Sustainability Planning in Thurston County, Washington: Opportunities and Challenges for Eco Civic Agriculture

by

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An Essay of Distinction Submitted in partial fulfillment of the requirements for the degree Master of Environmental Study The Evergreen State College

June 2013

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This Essay of Distinction for the Master of Environmental Study Degree by

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ABSTRACT

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Agricultural and food systems have undergone significant changes over time. Radical structural changes have occurred in the past century. The modern industrial food system is the product of a neoliberal political agenda and global corporate capitalism. As the environmental and social consequences of this dominant food regime become increasingly visible a variety of oppositional food system frameworks have emerged. Each has value, but each also has limitations. A new, holistic theoretical framework, Eco Civic Agriculture, has the potential to transform agriculture and food system in ways that improve environmental outcomes and foster democratic renewal. Realizing the transformative potential of this new framework will require communities to actively engage in food system planning based on the principles of Eco Civic Agriculture. Thurston County, Washington is currently engaged in food system planning as part of a larger effort to develop a regional sustainability plan. This effort marks the first time that the local food system has been included in regional planning and mirrors the reemergence of food system planning as a core concern among planning practitioners. The degree to which the current planning effort is likely to advance the principles of Eco Civic Agriculture is assessed through a case study of the project. The case study includes a review of the history of the project, analysis of relevant documents and interviews with key participants. The planning process has elevated the visibility of local food system issues, broadened the geographic and institutional framework for food system planning and promoted broader community discussion of key food system sustainability issues. However, future population growth, loss of agricultural land, definitional problems, insufficient attention to ecologically-based farming practices and continued acceptance of the dominant industrial food system pose challenges to advancing Eco Civic Agriculture through the planning process.

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Acknowledgements

In 1991 I moved to Thurston County for the opportunity to pursue graduate level study of environmental issues at The Evergreen State College (TESC). In 1993 I took a time-out from completing my degree, largely to start solving some of the problems I had been studying. Over the past 22 years I have applied my learning towards solving a variety of social and environmental problems and the betterment my state, region and community as a professional planner, engaged citizen, and elected official.

After leaving elected office in 2008, I joined the board of directors of Sustainable South Sound and founded the Local Food System Program. I launched this initiative because my experience has led me to believe that the key to realizing a sustainable future lies in a radical restructuring of the way we produce, transport and consume food, and I saw no other organization or individual stepping forward to address this crucial issue in my own community. Since that time I have worked as a food system activist, growing and preserving much of my own food, developing community gardens, educating the public and catalyzing efforts to change local food and agricultural policies. I have also worked as a food system academic, teaching Ecological Agriculture at TESC. This teaching experience reawakened my academic curiosity and led to a desire to complete the graduate degree I put on hiatus in 1993. The result is this document.

I gratefully acknowledge my faculty advisor, Martha L. Henderson, for her support, encouragement and flexibility in bringing this long-overdue project to fruition, as well as faculty members John Perkins, Tom Womeldorff and Ralph Murphy for their key roles in my academic development. I also wish to recognize my faculty colleagues, Martha Rosemeyer and Dave Muehliesen, for their personal friendship and assistance.

The elected officials and professional planners interviewed for this research provided critical insight into the origins of Sustainable Thurston and the potential for that planning process to lead towards the realization of a sustainable local food system. The final product benefitted greatly from their perspectives.

Special recognition is reserved for Stephanie Johnson for her patience and support, and for sharing my passion for local food, and for Quinn Johnson, a lover of good food and a member of the generation that is inheriting the mess my generation created and has proven seemingly incapable of rectifying.

This thesis is dedicated to Wendell Berry who first sparked my curiosity about agriculture and food systems, and who reminds us that eating is an inherently political act, and to all the farmers, gardeners and food activists in the emerging Eco Civic Agriculture movement in Thurston County.

Chapter 1: Introduction

In recent years, the American public has been presented with a flurry of new, and at times shocking, perspectives on modern agriculture and the food system that provides most people their daily sustenance. Bestselling books such as Pollan's *The Omnivore's Dilemma*, Estabrook's *Tomatoland* and Schlosser's *Fast Food Nation* have drawn popular attention to the environmental, social and health problems resulting from the modern industrial food system. Popular films such as *Food, Inc., Super Size Me* and *Killers at Large* have presented an even more potent and graphic indictment of the system. Product recalls, stories about tainted meats and vegetables and the dangers of consuming everything from mercuryladen tuna to soft drinks loaded with high fructose corn syrup have become a regular feature in the morning newspaper and on the evening news.

Becoming equally evident is the massive impact of the modern industrial economy on the environment and the earth's basic life support systems. Climate change has gone from scientific theory to immediate emergency in the form of superstorms, more frequent and severe tornadoes, prolonged drought and more widespread and intense wildfires. Degraded air quality regularly results in public agencies issuing health alerts. Cancer clusters are growing more frequent in communities surrounding many industrial facilities, and contamination of drinking water supplies by hydraulic fluids used in natural gas extraction are forcing people in communities across the country to turn off their taps.

Meanwhile, since 2008 the U.S. economy has been stuck in neutral, still recovering from the costs of two decade-long wars, Wall Street excesses, well publicized corporate scandals and trillion dollar government bailouts. Unemployment and home foreclosure rates remains stubbornly high, there is a growing gap between rich and poor, and hunger and food insecurity are on the rise. Basic safety net services such as emergency food assistance often remain the first to be sacrificed by governments at all levels seeking to balance their budgets and remain solvent. Increasing numbers of people are wondering how things got so bad so fast, and many, particularly those with children, wonder what the future

holds. Faith in the ability of governments at all levels to address pressing social and environmental problems is at a historic low.

The combination of these and other factors are causing many individuals and communities across the country to search for ways to cope with the challenges and regain some sense of control over their destiny. Growing recognition that the modern global economy may be antithetical to healthy, functional ecosystems and the preservation of community identity and local culture has spawned a variety of movements and initiatives to reassert local control and reshape the system from the bottom up. One of the most visible manifestations of these efforts to reclaim community control is found in emerging movements to rebuild local and regional food systems, which historically served as both an engine of economic development and a force for social cohesion.

Evidence of renewed interest in the transformative power of local food systems is found in the phenomenal growth of local farmers markets, community supported agriculture (CSA) programs, community and school gardens and the number of young people seeking to become farmers and small scale food system entrepreneurs. According to Nordahl (2009), local agriculture is "enjoying a popularity not witnessed in more than half a century" (p. 4). While they still remain a small part of its overall portfolio, the United States Department of Agriculture (USDA) has developed a variety of programs and projects to support the burgeoning local food movement, including Know Your Farmer, Know Your Food and several farm to school and farm to institution initiatives.

Increasing recognition of the critical role that food plays in our lives and the life of our communities, a concept well understood by our ancestors in the not-too-distant past, provides an opportunity for serious efforts to rebuild local and regional food systems. In a recent presentation at The Evergreen State College, author Sandor Katz stressed that reclaiming community control over our food and reintegrating it into a central role in our lives is "desperately important" (Katz, 2013). Ladner (2011) compares the emerging local food movement to "a giant, self-organizing community barn-raising that is rebuilding the foundations of healthy food and self-sufficiency in our cities and surrounding farms" (p. 12).

Many of the projects and initiatives growing out of the local food movement are grounded in the realization that agricultural practices and food systems play a central role in the transition to a more environmentally and culturally sustainable future, and that community scaled solutions are the most likely to further sustainability objectives. Jackson (1996) stresses this point, writing that "as we search for a less extractive and polluting economic order, so that we may fit agriculture into the economy of a sustainable culture, community becomes the locus and metaphor for both agriculture and culture" (p. 50).

Across the country, concerned communities are beginning to purse the development of sustainability plans to guide future development; some of these plans include an examination of the local food system as an element of the planning process. One of the communities currently engaged in a sustainability planning effort is Thurston County, Washington. This three year, \$1.5 million planning process, Sustainable Thurston, includes analysis of the local food system and its role in advancing community sustainability.

The research undertaken for this essay includes a case study examination of Sustainable Thurston intended to assess the degree to which this planning process is likely to advance a sustainable local food system in the county. Understanding both the opportunities and challenges for advancing a sustainable local food system through the Sustainable Thurston planning process provides policymakers, professional planners and food system activists with valuable information to guide future efforts. In addition, similar individuals in other communities may find this research useful as they undertake sustainability and food system planning efforts.

Chapter Two provides a context for understanding this case study. This chapter includes a discussion of the evolution of the modern industrial food system, including the profound changes that have occurred in the system in recent decades, and an analysis of some of the environmental and social consequences of the system. The emergence of a variety of oppositional food system theories is examined, with emphasis on the strengths and weaknesses of each. Recognizing the limitations of these existing theories, I propose a new framework for sustainable local food systems, Eco Civic Agriculture, which has the potential to

successfully challenge the dominant food system while improving environmental outcomes and strengthening local communities. The chapter concludes with a discussion of the research methods used for the case study.

Chapter Three provides an overview of the history and development of agriculture and food systems in Thurston County. Food system planning in the county is examined within historic and organizational contexts, with emphasis on the emergence of food system planning as a primary concern of professional planners over the past several decades. The origin, scope and progress of Sustainable Thurston are examined, with emphasis on the local food system's place within the overall planning effort.

