health, WIC Program, Monthly report of Expenditures and Obligations, January 2009.

also a relationship that exists between the level of food consumption, poverty and health status. While the co-existence of hunger and obesity may seem contradictory, it is not. Both are the results of malnutrition and both represent a lack of food security.<sup>8</sup> “Food security” is defined and exists when all people, at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.<sup>9</sup>

The rates of obesity, heart disease, and diabetes in this country are rising at an alarming rate. Every year there is a dramatic increase in the number obese individuals especially children. The national rate of obesity for adults is 60%, for children ages 10-17 the rate is 15%; for the state of Minnesota the rate is average of obese adults is reported to be 61%, and children ages 10-17, 10%.<sup>10</sup> The reported average rate of obesity for the three reservations in our food shed is 85.2% for the ages of 35-44. For children ages 2-5, the rates are 58.1%, ages 12-19, the rates are 56.3%.<sup>11</sup>

The prevalence rate of developing diabetes for the three federal service units is 13%,<sup>12</sup> for the state of Minnesota it is a prevalence rate of 6%.<sup>13</sup> The rates broken down by the individual reservations are: Leech Lake Reservation, 783 out of 12,393 patients were diagnosed with diabetes, which is prevalence rate of 6.3%. For the Red Lake Reservation 713 out of 8,946 patients were diagnosed with diabetes, which is a

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<sup>8</sup> Institute of Agriculture and Trade Policy.

<sup>9</sup> Definition is provided by the UN’s Food and Agriculture Organization (FAO).

<sup>10</sup> Information provided by State Health Facts. Data for adults is from 2007, data for children is from 2003.

<sup>11</sup> Bemidji Area IHS Office for the time period 7/1/07-6/30/08 for the three Federal Service Units (Red Lake, White Earth, and Leech Lake). See IHS report for complete tables.

<sup>12</sup> Bemidji Area IHS Office for the time period 7/1/07-6/30/08 for the three Federal Service Units (Red Lake, White Earth, and Leech Lake). See IHS report for complete tables.

<sup>13</sup> Information provided by State Health Facts.

prevalence rate of 8%. For the White Earth Reservation, 665 out of 11,069 patients were diagnosed with diabetes, which is a prevalence rate of 6%.<sup>14</sup>

Diabetes education, diet instruction, and exercise instruction are important factors to prevent complications. For tribes in the IHS Bemidji Area Office, in 2007, 60% of patients reported receiving adequate diet instruction to manage their disease and provide self care. 40% of patients received exercise instruction and 40% received diabetes management instruction. For heart disease data see the Bemidji Area IHS Report.

Health literacy is defined in *Healthy People 2010*<sup>15</sup> as: "The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions". Health literacy includes the ability to understand instructions on prescription drug bottles, appointment slips, medical education brochures, doctor's directions and consent forms, and the ability to negotiate complex health care systems. Health literacy is not simply the ability to read. It requires a complex group of reading, listening, analytical, and decision-making skills, and the ability to apply these skills to health situations. According to the American Medical Association, poor health literacy is "a stronger predictor of a person's health than age, income, employment status, education level, and race."<sup>16</sup>

There are also health impacts associated with our current food system. In recent decades, U.S. farm policy has driven down the price of a few farm commodities, including corn and soybeans, through subsidies. The low cost of corn and soybeans, which are used to produce high fructose corn syrup (a sweetener) and hydrogenated vegetable oil (a type of fat), has contributed to a proliferation of inexpensive crackers,

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<sup>14</sup> Bemidji Area Diabetes Care Summary Report, numbers were taken from the 2003 report.

<sup>15</sup> Healthy People 2010, a national health promotion and disease prevention initiative. (healthypeople.gov)

<sup>16</sup> Report on the Council of Scientific Affairs.

chips, soda and candy, among other processed foods, on grocery store shelves. At the same time, the retail cost of fruits and vegetables in the United States has increased nearly 40 percent since 1985. While the current industrial food system certainly impacts the abundance of unhealthy food on the market, there are additional impacts on human health. The dominant industrialized agricultural system requires heavy use of synthetic pesticides, herbicides, and fertilizers; these kill wildlife and contribute to cancer, birth defects, neurological disorders, and asthma in humans, putting both food consumers and those with the greatest exposure to these dangerous toxins, such as migrant farm workers and those living in farming communities, at high risk. The rising prevalence of antibiotic resistant bacteria has been linked to the routine, non therapeutic use of antibiotics in meat and poultry, which constitutes 70% of all antibiotic use in the United States.<sup>17</sup>

Our food system has also contributed to the socioeconomic decline of rural communities. Small and mid-sized farmers are struggling to survive, farming families are twice as likely to live in poverty compared to the general U.S. population and often must pursue additional employment opportunities in order to stay out of debt. However, the food system does not solely impact the health of rural communities. In the U.S., transportation of food products for an average of 1,500-2,100 miles contributes to both heavy truck traffic on our highway system and diesel exhausts, which has been linked to cancer, asthma and other respiratory illnesses.<sup>18</sup>

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<sup>17</sup> “Redefining healthy food: An ecological health approach to food production, distribution, and procurement” by Jamie Harvie.

<sup>18</sup> “Food, fuel, and freeways: An Iowa perspective on how far food travels, fuel usage and greenhouse gas emissions” by Leopold Center for Sustainable Agriculture, Iowa State University.

## **Income Component**

The socioeconomic status of these ten counties is, on average, lower than the state of Minnesota average. The average poverty rate is higher in our food shed area than it is in other portions of the state. The Minnesota state poverty rate is 9.5%, and in our area the highest poverty rate is in Beltrami County at 17%.<sup>19</sup> Socioeconomic indicators are related to population characteristics, education level, income, employment, family and kids.<sup>20</sup> The high school graduation rate is on average lower than the state which is 87.9%, with Mahnomen County being the lowest at 75%.<sup>21</sup> An individual's education level is a health determinant and indicator of health literacy level. Although the percentage of American Indians who receive higher education has been increasing since 1990, fewer American Indians have high school diplomas and bachelor's degrees when compared to all races population in the three-state area (Minnesota, Wisconsin, and Michigan) and in individual states. A higher percentage of American Indians also have less than a ninth grade education.

If you look at the median incomes for the three Indian reservations within the region they are close to half of what the median incomes are for the rest of Minnesota. Red Lake reservation reports a median income of only \$20,796, White Earth reports a

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<sup>19</sup> Becker County has a poverty rate of 12.1%, Cass County has a poverty rate of 13.4%, Clearwater County has a poverty rate of 16.4%, Hubbard County has a poverty rate of 11.4%, Itasca County has a poverty rate of 9.8%, Mahnomen County has a poverty rate of 19%, Pennington County has a poverty rate of 11.3%, Polk County has a poverty rate of 15.7%, Red Lake County has a poverty rate of 11.1% (U.S. Census Bureau Quick Facts).

<sup>20</sup> Regional indicators data comes from two sources; U.S. Census Bureau and U.S. Bureau of Economic Analysis.

<sup>21</sup> Becker County has a graduation rate of 82.9%, Beltrami County 83.4%, Cass County 83.9%, Clearwater County 76.4%, Hubbard County 86.1%, Itasca County 85.6%, Mahnomen County 75%, Pennington County 81.3%, Polk County 82%, and Red Lake County 78.8%, information provided by U.S. Census Bureau.

median income of \$22,796, and Leech Lake reports a median income of \$36,362 compared to the average median income for the State which is \$55,649.<sup>22</sup>

When looking at the demographics of the food shed region it is important to know which counties the three Indian Reservations extend into.<sup>23</sup> Portions of the Red Lake Indian Reservation extend into Clearwater and Beltrami counties. Portions of Leech Lake Indian reservation extend into Hubbard, Cass, and Beltrami counties. Portions of the White Earth Indian Reservation extend into Clearwater, Becker, and Mahnomen counties (the only county in Minnesota entirely within an Indian reservation). The White Earth Reservation was formed in 1867 and originally covered 1,300 square miles, but much of the communities' land was improperly sold or seized to outside interest.<sup>24</sup> The White Earth Land Recovery Project is pushing to recover the land as they report that only 10% of the land is now owned by tribal members.

The communities within the food shed region are considered rural communities. A rural area is other than an urban area of 50,000 or more in population.<sup>25</sup> None of the counties in the food shed region have a total population of more than 50,000.<sup>26</sup> In some of the Reservation communities, the access to grocery stores is a challenge. Most of the shopping is done off the reservation in the nearest grocery store. For example, the trip is about 30 miles for a White Earth or Waubun resident to get to Detroit Lakes, where nearly 100% report shopping. Naytahwaush residents must travel 45 miles to reach

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<sup>22</sup> Information provided by the Northwest Area Foundation.

<sup>23</sup> Wikipedia: The Free Encyclopedia.

<sup>24</sup> Wikipedia: The Free Encyclopedia; the Dawes Act of 1887 and the Nelson Act of 1889.

<sup>25</sup> USDA.