Chapter Four presents the results of research interviews conducted with two key groups of informants involved in the project, professional planners and elected officials overseeing the project. The interviews provide crucial insights not available through bibliographic research and serve as the basis for gaining a deeper understanding of the origins of Sustainable Thurston as well as the challenges and opportunities to furthering Eco Civic Agriculture through the planning process.

Chapter Five presents the conclusions and recommendations drawn from the research, and suggests potential next steps for fostering Eco Civic Agriculture in Thurston County.

Chapter 2: Establishing the Context: The Global Industrial Food System, Emerging Alternatives and Research Methods

Chapter Overview

Agricultural and food systems have undergone significant changes over time. Radical structural changes occurred in the past century, especially since the end of the Second World War. This chapter examines the origin and development of the modern industrial food system, the factors that made it possible, and its place within a larger neoliberal political framework and global corporate capitalism. Recognizing that this new food regime has been tremendously successful at increasing agricultural productivity, we also consider some of the social and environmental consequences of the system that lead many to question its long term sustainability and resilience to changing environmental, political and economic conditions.

Opposition to the dominant food regime has spawned various alternative frameworks designed to reclaim popular control over the food system and restructure it to support broader social justice and ecological goals. The strengths and weaknesses of several of these alternative frameworks are examined and a new framework – Eco Civic Agriculture - is proposed which promotes ecological sustainability, social justice and community cohesion, an approach with the radical potential to seriously challenge the dominant food regime.

The chapter concludes with a review of the research methods used to develop and analyze a case study of the potential for an existing regional sustainability planning process to advance Eco Civic Agriculture in Thurston County Washington.

From Hunter Gatherers to Corporate Capitalists

Throughout human history, the means by which individuals and communities produced, distributed and consumed food has undergone continual and occasionally fundamental change. The earliest humans were hunters and gatherers who traveled widely and seasonally in pursuit of food sources. Eventually small bands of humans established permanent settlements in the Fertile Crescent between the Tigris and Euphrates rivers and transitioned from foraging for food to cultivating crops (Montgomery, 2007). Over time improved farming techniques resulted in agricultural surpluses, which began to be traded with other settlements. By 3.500 BCE Egyptian farmers were producing more than enough wheat to feed the local population and began trading their surplus throughout the region; the resulting accumulation of wealth further reduced the incidence of hunger and supported significant growth in human populations throughout the region (Roberts, 2008).

Agricultural surplus also meant that not all members of the community were required to participate in food production, allowing for more labor specialization, development of more sophisticated economic and social systems, and increasingly complex trading networks. Expanding agricultural knowledge and scientific and technological innovations resulted in higher outputs per unit of labor, a cycle that repeated with only occasional interruptions over thousands of years. Domesticated animal power increasingly replaced human labor, yet the majority of people were still engaged directly or indirectly in food production as recently as the beginning of the nineteenth century. According to Conklin (2008), in 1800 more than 50 percent of human labor worldwide was still engaged in procuring food.

In the U.S. and Western Europe, the Industrial Revolution fundamentally changed the nature of agriculture by more easily and cheaply manufacturing tools and machines that supported further increases in farm productivity. Surplus farm labor was drawn to work in factories, beginning a long steady migration from the rural countryside to urban areas. In 1800 at least 90 percent of the U.S. population had some direct tie to agriculture, but by 1900 the percentage of Americans living on farms had dropped to 40 percent (Conklin, 2008). Urban residents and factory workers no longer engaged directly in food production acquired food through market transactions mediated by a growing class of food wholesalers, retailers and shopkeepers who served as middleman between urban consumers and rural producers. This pattern that would later repeat throughout other parts of the world as those regions underwent similar industrialization. German chemist Fritz Haber's 1913 discovery of a process to convert atmospheric nitrogen to ammonia, and Carl Bosch's later scaling up of the technology, provided the basis for mass production of the first artificial fertilizers. The Haber-Bosch process is arguably the most important invention of the twentieth century. These fertilizers allowed for dramatic increases in agricultural production, which had previously been limited by the amount of nitrogen available from animal waste and nitrogen fixing cover crops. Correspondingly large increases in the human population followed. Growing agricultural productivity further reduced farm labor needs and fueled continued rural to urban migration. Beginning in the early 1900s the U.S. farm population began a slow but steady decline that continued through most the century (Conklin, 2008).

The Haber-Bosch process is also the basis for modern nitrogen explosives. During World War II much of the industrial nitrogen production capacity was shifted from agriculture to the war effort, temporarily slowing the growth of agricultural productivity. Following World War II the production of synthetic fertilizers accelerated dramatically. Montgomery (2007) notes that use of nitrogen fertilizers "tripled between the Second World War and 1960, tripled again by 1970, and then doubled once more by 1980" and that agricultural output doubled in the second half of the twentieth century largely as a result of increased reliance on manufactured fertilizers (p.197)

In addition to manufactured fertilizers, the production and widespread use of chemical insecticides, fungicides and herbicides reduced crop loss and resulted in bigger harvests. A wide range of synthetic insecticides began to be routinely applied to agricultural crops. Today there are more than 300 fungicides registered for agricultural use in the U.S. and by 1982 95 percent of the US corn crop was sprayed with herbicides (Conklin, 2008).

Another factor that explains the dramatic increase in farm productivity over the past hundred years is the mechanization of agriculture in the form of improved plows, automated harvesters and tractors which reduced the labor input required per unit of agricultural output. Most farmers eagerly embraced the labor saving innovations which allowed them to work more acres in less time, and they

increasingly invested in these new technologies. Between 1910 and 1920 the typical Kansas farmer tripled their investments in these new machines, and tripled it again in the next decade (Montgomery, 2007).

As important as all of these factors were in dramatically increasing agricultural productivity, equally important were the changes taking place off the farm that allowed agricultural surpluses to become the catalyst for creating a globalized food system. As farmers increasingly adopted a capital intensive industrial approach to production they also adopted other fundamental principles of industrialization such as specialization, standardization and centralized decision making (Ikerd, 2001). Heeding the advice of former U.S. Agriculture Secretary Earl Butz to "get big or get out" small diversified farms were replaced by larger farms growing fewer crops with an emphasis on consumer demand for uniform appearance of the end product. According to the USDA Economic Research service between 1950 and 2002 the number of farms in the US dropped from 5.3 million to 2.2 million, while average farm size increased from 213 acres to 440 acres (Imhoff, 2012).

The transition to a capital intensive industrial model of production meant that farmers also became more dependent upon the corporations who produced the chemical inputs and machines, who bought and marketed the harvest, and who provided the financing to keep the whole system running. As a result food increasingly became just another industrial commodity. The power to decide what to grow, how to grow it and when to harvest it shifted from farmers and local communities to an emerging group of vertically and horizontally integrated agribusiness corporations operating in a global marketplace and driven primarily by the imperative of maximizing return on investment to their shareholders. Ikerd (2001) observes that:

Regardless of whether the result is assembly line production by giant automobile manufacturers or a large scale confinement animal feeding operation, the principles are the same. The gains in efficiency from industrialization result from carrying out specialized functions by standardized means under centralized management. (para.7)

Operating within the dominant neoliberal political economic framework that accepts the primacy of the market as the means to determine how to best allocate scarce resources to meet human needs, this corporate food regime has come to dominate all aspects of the global food system, from farm to table (Alkon & Mares, 2012). Kloppenberg, Henrickson & Stevenson (1996) write that the objective of these corporations "is to restructure this marvelously diverse world into a homogenous plain free of physical or social obstacles to the free flow of money and agricultural commodities" (p. 34). The practical result is the clearcutting of Paraguayan rainforests to grow organic sugar cane that is harvested by poor migrant workers, refined in distant factories and shipped to wealthy North American consumers whose purchase fills the pockets of the executives and shareholders of one of the largest food conglomerates in South America (Rogers, 2010).

Increased concentration of ownership in key agricultural sectors has been one of the most visible manifestations of this new corporate food regime. By 1980 the United Nations Center on Transnational Corporations found that five companies controlled 65 percent of the global pesticide market and the top five grain trading companies controlled 75 percent of the world cereal market (Halweil & Worldwatch Institute, 2002). More recently Food and Water Watch (2012) reported growing monopoly control of the US food system. They found that that the four largest agricultural companies controlled "82 percent of the of the beef packing industry, 85 percent of soybean processing, 63 percent of pork packing and 53 percent of broiler chicken processing" and that 53 percent of all the groceries in the U.S. were sold by just four companies (p.4). Guthman (2004) concludes that even within the rapidly growing California organic food industry a small number of very large firms exerted disproportionate control of the market.

According to the Center for Responsive Politics, U.S. agribusinesses spend over \$100 million per year on lobbying at the state and federal levels to ensure the continuation of public policies favorable to their corporate interests (Imhoff, 2012). The political and economic pressures exerted by the agribusiness giants has resulted in a national agricultural policy, as codified in the Farm Bill, that has remained largely unchanged and supportive of large corporate interests since the 1970s. Imhoff (2012) notes that by the early 1980s "large grain handlers like Cargill and Archer Daniels Midland and other agribusiness giants were essentially writing the Farm Bill for their own benefit" (p.48).

Social and Environmental Challenges

The corporate industrial model that dominates all facets of the modern food system has been tremendously successful at increasing agricultural output. According to the United Nations Food and Agricultural Organization (UNFAO), between 1961 and 2000 the value of international food trade tripled and the tonnage of food shipped between countries grew fourfold (Halweil & Worldwatch Institute, 2002). By 2007 the world's farmers grew enough food to provide everyone living on the planet with 3,500 calories per day, more than required to provide an adequate daily level of nutrition to everyone (Montgomery, 2007). Between 1909 and 2004 per capita daily food availability increased by four hundred calories (Lang, 2009). American consumers, living at the top of the global food system, also enjoy unprecedented consumer choice. There are at least 300,000 food and beverage products available in the US, with the average supermarket stocking 30,000-40,000 products (Murphy 2008).

While dramatic increases in both agricultural productivity and consumer choice have been hailed as evidence of the success of the global food system there are also growing concerns that the social and environmental consequences of the system make it unsustainable in the long term and increasingly vulnerable to changing political, economic and ecological factors. One of the earliest and most widely read systemic critiques of the industrial agricultural model is offered by Berry (1977) in which he questions the mechanistic foundations of the system, which he linked to the destruction of both human communities and nature. Berry's friend and fellow farmer Wes Jackson offers similar criticisms, noting that it is the nature of the larger political and economic system in which modern agriculture exists that must be examined and challenged and "therefore we should not expect sustainable agriculture to exist safely as a satellite in orbit around an extractive economy" (Jackson, 1996).

The industrial agriculture model disconnects producers from consumers through a complex and tightly controlled global marketplace, and as such undermines functional human communities and complex systems of established human relations. Ikerd (2001) suggests that this disconnectedness "is no coincidence with industrialization; instead it is a direct consequence of industrialization. And equally significant, we will not become reconnected as a people until we move beyond industrialization to a fundamentally new and different era of human progress" (para. 12).

By shifting food systems from their historic groundings in local communities to a tradable commodity in a global marketplace, community values and goals cease to be relevant factors in basic production and consumption decisions. Lacy (2000) writes that "globalization enriches the consumer in us, but Friedman observes that it can also shrink the citizens in us and diminish space for individual cultural and political expression" (p. 8). Francis, Lieblin, Steinsholt, Breland, Helenius, Sriskandarajah & Salomonsson (2005) observe that distancing consumers, who primarily live in urban areas, from the realities of agricultural production, which usually occurs in rural areas, means that they have:

Little knowledge or concern about where their bananas were produced and what the effect of insecticides (perhaps banned in their own countries) had on the people at the other end of the supply line, or on their own families who may have used the chemical containers for storage of food or water. They are unaware that their instant coffee was produced by small farmers in Viet Nam as a result of massive support from the World Bank, which promotes global political and economic decisions driving similar coffee farmers in Kenya and Costa Rica from the market, while helping international food companies to assure cheap supplies and higher profits. (p.62)

Attempts to provide consumers with more information about the conditions under which their food is produced are often met with resistance by both industry and government, such as the recent wave of "ag gag" bills sweeping state legislatures in the US which make it a crime to videotape large industrial

agricultural operations or to write or speak disparagingly about specific agricultural products or processes.

Industrial enterprises operating in global markets under neoliberal economic policies and trade regimes means that the factors of production, particularly capital, are able to move freely across the planet. Kloppenberg, Hendrickson & Stevenson (1996) note that "agribusiness tends to gravitate to areas where government intervention is minimal and wages are low... or in which costs can be reduced through mechanization and increases in scale" (p.35), a thoroughly modern twist on Ricardo's classical theory of competitive advantage. With the ever present threat that the local chicken processing plant or corporate vegetable farm could move operations to another state or another country, putting local workers in the unemployment line and undermining municipal coffers, community leaders are at a perpetual disadvantage in terms of ensuring that agribusiness interests enhance the economy and quality of life of their communities.

Such a system tends to have a downward pressure on wage structures and can result in grueling and event violent workplace conditions for agricultural workers. Estabrook (2011) documents the situation of migrant tomato pickers in Florida who live in near-slavery conditions and are routinely harassed and even murdered by their agribusiness employers. Holt-Giminez (2011) questions how the existing food regime can ever be successfully challenged without addressing the crucial role that labor plays in perpetuating the system.

Just as people serve as labor to support the industrial food system, they also act as the final end user of the system's products as food consumers. As noted earlier, the industrial food system has been quite successful in increasing agricultural output and offering increased consumer choice. But these benefits have not accrued equally across the globe. Nearly 900 million people are chronically malnourished and another billion people lack food with sufficient nutritional value, offering "dramatic proof that the modern food economy is failing catastrophically" (Roberts, 2008, p.146). In the US between 2002 and 2012 federal spending on nutrition programs to feed the growing number of

hungry and food insecure Americans grew dramatically, totaling \$470 billion (Imhoff, 2012).

With enough calories being produced each year to feed everyone on the planet an adequate diet it is clear that continued hunger is not due to lack of production but rather to a global food system that prioritizes profits over people. A potent example is offered by Kaufman (2010) in his detailed account of how Wall Street speculators led by Goldman Sachs manipulated the global wheat market at a time of record harvests, increasing the ranks of the hungry by 250 million people in a single year.

At the other end of the spectrum Roberts (2008) chronicles how overconsumption of calorie rich nutritionally deficient junk food has resulted in skyrocketing rates of obesity and diabetes, threatening a public health crisis. Pretty (2010) notes that one in seven people in industrialized countries are now clinically obese. Similar trends are seen in other countries as they undergo industrialization of their food system and transitions away from traditional diets and towards foods that are fattier, saltier and sweeter (Lang, 2009). Murphy (2008) notes that at the same time federal health care spending to address obesity and diabetes is moving sharply upward, federal policy continues to ensure massive subsidies to the corporate producers of the very foods and additives linked to the problems.

Concerns over the safety of the food supply are also becoming more frequent. Highly publicized incidences of salmonella in poultry and *e.coli* in beef, rising antibiotic resistant superbugs and a host of newly emergent and highly aggressive pathogens have left government food safety regulators scrambling to reassure a skeptical public that their food is safe. Roberts (2008) also notes growing concern about the vulnerability of the industrial food system to disruption and contamination from a terrorist attack. As world acreage planted with genetically engineered crops expanded 40-fold between 1996 and 2003 public concern about the safety and long-term consequences of this type of agricultural biotechnology have also increased (Gliessman, 2007).

There are also serious questions about the industrial food system's ability to keep pace with a rising population that is expected to top nine billion by the middle of this century. The UNFAO estimates that global food production will need to increase at least 70 percent by 2050 to meet rising global demand (Ladner, 2011). Expanding production to meet the increased demand will require significant investments in all facets of the food system from the development of more productive and resilient crop varieties to improved on-farm management systems to expanded and enhanced transportation, processing and distribution facilities. This could be complicated or curtailed by unforeseen geopolitical or economic events or natural resource constraints.

The industrial food system is highly dependent on oil and other fossil fuels to power and lubricate all components of the system from on-farm equipment to transportation and refrigeration to end user preparation. The continuation of the system will not be feasible without abundant cheap supplies of energy. Halweil & Worldwatch Institute (2002) notes that a head of lettuce grown in California and shipped to the East Coast requires 36 times as much fossil fuel energy as the food energy it supplies to the eater. In 2007 the U.S. Government Accountability Office reported that global peak oil will occur sometime in the next decade (Murphy, 2008). More recently Murphy (2011) found that increasing oil supplies to meet demands of the industrial economy will require significantly higher prices, which will in turn reduce economic growth, and that the rising economy of the past 40 years is unlikely to continue.

The oil and natural gas used to power the industrial food system is a significant factor in rising greenhouse gas (GHG) emissions and climate change. Estimates of agriculture's contribution to global GHG emissions range from 10 to 60 percent; one study suggests that livestock alone may be responsible for 51 percent of GHG emissions (Holt-Giminez, 2012). The existing food production model also depends on a stable climate (Donlon, 2013), and a major new report for the USDA by Walthal, Hatfield, Backlund, Lengnick, Marshall & Walsh (2013) finds that rising temperatures, changing patterns of precipitation and increased severe storms events linked to rising GHG levels in the atmosphere will

have significant negative consequences for U.S. agricultural production. The Washington State Department of Ecology (2012) recently concluded that climate change threatens Washington's farms with increased risk of disease, pests, weeds and fire and reduced water supplies.

Water availability is a crucial factor in the success of industrial agriculture and resources are already stretched precariously thin in many parts of the world. According to Ladner (2011), global demand for water will exceed supply by 60 percent within a generation. Saudi Arabia, previously self-sufficient in wheat, saw production drop by two thirds between 2007 and 2011 and will soon become a net importer due to declining water reserves. In the U.S. the Ogallala Aquifer, which supplies water to 20 percent of all the irrigated acres in the US, is being overdrawn by 3.1 trillion gallons a year (Roberts, 2008).