<sup>26</sup> Becker County population 30,000, Beltrami County population 39,650, Cass County population 27,150, Clearwater County population 8,432, Hubbard County population 18,376, Itasca County population 43,992, Mahnomen County population 5,190, Pennington County population 13,584, Polk County population 30,708, Red Lake County population 4,118. Data collected from Wikipedia: The Free Encyclopedia.

Detroit Lakes, where 83% shop, and 55 miles to Bemidji, where 40% shop.<sup>27</sup> Therefore, the challenge of transportation and the access to fresh, local ingredients is a problem for several communities within the food shed.

The official poverty rates are not evenly distributed across the food shed region. There are portions of the counties which contain the three Indian Reservations that have a considerably higher poverty rate, and lower Per Capita Income than the rest of the county, therefore creating what can be considered the “Pockets of Poverty” within the food shed region. The White Earth Reservation has a poverty rate which is 34%, compared to 10% in Becker County, and the 19% of Mahnomen County.<sup>28</sup> The median household income is \$22,794 (\$1,900 per household per month) or about half the national average. The Per Capita Income on the reservations is \$9,127 a year, or about \$761 a month.<sup>29</sup> The income is not evenly distributed across the reservation. The City of Rice Lake has a Per Capita Income of as low as \$5,590 compared to the city of Bejou which has a Per Capita Income of \$18,140.<sup>30</sup>

### **Food Assistance Programs**

There are several Federal and State food assistance programs available to low income families to help ensure that everyone gets enough to eat. The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) focuses on women who are pregnant, infants, and children up to age five. To qualify for the WIC program you need to be a pregnant woman, infant, or child less than five years of age

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<sup>27</sup> Food Sovereignty Report.

<sup>28</sup> The poverty rate is the level of people living below the poverty level or “threshold” 1999 U.S. Census Bureau.

<sup>29</sup> Per Capita Income is the “mean” or average income received by individuals, that is, total income divided by total number of people. Here we provide information on real Per Capita Income, which means the data has been adjusted for inflation. For reservations, Per Capita Income data from U.S. Census Bureau.

<sup>30</sup> Callaway (Per Capita Income \$10,986), Elbow Lake (Per Capita Income \$5,508), Pine Point (Per Capita Income \$7,609), Omega (Per Capita Income \$11,502).

who has a nutritional or medical need. The program does have income guidelines that must be met to qualify; income must be no more than 185% of the poverty level.<sup>31</sup>

WIC is a nutritional program that helps families eat better to stay healthy. The main priority of the program is to offer families one-on-one counseling, support with breast feeding, and referral for health care if needed.<sup>32</sup> The nutritional education includes information about healthy eating during pregnancy, how to feed your baby, and how to keep your child healthy with good nutrition. The one-on-one office visits are scheduled for every three months to track the growth and development of the clients.

During these visits, food vouchers are issued as a secondary incentive to bring clients into the office. The foods that clients are eligible to receive are milk, cheese, eggs, dried beans, peanut butter, cereal, and juice. The voucher packets vary depending on which groups you or your family fit into. The groups are as divided up by pregnant women, postpartum breast feeding women, postpartum non-breastfeeding women, infants, and child's food package. The child food package for a month consist of 4 gallons of milk, 1 pound of cheese, (3)46 oz. containers of juice, 36 oz. of cereal, 1 dozen eggs, (1)18oz. jar of peanut butter, and has a dollar amount of \$50.00 per month.<sup>33</sup>

The USDA offers "Farmer's Market" vouchers during the summer months to be spent at the local farmers markets. There are markets located in Bemidji, Detroit Lakes, Park Rapids, Crookston, and Grand Rapids.<sup>34</sup> The vouchers (valued at \$20 maximum

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<sup>31</sup> Starting at a household of two which is a pregnant woman \$25,900, a household of three \$32,560, a household of four \$39,200, a household of five \$45,880, a household of six \$52,540, a household of seven \$59,200, a household of eight \$65,860, a household of nine \$72,520, a household of ten \$79,180, this information was updated 7/25/08. Information provided by the Minnesota Department of Health.

<sup>32</sup> Information provided by the Minnesota Department of Health.

<sup>33</sup> The food package for an infant on formula is \$148, Pregnant women's package \$70, breast feeding women \$70, postpartum not breastfeeding \$47, postpartum breastfeeding \$85. Minnesota Department of Health.