The loss of productive farmland is another pressure squeezing the system. Dumas (2013) reports that in the U.S. a combination of "drought, weather, economic factors and fluctuating commodity prices combined to take 3 million acres of farm and ranch land out of production in 2012." While recent years have seen accelerated conversion of grasslands and wetlands to agricultural use (primarily biofuels) in the American midwest (Wright and Wimberly, 2013), U.S. farmland acreage peaked in 1954. Between 2002 and 2007 the U.S. lost 3.2 million acres of farmland, mostly to urban development (Ladner, 2011). Soil degradation and erosion caused by industrial farming practices is impacting millions of acres of farmland each year (Roberts, 2008). Montgomery (2007) estimates that globally 24 billion tons of topsoil are lost annually.

Alternative Food System Theories and Frameworks

The growing awareness of the problems associated with the global industrial food system and questions about its ability to equitably meet the needs of an expanding human population on a rapidly changing planet have in recent years led to vigorous discussion in academic and popular circles about potential alternative approaches.

Before examining some of these emerging alternatives, it is important to understand that while the global industrial model is firmly established as the dominant food system across most of the planet, it has always and continues to coexist in relationship to other agricultural models and scales of production. In some places, particularly in the Global South, many people continue to practice traditional methods of food production for self-sufficiency and localized exchange. Some do so because the tentacles of the dominant system have not yet penetrated their communities; others do so as acts of active resistance to the industrial model. In addition, interest in agricultural systems more closely aligned to human needs, local social and economic conditions and natural cycles and processes are on the rise in a variety of forms.

Jensen (2010) presents a useful discussion of the relationship between the various types of food systems based on a model developed by the University of Wisconsin-Madison Center for Integrated Agricultural Systems. This model is presented as a series of concentric rings representing a nested, multi-scaled food system with personal production of food at the center, small scale and regional exchange of agricultural products in the inner rings and the global system as embodied by companies such as Archer Daniels Midland and Cargill in the outer ring. The model recognizes the dominance of the global industrial food system as well as the existence of multiple other systems within its sphere of influence. Clancy (2012) relies on systems-level analysis to offer a similar nested approach for understanding food systems.

The existence of multiple food systems operating at different scales and with different underlying values and goals results inherently in tension between the systems. Campbell (2004) finds that these tensions occur at epistemological, political, institutional, socioeconomic, spatial, community and organizational levels. Holt-Giminez (2012) presents a very useful and practical framework for understanding these tensions between what he calls "corporate food regimes" and 'food movements" by identifying the institutions, orientations and approaches that are the foundation of each. Ikerd (2001) believes that the tension between these various systems is based on irreconcilable world views that underlie each, and is evidence of what he calls a "great transition." Drawing from the work of a wide range of thinkers Ikerd writes:

of a shift in worldview from the mechanistic, industrial model of the past, where people derived power from control of capital and the technological means of production, to a new life-centered, post-industrial era where knowledge becomes the new source of power, of wealth and future human progress. (para. 18)

Colasanti, Wright and Reau (2009) draw a similar conclusion that new food system models are emerging because "conventional agrifood systems typified by commodification, intensification and industrialization have proven incapable of meeting the multiplicity of human needs embodied in health, environment, and distributive justice issues" (p. 3).

Market based industrial food systems have failed to ensure equitable access to sufficient quantities of nutritious food for all members of the human family. One of the emerging frameworks for challenging the dominant food system model from this perspective is the concept of food security. Anderson and Cook (1999) note that this concept first appeared in international development work in the 1960s, and was defined as the ability to consistently meet the food needs of a population. By the 1980s the term had expanded to include issues of food access as well as adequate levels of production. However, applying food security frameworks at a global, regional or even national level proved problematic, and by the 1990s a new community-scaled approach to food security gained popularity, particularly in the U.S. Hamm and Bellows (2003) write that community food security (CFS) provides an expanded emphasis on economic and social rights, community empowerment and sustainable use of natural resources. Community food security is most accurately envisioned as a reformist movement designed not to overthrow the industrial food system but to move it in the direction of being more attentive to social and environment concerns.

Growing interest in CFS in the U.S. was evidenced by a variety of projects and initiatives that found shelter under its banner, from community gardens and farmers markets to food banks and soup kitchens. Community food security found its institutional home with the establishment of the Community Food Security Coalition (CFSC) in 1998. The CFSC sought to bring together people and

organizations interested in a variety of food system issues, including local production, ecological sustainability, social justice and economic development, into a single coherent movement. The CFSC defined community food security as "all persons in a community have access to culturally acceptable, nutritionally adequate food through local non-emergency sources at all times" (Henderson, 1998). However, Hamm and Cook (1999) found that tensions between the different interests, lack of metrics to measure success and absence of a coherent underlying political philosophy presented challenges to the reformist potential of CFSC and the larger CFS movement.

Despite launching and supporting a variety of important projects and initiatives and hosting popular annual conferences for over a decade, the CFSC dissolved in 2012 due to lack of funding and the inability to resolve the challenges identified by Hamm and Cook a decade earlier. Lacking a national organization to support and advocate on its behalf, the future of community food security as an organizing framework to reform the dominant food system is very much in doubt. Even if it finds renewed traction, there are questions about its potential and whether it is really a solution to the problems caused by the industrial food system or "something that will produce only a minor irritant to corporate dominance of the food system" (Henderson, 1998, p.123).

In contrast to the community food security movement another emerging theoretical framework, food sovereignty, presents a more direct challenge to the neoliberal hegemony of the dominant food regime. The concept of food sovereignty is most closely linked with La Via Campesina, the International Peasants' Movement, and was first articulated in 2007 in the Nyeleni Declaration as "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agricultural systems" (Holt-Giminez, 2012, p. 24). Alkon and Mares (2012) write that food sovereignty "moves beyond a focus on food security – access to sufficient food – to advocate for communities' rights to produce food for themselves rather than remain dependent on international commodity markets" (p.348). Food sovereignty embodies a structural critique of the

industrial food system and is manifested in efforts opposed to trade liberalization, expropriation of indigenous land and institutions such as the International Monetary Fund (IMF) and the World Bank.

Thus far, the food sovereignty movement has been strongest and most visible in the Global South, particularly in those regions of Latin America and Africa that have been most victimized by the global industrial food system. Holt Giminez (2012) draws on the writing of activists and academics from around the world to present a snapshot of a vibrant movement which is gaining momentum in many areas.

However, to date the food sovereignty movement has failed to gain traction in the U.S. A variety of reasons might explain that situation. First, despite its many negative consequences most Americans have benefitted greatly from the industrial food system, which has provided them with unprecedented consumer choice and reduced food costs. As such, the natural inclination of U.S. food system activists is to work for politically feasible policy reforms within the basic framework of the current system. Second, social movements that explicitly address issues of class and power are seen as antiquated and radical by many Americans. Generally speaking most Americans will tolerate or even support reformist movements but are frightened by radical movements. This is a country that recently honored civil rights icon Martin Luther King Jr. with a monument on the National Mall, but which still trembles at the rumor of a gun-toting member of the Black Panthers patrolling polling places in Philadelphia during the 2012 presidential election. Third, the language of the food sovereignty movement even the word sovereignty itself - is simply not germane to many Americans, and the myth of American exceptionalism leads many to dismiss the relevance of any movement or cause that originates outside of its boundaries.

While in the U.S. food sovereignty presents a problematic conceptual framework for challenging the industrial food system its two main tenets – that food should be produced in ecologically sound and sustainable ways and that food systems should be organized and controlled at the local level – are gaining

widespread attention in the U.S. and across the globe. Thus it is worth considering each of these ideas and their potential.

The increasingly visible environmental impacts of the industrial food system discussed earlier in this chapter have prompted growing numbers of academics, farmers, policy makers, businesses and consumers to consider alternative methods of production. The emergence of the organic agriculture movement in 1970s offered a model of production that relied less on chemical inputs and mechanization and more on farming in ways that did not degrade natural systems. However, as Guthman (2004) documents the U.S. organic movement has strayed from its promising early roots. The organic movement has evolved into the organic industry, a niche market existing largely within the established global industrial system, tightly controlled by a handful of major producers and distributors, and operating within a narrow regulatory framework that consists primarily of identifying specific allowable practices and inputs that determine whether a product can be labeled organic.

The emergence of agroecology, also known as ecological agriculture, holds greater potential. Gliessman (2007) defines agroecology as "the science of applying ecological concepts and principles to the design and management of sustainable food systems" (p. 369). In his widely used textbook, he discusses a variety of plant and environmental factors and system level interactions that need to be understood and considered when designing sustainable agricultural systems based on agroecological principles. Agroecology moves beyond the organic industry's narrow focus on acceptable inputs and methods of production to understanding the full range of issues that constitute the ecology of food systems (Francis, Lieblin, Steinsholt, Breland, Helenius, Sriskandarajah & Salomonsson, 2003).

Olivier De Schutter, the United Nations Special Rapporteur on the Right to Food, writes that agroecological approaches have the potential to increase the income of small scale farmers, contribute to rural development, improve nutrition and mitigate climate change (Holt-Giminez, 2012). However, tension between supporters of the current food system and advocates of agroecological approaches

remain significant, as evidenced by the controversy surrounding the development of the recent International Assessment of Agricultural Science and Technology for Development (IAASTD) report (Stokstad, 2008).

Critics of ecological agriculture often claim that such approaches result in lower yields and are unsustainable due to insufficient quantities of natural nitrogen fertilizers. However, Badgley, Moghtader, Quintero, Zakem, Chappell, Aviles-Vazquez, Samulon & Perfecto (2007) found agroecological farming systems could produce enough food to sustain the current human population without increasing the agricultural land base, and that leguminous cover crops could fix enough nitrogen in the soil to displace all synthetic fertilizers currently in use. Maeder, Fliessbach, Dubois, Gunst, Fried & Niggli (2002) conclude that fertilizer, pesticide and energy use are dramatically lower in agroecological systems, soil fertility and biodiversity are higher, and "organically manured, legume-based crop rotations utilizing organic fertilizers from the farm itself are a realistic alternative to conventional farming systems" (p. 1697).

Francis, Lieblin, Steinsholt, Breland, Helenius, Sriskandarajah & Salomonsson (2003) suggest that agroecology is the logical framework to integrate the full range of human and ecological concerns that are the foundation of a sustainable food system. Gliessman (2012) argues that agroecology should be framed as a social movement whose goals are to reconnect producers and consumers and which removes exploitation of people and nature from the food system. However, to date most of the agroecology literature tends to focus on the environmental and ecological elements of agroecosystems, with far less emphasis on the social, political and economic dimensions of agriculture and food systems.

While agroecology holds significant potential to redesign farming and food systems in ways that reduce their negative environmental and social consequences, the other major element drawn from the food sovereignty movement – the relocalization of food systems – holds equally significant potential to rebuild local economies, enhance civic engagement and strengthen communities.

The emergence of vigorous food system localization efforts in the US and elsewhere is the strongest manifestation of resistance to the dominant corporatized global economy (Norberg-Hodge, 2001). The assumption underlying food system localization is that by reducing the scale of agricultural production and distribution and building more direct connections between producers and consumers, many of the negative consequences of the dominant food regime can be curtailed or eliminated. However, just as local food systems exist in relationship to regional, national and international systems they are also embedded in complex social structures unique to each community (Granovetter, 1985).

Born and Purcell (2006) caution against what they call "the local trap" which assumes that local food is always preferable. They write that "no matter what the scale, the outcomes produced by a food system are contextual: they depend on the actors and agenda that are empowered by the particular social relations in a given food system" (p. 196). Dupuis and Goodman (2005) note that food system localization cannot be assumed to lead towards a more socially just food system because local communities are often sites of great inequality and hegemonic domination. Hinrichs (2003) cautions against localization becoming market obsessed, elitist and reactionary. Winters (2003) offers a similar warning to assuming that localized food systems are inherently more likely to result in ecologically sound agricultural practices. DeLind (2010) worries that the growing popularity of the local food movement in the US - with its locavore emphasis, preoccupation with celebrity spokesman like Michael Pollan and its embrace by major retailers like Wal-Mart – is shifting attention from "deeper concerns about equity, citizenship, place building and sustainability" (p. 273).

Accepting that relocalization may not be a panacea for addressing all that is wrong with the industrial food system, there are still reasons to be optimistic about its growing popularity. Lacy (2000) believes that efforts to strengthen active participation and engagement in local food systems "will greatly enhance the creation of sustainable communities and temper the negative effects of globalization" (p. 23). Kloppenberg, Hendrickson & Stevenson (1996) encourage

the development of "regionally based food systems comprised of diversified farms using sustainable practices to supply fresher, more nutritious foodstuffs to small-scale processors and consumers to whom producers are linked by the bonds of community as well as economy" (p.34).

Local and regional food systems have the potential to make significant contributions to building prosperous and resilient local economies. Hewitt (2011) chronicles how a variety of local food system initiatives in Hardwick, Vermont are creating jobs and revitalizing the economy of a formerly prosperous community that had fallen on hard times. Developing clusters of food systemrelated businesses keeps more money circulated in the local economy, increasing the multiplier effect of food system investments. Economic multipliers are used by economic development professionals and elected officials as a key measure to assess the potential benefits of various investments. Ken Meter cites a number of studies to demonstrate that the multiplier effect of investments in local farmers markets and locally owned restaurants are significantly higher than comparable investments in national grocery stores or chain restaurants (Holt Giminez, 2012).

Another way local food systems can contribute to community vitality is by fostering stronger connections between rural and urban populations. Francis, Lieblin, Steinsholt, Breland, Helenius, Sriskandarajah & Salomonsson (2003) make useful distinctions between the sometimes different goals of rural and urban populations while identifying opportunities for local food systems to advance the interests of each group. Connecting rural food producers to urban consumers through shortened supply chains can foster what Sage (2001) calls a "geography of regard" as both groups come to understand and appreciate the values and needs of the other. Selfa and Qazi (2005) found that while significant misunderstanding persists between rural producers and urban consumers in Washington State and definitions of "local food" differ, initiatives are beginning to emerge that could benefit both groups and lead to improved social understanding. Ross (2006) finds that rural urban relationships embedded in local food systems in Maine provide a springboard for both economic success and enhanced social relations.

Lyson (2004) describes these local agricultural and food production systems that are tightly linked to a community's social and economic development as civic agriculture. According to Lyson, civic agriculture describes:

the emergence and growth of community-based agriculture and food production activities that not only meet consumer demands for fresh, safe and locally produced foods but create jobs, encourage entrepreneurship, and strengthen community identity. Civic agriculture brings together production and consumption activities within communities and offers consumers real alternatives to the commodities produced, processed and marketed by large agribusiness firms. (p.2)

In contrast to the dominant industrial food system, civic agriculture has the potential to transform individuals from passive consumers into active food citizens, which Lyson envisions as someone "who not only has a stake but also a voice in how and where his or her food is produced, processed and sold" (Lyson, 2004, p. 77).

By placing agriculture and food systems in a local context that acknowledges the role of individuals not just as passive consumers but also as active citizens, civic agriculture has significant potential to serve as both a framework for developing sustainable food systems and for empowering individuals to actively participate in self-governance and the renewal of democratic institutions. Kemmis (1990) notes that in the U.S. farming historically served as the embodiment of civic virtue and that all community members were assumed to have some obligation to participate in the maintenance of civic culture. Lacy (2000) observes that a functioning democracy and thriving communities are dependent on nurturing this civic-spiritedness. According to Swanson (2001) the convergence of several factors suggests that the time may now be ripe for the reemergence of such local collective agency.

If civic agriculture is to realize its potential for catalyzing both sustainable food systems and democratic renewal, it will need to evolve beyond its current emphasis on strengthening relations between producers and consumer to address a wider set of issues. DeLind (2002) is concerned that civic agriculture manifests

many of the same contradictions that characterize industrial agriculture and she questions its "pronounced reliance or dependence upon traditional market relations" which "revolves largely around private enterprise, private ownership and private accumulation" (p.218). However, she still believes that civic agriculture has the potential to transcend its economic preoccupation to prioritize citizenship and civic engagement. In a later paper Delind and Bingen (2007) argue that agriculture is a civic enterprise and:

it emerges from lived experiences, shifting relationships and common cause. It is the culture of shared understandings and responsibilities. It is not agreement, or sameness, or personal comfort; rather it is bound into democratic process and engagement. Raising, selling or eating a cabbage, however worthy and delicious, is not inherently a civic act. (p.129)

All human communities and agricultural systems are embedded in specific landscapes, and civic engagement in the management of agricultural and other natural resource systems is critical to bringing these systems into greater alignment with ecological processes (Brunckhorst, Coop & Reeve, 2006). The implicit assumption of civic agriculturalists seems to be that relocalizing food systems will inherently result in better environmental outcomes. However, to date advocates of civic agricultural systems. Even Lyson (2004), who first articulated the concept, only loosely connects civic agriculture to sustainable farming practices, assuming that civic agriculture "captures the problem-solving foundations of sustainable agriculture" (p.79).

Eco Civic Agriculture

A variety of frameworks have emerged for challenging the dominant global food system. Each has value and has contributed to the discussion, but each also has limitations. Community food security emphasizes improving access to food for all members of a community, but largely accepts the existence of the global industrial food system. Food sovereignty presents a more direct challenge to the underlying economic and political foundations of the dominant system, but its direct structural critique of global capitalism poses challenges for such a

framework gaining popular acceptance, particularly in the U.S. Agroecology places the food system in a larger ecological context that can address some of the worst consequences of existing agricultural production systems, yet often fails to consider the role of human communities as actors in the system. Conversely, civic agriculture offers the potential for fostering thriving local communities and renewing democratic participation, but lacks deeper attention to the underlying ecological context and limitations of agricultural systems.

What is needed is a new holistic theoretical framework, one which draws the best elements from the existing approaches, which grounds food systems in an ecological context, which recognizes individuals and communities as actors in the system, and which is expressed in a way that is culturally acceptable and likely to engender popular and political support. I propose that such a system be called "Eco Civic Agriculture."

Eco Civic Agriculture embodies the complex understanding and appreciation of the plants, animals, environmental factors and system-level interactions that are the basis of agroecology. It places priority on farming practices that are grounded in local environmental conditions and which enhance soil fertility, promote biodiversity and conserve finite natural resources. The foodstuffs produced by such a system are intended primarily for personal consumption and consumption by the local population. Local people acquire food primarily through personal production, direct relationships with producers or through short local food supply chains, fostering social cohesion and concern for both the land and the people who steward it.