<sup>34</sup> Minnesota Farmer's Market Association.

once per year) are good for fresh fruits, vegetables and herbs from authorized vendors. There are no winter market vouchers since they are only for fresh produce.<sup>35</sup>

The WIC Farmer's Market system offers another vehicle in which the HFSC would be able to establish partnerships to provide nutrition education. There is a need for Farmer's Markets in smaller communities, as the current five locations are not accessible to all residents of the food shed region. Many smaller growers could also use assistance in obtaining appropriate certification to sell their produce and accept WIC vouchers. It should also be noted that many WIC families were not aware of the farmer's market vouchers, or they did not know the location of the nearest farmer's market.<sup>36</sup>

Another program designed to help low income families is the Food Stamp Program. Although it is a federal government program, it is run by state or local agencies. On October 1, 2008, the name of the program changed to the Supplemental Nutrition Assistance Program (SNAP). "The new name reflects our focus on nutrition and putting healthy foods within reach for low income households."<sup>37</sup> The program is still called Food Support at the state level. To qualify for Food Support, a household needs to be 130% below the poverty level. A household may have \$2,000 in countable resources, such as bank accounts. The guideline for the gross monthly income amount is dependent on the number of people in your household. For a household of one the gross monthly amount can't exceed \$1,127.<sup>38</sup> Snap clients will receive monthly benefits which are called an allotment. The allotment amount is figured out by using an equation which is

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<sup>35</sup> Information provided by the USDA Farmers Market.

<sup>36</sup> Food Sovereignty Report.

<sup>37</sup> Information provided by the Social Security Department.

<sup>38</sup> Household of two \$1,517, household of three \$1,907, household of four \$2,297, household of five \$2,687, household of six \$3,077, household of seven \$3,467, household of eight \$3,857, and for each additional member add \$390 data provided by USDA.

the net monthly income of the household multiplied by 0.3, and the result is subtracted from the maximum allotment for the household size. This equation is used because SNAP households are expected to use 30% of their resources on food.<sup>39</sup> The average dollar amount given is \$200 dollars per person that you have in your case.<sup>40</sup>

SNAP clients are allowed to purchase food for human consumption, also seeds and plants to grow food for household use. Items such as cigarettes, alcohol, medicines, vitamins, hot foods at the point of sale, foods that will be eaten in the store, non-food items (i.e. toilet paper, hygiene items, and cleaning supplies), and pet food are not allowed to be purchased with the SNAP portion of the EBT card.<sup>41</sup> Many people are not aware of the items they may purchase or which stores accept EBT cards. For example, Harmony Food Co-op, the area's largest grocer of fresh, local produce, reported that "very few EBT purchases are made each month, but certainly not because we discourage their use." This issue represents a health literacy disparity among the people of certain communities, while it also demonstrates the fact that many residents rely on the nearest convenient store for their food needs.

The University of Minnesota Extension Office offers educational services through local county offices. In Beltrami County there are two Nutritional Education Assistants on staff. Deborah Dilley and Susanne Rabel are available to give demonstrations of healthy food choices in the WIC offices, through the food commodity programs, EFC, Senior programs, and the schools where over 50% of students qualify for the free lunch

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<sup>39</sup> Information provided by the Food and Nutrition Services (USDA).

<sup>40</sup> For 2 people \$367 is given, 3 people \$526 is given, 4 people \$668 is given, 5 people 793 is given, 6 people \$952 is given, 7 people 1,052 is given, 8 people \$1,202 is given and for each additional person \$150 is given. These figures are from April 2009 through September 2009.

<sup>41</sup> Minnesota Department of Human Services.

program.<sup>42</sup> They also receive referrals to give one-on-one nutritional counseling to anyone who qualifies for any of the federal food programs.

### **Farm to School**

This project also looked at the food procurement policies of the public school systems in the region. We studied one program, the Pine Point Farm to School Program on the White Earth Reservation, and found some promising opportunities to build connections between local growers and school districts. At Pine Point Elementary School (K-8) located in Ponsford, MN, a concerned parent started to inquire about where the breakfast and lunch food came from, a move that eventually transformed the breakfast and lunch menus served to approximately 100 students and staff. The Farm to School Program incorporates traditional Anishinaabe foods like buffalo, turkey, venison, hominy, berries, squash, and wild rice to substitute foods with high amounts of sugar and processed foods. These types of programs hope to change lifestyle habits and provide nutrition and health education to help prevent diseases. The Pine Point School demonstrates that a school district can supply its students with local, organic, and seasonal ingredients in an efficient manner that is completely safe, legal, and cost effective. This program also represents the importance and need for collaboration with community organizations, as the school works closely with Tribal Government entities such as Tribal Health and Indian Health Services. These collaborative efforts show promising potential to impact the epidemic rates of diabetes, obesity, and cardiovascular disease.