In Eco Civic Agriculture, export of agricultural products occurs only after the food needs of the local population are satisfied, with trade focused primarily at the regional level. In some situations, space exists between the producer and consumer for small scale food aggregators and processors to develop niche markets for preserving food and creating value added products, allowing these entrepreneurs to create and contribute additional wealth to support local communities. Locally produced and consumed food becomes a source of community pride and conversation, and the basis for small scale, diversified,

sustainable economic development. Multi-generational food system education, advocacy and celebration become integrated throughout the community's public and private institutions. Individuals have made the transition from passive food consumers to active food citizens and are engaged directly and indirectly in food production and the development and implementation of practices and policies which reinforces and expands the success of the system.

The realization of such a system is not only possible but essential. However, unleashing the transformative potential of Eco Civic Agriculture will require citizens and community leaders to first recognize the dysfunctional nature of the global industrial food system and then to begin actively planning for and transitioning to this new model.

Research Methods

In order to assess the degree to which Eco Civic Agriculture can be advanced through local food system planning, and therefore its potential to contribute to the realization of sustainable local food systems, this paper includes a case study of an existing sustainability planning process in Thurston County, Washington. The case study of Sustainable Thurston includes a review of the history and evolution of the county's food system, examination of the institutional framework in which food system planning occurs and an analysis of the origin, development and status of the planning process. Sources used to develop and analyze the case study include historic and legal documents, government and non-profit agency papers and reports and articles from academic and professional journals.

In addition, to gain a deeper understanding of the potential for the Sustainable Thurston planning process to advance Eco Civic Agriculture in the region, personal interviews were conducted with representatives of two key groups of informants involved in the project and whose support and leadership will be necessary to implement any recommendations included in the final regional sustainability plan approved at the end of the process.

Interviewing key informants directly involved in a project is a powerful form of qualitative research well suited for analyzing complex processes, including planning efforts like Sustainable Thurston. Dooley (1984) defines qualitative

research as "social research based on nonquantitative observations made in the field and analyzed in nonstatistical ways" (p.287). According to Manheim, Rich, Willnat & Brians (2008), intensive interviewing techniques are often used "as a means of gaining in-depth understanding of a phenomenon and understanding aspects of that phenomenon that researchers did not anticipate" (p. 372).

The interviews conducted for this research were relatively unstructured and based on a series of open ended questions. The same general topics and questions were posed to each interview subject, though the exact wording varied. An interview guide was developed and used to steer the general flow of each conversation. Dooley (1984) notes that using interview guides provides a useful tool for researchers to ensure that all relevant issues are addressed in the course of each interview (p. 278).

According to Manheim (1977) in an unstructured interview "the interviewer is permitted – in fact encouraged – to vary the manner and wording of the questions in order to fit the peculiarities of the situation, and he may follow up on opportunities suggested by the respondent's replies" (p. 212). In a later text Manheim, Rich, Willnat & Brians (2008) use the term "unscheduled" to define the same type of interview, and note that intensive interviews like the ones used in this research are especially useful "when the researcher is interested in learning what the respondent perceives as important and relevant to the research and lets the respondent's observations suggest what questions should be asked in order to gain useful information" (p. 372).

Collecting data through unstructured or unscheduled interviews based on open ended questions presents both challenges and opportunities in terms of analyzing the data, discerning patterns or themes and drawing conclusions. Manheim, Rich, Willnat & Brians (2008) write that:

unscheduled interviews produce data that are difficult to condense and summarize and that may not allow precise comparison among respondents. The asset accompanying this liability is a greater opportunity to learn from respondents and to acquire unexpected information that can lead to truly new ways of understanding the events being studied. (p.373)

Despite the challenges inherent in qualitative research, the opportunity to gain direct information and perspectives from people directly involved in Sustainable Thurston makes it uniquely suited to achieving the goals of this research.

The subjects chosen for the research interviews were drawn from two key groups of informants. The first group are professional planners employed by the Thurston Regional Planning Council (TRPC), the lead agency for the Sustainable Thurston project. The second group are elected officials who serve on the project task force. From a sociological research perspective, the interview subjects represent individuals with an elite status, given their access to information that can help answer the research question (Manheim, Rich, Willnat & Brians, 2008). In addition, support from both groups will be critical in implementing the sustainability plan adopted by TRPC, so understanding their views is important for assessing the potential for the planning process to help advance Eco Civic Agriculture in the region.

The planners that were interviewed were chosen because of their intimate knowledge of the origins of Sustainable Thurston and their deep involvement in the project. In addition, each has been employed by TRPC for many years, and as such can provide perspective on this planning process within the context of other regional planning activities and the evolution of TRPC's planning programs.

The elected officials selected for the interviews reflect the diversity of jurisdictions represented on the task force. In addition, these interview subjects represent a broad spectrum of philosophical and political ideologies as well as a mix of policymakers who have been involved in regional planning activities for many years and those relatively new to regional planning.

The goals of the interviews are to gain insight into why the Sustainable Thurston project was undertaken, how it relates to other planning initiatives, policies, programs and activities at the regional and local level and what the expected outcomes are for the project. Specific to the issue of local food systems, the goals are to determine why the topic was originally not included in the project, what factors caused the scope to be broadened to include food issues and how food systems relate to the other parts of the plan. Finally, the interviews are designed to determine each subject's perspectives about the connections between the food system and community sustainability and to identify opportunities and challenges for fostering Eco Civic Agriculture through the planning process.

All interviews were arranged in advance and with one exception each interview lasted between sixty and ninety minutes. Interviews were conducted in locations that were convenient to the interview subject, ranging from local coffeehouses to private offices to personal homes. All interviews were digitally recorded and handwritten notes taken during the interviews. The first two interviews were conducted with assurances that direct quotes would not be attributed to specific individuals in the final report. However, during these interviews it became apparent that there would be tremendous research value in being able to specifically attribute statements to the individuals who made them. Each of the first two interview subjects were subsequently contacted and permission requested and granted to change the original confidentiality agreement. In one case an interview subject asked to be allowed to review any quotes for accuracy prior to publication of the research, a request that was granted. The remaining six interviews were all conducted with the understanding that all data and information collected through the interview could be attributed to the subject of the interview.

After completing all of the interviews, the handwritten notes were typed up and responses organized in a thematic format based on key topics that paralleled the interview guide. The digital recordings of each interview were reviewed and key statements from each interview transcribed verbatim and placed within the established format.

The first level of data analysis focused on identifying key themes identified by each of the two groups of interview subjects, with specific attention to identifying major areas of convergence and divergence within each group. The second level of analysis concentrated on analyzing areas of convergence and divergence between the two groups. The third and final step focused on interpreting the data and drawing conclusions to help answer the basic research question - whether the
Sustainable Thurston project has the potential to advance Eco Civic Agriculture in Thurston County.

Chapter 3: Food System Planning in Thurston County, Washington: A Case Study of Sustainable Thurston

Chapter Overview

This chapter begins by presenting a short history and description of the evolution of agriculture in Thurston County, recent changes in the local food system, and the need for coordinated planning to ensure a more sustainable and resilient food system in the future. The history and organizational context for food system planning is examined, with emphasis on the origin, evolution and scope of the Thurston Regional Planning Council (TRPC), the primary agency responsible for regional planning. The absence of food system planning as an area of concern within the larger planning framework is examined in a historical context, with emphasis on its re-emergence as a prominent topic within the discipline over the past two decades.

After establishing the context for regional food system planning in Thurston County, the focus shifts to an examination of the origin and scope of Sustainable Thurston, the first comprehensive countywide sustainability planning project ever undertaken in the county. Food system planning is considered within the context of this larger planning effort, including an examination of the key participants, major findings and recommendations.

History and Evolution of the County Food System

Thurston County is located in Washington State at the southern end of Puget Sound. Several bays and inlets form the northern border of the county. Thurston County is bounded by Mason County to the northwest, Grays Harbor County to the West, Lewis County to the south, and Pierce County across the Nisqually River to the east.

The United States Department of Agriculture Soil Conservation Service (1990) reports a total land area of 761 square miles while the TRPC (2012b) claims an area of 736 square miles The topography of Thurston County ranges from coastal lowlands in the north to relatively flat prairies in the central part of the county to peaks reaching elevations over 2,500 feet in the southeast and southwest.

The earliest permanent inhabitants of the region were Coast Salish people who settled on the shores of Puget Sound and its tributaries to take advantage of the abundant fish and shellfish populations. Archeological research and carbon dating have established the presence of permanent coastal settlements dating back at least 3,000 years (Dougherty, 2006). Wild game was plentiful, and the native population gathered and over time cultivated a variety of plants, roots and fruits which provided additional sources of food and fiber. Descendants of these original inhabitants continue to live in the area, and the county includes two large tribal reservations, the Nisqually and the Chehalis.

The first documented European exploration of the area occurred in 1792 when British Captain George Vancouver dispatched officers Peter Puget and Joseph Whidbey to map the southern reaches of Puget Sound. In the 1820s, members of an expedition funded by the Hudson's Bay Company explored parts of Thurston County, traveling up the Chehalis River and then overland to Eld Inlet. In 1833, the Hudson's Bay Company founded the Puget Sound Agricultural Company which established large cattle, horse and sheep ranches in parts of Thurston County, and vegetable gardens and dairying operations in nearby Fort Nisqually (Washington State Department of Agriculture, 1956). By the late 1830s, small diversified farms began to appear along the Deschutes River between the present day towns of Tenino and Rainier (Crooks, 2011).

The first American exploration of the area occurred under the command of Charles Wilkes in 1841, and several years later American settlers began reaching the area. The Simmons/Bush party arrived in 1845, establishing small farms, homesteads and a new settlement that eventually became the City of Tumwater. One year later, Levi Smith and Edmund Sylvester founded what would become the City of Olympia on the shores of Budd Inlet where the Coast Salish village of Steh-Chass was located.

The first American immigrants had primarily come to the area seeking to establish farms. The advance and retreat of the Pleistocene era glaciers in

Thurston County had resulted in the deposition of rich mostly impermeable clay subsoil covering confined aquifers, overlaid with outwashed sands. Over time, the retreat of the glaciers created numerous small lakes and ponds as well as the development of three large river basins – the Nisqually, Deschutes and Chehalis – and their adjacent floodplains (Thurston Regional Planning Council, 2012b). For the new immigrants, this meant good quality though limited supplies of agricultural soils and plentiful water for irrigation. According to Crooks (2000), there were soon tensions between the new settlers and existing British farmers over access to agricultural lands, leading the Puget Sound Agricultural Company to eventually abandon their outposts in Thurston County.

The first American farms in the county were highly diversified, producing a variety of vegetables, grains and animal products. On his two acre Olympia farm, Levi Smith grew corn, beans and squash, and raised hogs, hens and goats for meat. Meanwhile at his farm near what is today the Olympia airport, George Washington Bush grew mixed vegetables, hops and high quality wheat that was prized throughout the region. By 1860 the James Farm in the southern part of the county was harvesting 65 bushels of wheat per acre (Crooks, 2011). According to the Washington State Department of Agriculture (1956) early advertisements in the local newspaper demonstrated that "bacon, lard, wheat, milk, butter and cheese were being produced for sale on farms on the prairies of Thurston County" (p.2).

Small scale processing and distribution facilities were also established. The Simmons party built a small grist mill along the banks of the Deschutes River to grind flour from the local grain, and the establishment of port facilities and the Customs House on the banks of Budd Inlet in Olympia provided an opportunity to ship agricultural products not consumed by the local population north throughout Puget Sound (Washington State Department of Agriculture, 1956).

Farming successfully in Thurston County required the early settlers to adjust to a different climatic regime than they were accustomed to on the eastern and mid-western farms from which they emigrated. Unlike the hot summers and cold winters they were used to, Thurston County has a mild climate year round.

Temperatures vary across the county, with the average winter daily minimum temperature in the mid to upper thirties (degrees Fahrenheit) while summer high temperatures average in the low to mid seventies. A bigger challenge was adjusting to more plentiful and seasonally variable precipitation. Total average annual precipitation ranges from a high of 51 inches in Olympia to a low of 39 inches in the southeast portion of the county (United States Department of Agriculture Soil Conservation Service, 1990). The majority of the precipitation falls in the winter, while summers are usually dry. Cloud cover exists throughout much of the year.

Dealing with the vagaries of their new climate was a constant challenge. A shorter growing season and extended wet winters required new approaches to farming, and ensuring adequate water supplies during the dry summer months entailed the construction of irrigation systems. Many early farmers constructed windmills to pump water to their fields (Crooks, 2011). More challenging was the fact that the limited number of flat prairies and fertile flood plains were soon filled with farms, meaning that settlers arriving later were forced to clear the dense forests that covered much of the county to establish their farms and homesteads. The farms in these logged areas were often on slopes and lacked the fertile soils found in the flatter local prairies, and required more labor and effort to produce crops. Over time, many small farmers opted to work in the more lucrative timber industry and purchase their food from other producers (Dougherty, 2006). Crooks (2011) notes that many of these abandoned "stump farms" were later leased to Chinese immigrants who grew a variety of vegetables and herbs for personal consumption and local sale.

Revenue from the timber industry, and to a lesser extent from agricultural trade, provided the basis for increased investments in roads and rail lines in the second half of the nineteenth century. The improved infrastructure allowed small farming and logging communities throughout the south part of the county – Yelm, Rainier, Tenino and Bucoda – to prosper and link to growing populations in the northern part of the county. The resulting county land use pattern is the one that remains today: a strong urban core composed of three primary cities (Olympia,

Lacey, Tumwater) surrounded by low density residential development and a patchwork of agricultural and forest lands, connected to smaller outlying communities by a few key transportation corridors.

Mirroring larger national trends in agriculture, the early 1900s saw the increasing mechanization of local farms and a transition to larger farms with an increased emphasis on producing products destined for feeding growing regional and national populations. Crooks (2011) notes that these new "scientific farms" prospered throughout Thurston County until the advent of the First World War when disruptions to national and international trade caused many of these capital intensive enterprises to collapse.

Agricultural production and trade recovered briefly after the war, but the impacts of the Great Depression of the 1930s were soon felt in Thurston County in the form of bank closures, high unemployment and a decline in the economic importance of farming and extractive industries, especially timber, which never regained its pre-depression prominence. The farms that remained were producing crops primarily for local consumption and the number of farms in Thurston County peaked in 1940 at 2,876, largely as the result of a new irrigation system in Yelm opening up additional acres for production. In 1940, nearly 180,000 acres, or 39 percent of the county's land, was devoted to farm use (Thurston County Agriculture Committee, 1978).

During World War Two, the labor force in Thurston County and throughout the nation was diverted from farms into the war effort. Following the war, many opted not to return to the farm. The number of farms in the county dropped to about 2,000 by 1950, with most of the remaining farmers being part time and increasingly employed off-farm in the growing industrial sector or the expanding state government (Washington State Department of Agriculture, 1956). Many local farmers stopped farming altogether, unwilling or unable to adapt to the massive changes sweeping the agricultural system in the form of specialized equipment, new fertilizers and pesticides, expanding national and international markets and radically different economics of production (Dodds, 1986). As the number of farms in the county fell, many canneries and other local food processors also disappeared.

The changing nature of agriculture in the decades following the World War Two is reflected in changing characteristics of Thurston County farms during that period. Data compiled by the Thurston County Agriculture Committee (1978) show that in 1945 27 percent of the county's farms were less than nine acres, but by 1964 that had dropped to 4 percent. Meanwhile, the number of farms between 100 and 219 acres more than doubled, and the number of farms over 220 acres more than tripled. Mirroring similar trends throughout the U.S., average farm size more than doubled between 1940 and 1974, from 63 to 124 acres, while the total number of farms in the county dropped from 2,876 to only 529 in the same period (Thurston County Agriculture Committee, 1978).

While the average size of local farms was growing dramatically and there were fewer farms overall, the value of agricultural products produced in the county increased significantly. Between 1969 and 1974, the average value of agricultural products sold on farms with annual sales greater than \$1,000 increased 25 percent, with the largest gains taking place on the largest farms (Thurston County Agriculture Committee, 1978).

Since the 1970s, the face of farming in the Thurston County has continued to change. A 1994 survey found that most farms in Thurston County were now parttime small acreage operations that gross less than \$25,000 per year and were primarily operated by family members (Thurston County Advanced Planning and Historic Preservation, 1994). The same survey found that average farm size had shrunk from its 1974 peak of 124 acres to just over 70 acres, with the most common farm size being 10-49 acres. However, only one of the three most important crops identified by farmers in the 1994 survey, beef, was a crop raised for direct human consumption (Thurston County Advanced Planning and Historic Preservation, 1994).

More recently, the 2007 agricultural census found that the total number of farms in the county had more than doubled since 1974 to 1,288 while the amount of land being cultivated had grown by over 15,000 acres (Thurston County,

2010). Washington State University Extension (2006) reported that the number of farms over 50 acres in size was decreasing while those under 50 acres were increasing. While the number of small and medium sized farms focusing on specialty crops and niche markets like herbs, berries and organic vegetables has grown in recent years, the number of large agricultural operations has shrunk considerably. Between 1995 and 2008 the number of dairies in the county fell from 29 to one, the number of chicken fryer facilities fell from five to one and there are no longer any large acreage commercial growers of peas or sweet corn (Thurston County, 2010).

In the past few years, average farm size has continued to shrink. In 2010, the largest number of farms in the county were between one and nine acres in size and were small scale vegetable and livestock operations (Thurston County, 2010). The recently released 2013 direct sales farm map identifies 54 agricultural producers in the county that market their products directly to consumers (South of the Sound Community Farmland Trust, 2013). Agriculture remains a significant factor in the local economy, with the total value of farm products sold in 2009 estimated at \$117 million per year (Thurston County, 2010).

Starting in the 1950s, one of the major factor fueling changes in the scale and nature of farming in Thurston County was rapid population growth. Many of the people who came to the region during the war to work in national defense facilities in nearby Tacoma or train at Fort Lewis opted to settle in the area after the war. The growth of state government, including the establishment of The Evergreen State College in 1967, provided increased opportunities for off-farm employment. The construction of Interstate 5 through the heart of Thurston County, as part of the Interstate Highway System, improved access to the county. A growing network of roads connected the new subdivisions being constructed on the fringes of Olympia, Tumwater and Lacey, and people seeking to raise their families in an area with tremendous natural beauty and a high quality of life flocked to the area.