The Pine Point Farm to School program is attracting the attention of other schools in the area. Pine Point School held an invitational to showcase their program. The Bug-

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<sup>42</sup> Information provided by the University of MN Extension.

O-Nay-Ge-Shig School and the Naytahwaush Community Charter School attended to gain ideas for their own programs. Since they are in the same geographic region, both schools should be able to call on the resources of the Pine Point program.

We looked into the procurement policies of other school districts also. The Bemidji area school district follows the federal nutrition guidelines when planning the lunch menus. The different schools within the district have different breakfast and lunch menus. The Bemidji School District has plans to incorporate foods from local farmers starting in the spring and fall when there is fresh produce available. Some of the challenges they anticipate having is a short growing season, and the limited variety of foods in the area, and overall supply need. They are planning to start a garden at one of the schools. Their Primary Venture Bid for food is through Appert's Food Service from St. Cloud, MN.<sup>43</sup> At this time the Lake Wood Health Systems is not using local foods in their service menus.<sup>44</sup>

### **Summary**

One of the main accomplishments of the HFSC was to begin to get an overall and clear picture of the existing food supply including mapping the food shed, which entails among other things, collection of producers, consumers, and institutions of distribution on the tribal, state, and federal level. We researched food service programs in the region such as Head Start, school lunch, childhood nutrition, and elderly nutrition programs. We also looked at other barriers and opportunities to food sovereignty within the food shed area.

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<sup>43</sup> Information collected from Marline Webb, Bemidji Area Food Service Director.

<sup>44</sup> Kelly Coglieno.

Within community food networks, “there is the potential to regain some of the food economy and possibly to reduce the number of household receiving food assistance.”<sup>45</sup> “If households planted gardens and were able to access more venison and fish and if local reservation stored stocked more items that families wanted at prices they could pay, the reservation could regain some of its food sovereignty.”<sup>46</sup> In a recent survey on the White Earth Reservation, households expressed interest in buying more food in local stores if it was available. 89% would buy fruits and vegetables, 88% would buy meat, 86% would buy bread and baked goods, 78% would buy dairy, and 59% would buy grains or hot cereals.

There is also potential to increase the consumption of fish, venison, and other locally gathered or hunted foods. In the same survey on the White Earth Reservation, “11% of surveyed households responded that they never eat fish, 57% eat it a few times a year, 26% eat it monthly, and 6% eat it weekly. Regardless of current fish consumption levels, when asked whether they would like to eat more fish if it was available, 86% of households across the reservation said they would.”<sup>47</sup>

There are promising opportunities opening up, because of the changes made within the 2008 Farm Bill. There is now a fivefold increase made in funds that are available to help small farmers increase their access to local consumers through farmers markets, roadside stands and to promote direct producer-to-consumer marketing. The food shed region is located within rural farming land but there are only five farmer’s market locations available for individuals to buy fresh, local ingredients in the summer months. They are located in Bemidji, Park Rapids, Detroit Lakes, Crookston, and Grand

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<sup>45</sup> Food Sovereignty Report.

<sup>46</sup> Food Sovereignty Report.

<sup>47</sup> Food Sovereignty Report.

Rapids. Section 6015 of the Farm Bill states that “any agricultural food product that is raised, produced, and distributed in the locality or region in which the final product is marketed, so that the total distance that the product is transported is less than 400 miles from the origin of the product; or the state in which the product is produced.”<sup>48</sup>

Our federal government provides several programs to ensure that households have sufficient and safe food to eat for an active healthy life. Yet there are studies that say low income households tend to eat less nutritious diets than other households. On average, they do not meet federal recommendations for consumption of fruit, vegetables, whole grains, and low-fat dairy products.<sup>49</sup> With the increasing rate at which the epidemic of obesity is rising in our country, and the high rates that exist in our area, the need for more nutrition education programs is apparent. We must also accomplish our goal of creating a local food system that is sustainable and accessible to everyone in the food shed region. There are tremendous opportunities for intervention if we create prevention programs that focus on teaching healthy lifestyle habits. There is room for improvement in all of the programs we looked at, from WIC and Head Start programs to school lunch programs and federal SNAP program. More food businesses could be established thus allowing more people to find employment in various segments of the region. Sustainable community food systems can also protect and regenerate natural resources and build social capital. Food and agriculture policies would ensure the sustainability of the food system by encouraging ecological farming practices and processing methods, decreasing barriers to local marketing, and creating links to local agriculture in federal food assistance programs.

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<sup>48</sup> Definition provided by the USDA.

<sup>49</sup> Information provided by the Economic Research Service/USDA.

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