Between 1960 and 1974, Thurston County was the second fastest growing county in the state (United States Department of Agriculture Soil Conservation

Service, 1990). According to data compiled by the TRPC (2012b), between 1960 and 1980, the population of the county grew from 55,059 to 124,624, and more than 30,000 new homes were constructed. In recent years, the county has continued to consistently rank among the fastest growing in the state. Between 1990 and 2000, the population grew 2.5 percent per year, slowing slightly to 2 percent per year between 2000 and 2010, with a total population in 2010 of 252,264. By 2012, there were 110,490 housing units in the county; 66 percent of the units are single family residences on individual lots.

The rapid population growth and development has whittled away at formerly large tracts of agricultural land as housing developments, roads and businesses increasingly sit atop land previously used for farming. The extensive subdivision of agricultural lands since the 1970s is a prime factor in the decreasing number of large farms still operating in the county. A report by Fisher and Mitchell (2009) found that between 1950 and 2008, the county's population grew by over 193,000 and over 90,000 acres of farmland were lost. Farmland per capita declined from 3.8 acres to just over a third of an acre.

Further, 75 percent of the remaining farmland is located in close proximity to urban areas and at risk of development (Fisher and Mitchell, 2009). A report by Thurston County (2010) notes that the remaining agricultural lands tend to be relatively flat and attached to stable water rights which make them attractive to developers. Additionally, the report cautions that the average Thurston County farmer is 56 years old and finding it difficult to transfer their property to the next generation of farmers who cannot afford to purchase the land at current market values.

Meanwhile, consumer interest in locally produced food is on the rise in Thurston County, echoing similar trends around the nation. The Thurston County Agriculture Committee (1978) noted over three decades ago that the growing interest in fresh local produce was one of the factors that could help sustain the local agricultural economy. Thurston County (2010) finds that the success of existing farmer's markets in the county's urban areas and recent increases in

direct farm sales could be leveraged to support efforts to protect farmland and catalyze the development of a thriving local food system.

With a median household income of \$60,930 between 2006 and 2010 (Thurston Regional Planning Council, 2012b) and an educated, health conscious population, the county may be well positioned to protect its remaining farmland and nurture a stronger local food system. However, the vast majority of food consumed by Thurston County residents today is the product of the global industrial food system, primarily purchased from numerous large national retail grocers located throughout the county. Locally produced food purchased directly from producers or at small, locally owned grocery stores is an almost insignificant part of the total local food economy.

In addition, the impact of the ongoing financial crisis and stubbornly high local unemployment have left growing numbers of local residents unable to feed themselves, undermining food security for the region. There were 10,293 visits to the Thurston County Food Bank in 2010, a 29 percent increase from 2009 and up 99 percent since 2005, and the level of in-kind food donations decreased 11 percent between 2009 and 2010 as former donors became emergency food recipients (Thurston County Food Bank, 2011).

Renewed interest in the health of the local food system is evident in recent government actions that make it easier to grow food in urban areas and protect rural agricultural lands. Since 2011, the cities of Olympia, Lacey and Tumwater have all adopted new urban agriculture ordinances designed to encourage community gardens, small scale backyard fruit and vegetable gardens and the keeping of bees, chickens, rabbits and goats. In addition, the City of Olympia is considering comprehensive language to encourage urban gardening and farming as part of its long term growth plan. Thurston County Commissioners expanded the amount of land zoned for long-term agricultural use in 2010, and in 2011 adopted a new agritourism ordinance intended to provide regulatory flexibility for existing farmers and potential food system entrepreneurs in specific parts of the county.

Grassroots community efforts led by a variety of individuals and non-profit organizations have also drawn attention to the condition of the local food system and have complemented and supported government actions. In 2011, over 500 people participated in a two day local food summit organized by Sustainable South Sound, and follow up efforts have resulted in the creation of the Thurston Food System Council (TFSC). Local organizations offering workshops on everything from garden design to seed saving to canning the harvest are attracting widespread interest, and Garden Raised Bounty (GRuB), an organization that builds gardens for low income residents and provides farm-based life skills development for at-risk youth, recently secured a permanent site for an expanded program. In addition, Enterprise for Equity, an organization that provides business development training to low income individuals, has developed a popular agripreneur training program.

In sum, there are reasons to be both cautious and optimistic about the future prospects for the food system in Thurston County. The current condition of the local food system is the result of over a century of individual choices made by farmers, consumers, businesses and local elected officials responding to a variety of environmental and geographical factors, consumer preferences, and changing demographics, technologies and market conditions. Creating a new system that is grounded in the principles of Eco Civic Agriculture and which can provide local resilience to unpredictable future economic and environmental conditions will require a more coordinated approach. In essence, it will require a level of comprehensive food system planning that up until now has not existed at the local level.

Food System Planning: Context and History

To understand the potential for food system planning to support the realization of Eco Civic Agriculture in Thurston County, it is necessary to understand the history and institutional framework in which planning occurs in the county. As noted previously, the county's existing food system is the product of a series of unique conditions and decisions made over a long period of time, lacking in coordination and without intent to achieve specific outcomes for the system as a whole. Today, a variety of laws and policies at the federal, state and local levels encourage or require the jurisdictions within the county to pursue a more coordinated approach to future development.

Recognizing the impacts of rapid population growth on Thurston County and other fast growing regions, in 1963 the Washington State Legislature passed a new law designed to improve and coordinate regional planning statewide. The law allows that:

A county or a city may join with one or more other counties, cities and towns, and/or with one or more school districts, public utility districts, private utilities, housing authorities, port districts, or any other private or public organizations interested in regional planning to form and organize a regional planning commission and provide for the administration of its affairs. Such a regional planning commission may carry on a planning program involving the same subjects and procedures provided by this chapter for planning by counties, provided this authority shall not include enacting official controls other than by the individual participating municipal corporations. The authority to initiate a regional planning program, define the boundaries of the regional planning district, specify the number, method of appointment and terms of office of members of the regional planning commission and provide for allocating the cost of financing the work shall be vested individually in the governing bodies of the participating municipal corporations. (Regional Planning Commissions Act)

The law also allows for any planning agency created pursuant to the act to receive and expend state and federal funds in a manner that is consistent with fulfilling its responsibilities under the act.

In 1967, the Thurston Regional Planning Council (TRPC) was established as set forth by the statute and through mutual agreement by the Thurston County Commission and several of the cities within the county. Today TRPC includes 22 members representing all of the cities and towns within the county, as well as the Nisqually and Chehalis tribes, the North Thurston and Olympia school districts, Intercity Transit, the LOTT Clean Water Alliance, the Port of Olympia and Thurston Public Utility District 1. An additional six entities serve as associate member.

The current mission of TRPC is to "Provide visionary leadership on regional plans, policies and issues" (Thurston Regional Planning Council, 2012b). To further its mission, TRPC develops regional plans and policies for transportation, growth management, environmental quality and other topics as determined by the council members. It provides data and analysis to support local jurisdiction planning efforts and regional decision making, and brings together local, state, federal and tribal leaders to build consensus on regional issues. It also provides additional technical services to members on a contractual basis. As of January, 2012 TRPC employed 21 permanent staff members and had an annual budget of approximately \$4.8 million, sourced primarily from state and federal grants, contracts and member dues. The agency reports that every dollar provided in the form of membership dues leverages an additional \$10 in federal, state and local funding (Thurston Regional Planning Council, 2012c).

TRPC is the regional repository for population, land use, transportation and other data. It uses the data to produce regional growth forecasts, develop transportation and other infrastructure plans and provides data to member jurisdictions to support local planning efforts. Since 1982, TRPC has produced The Profile, an annual comprehensive collection of demographic, land use and economic data about Thurston County that is widely used by policy makers, academics, researchers, businesses and activists.

TRPC also supports a wide variety of environmental planning projects. Under a contract with the Thurston County Emergency Management Council, it developed and maintains a natural hazards mitigation plan for the county. Since passage of the Washington State Shoreline Management Act in 1971, TRPC has provided support to member jurisdictions as part of their requirement to periodically update their Shoreline Master Program. It has also been active in facilitating watershed-level land use planning activities required under state and federal laws. In 2010, it received a large US Department of Energy grant to

reduce regional greenhouse gas emissions through innovative transportation programs, increased density through infill development, and broad public education and outreach.

The importance of regional planning was further emphasized and TRPC's role as a regional planning agency for Thurston County was significantly expanded by passage of the Washington State Growth Management Act (GMA) in 1990. Most of the agency's current planning activities take place within the framework created by GMA. Despite improved regional planning that had followed passage of the 1963 legislation and the creation of TRPC and similar regional planning organizations across the state, the consequences of continued rapid population growth prompted the legislature to take additional action. The legislative findings setting the context for GMA state that:

uncoordinated and unplanned growth, together with a lack of common goals expressing the public's interest in the conservation and the wise use of our lands, pose a threat to the environment, sustainable economic development, and the health, safety, and high quality of life enjoyed by residents of this state. It is in the public interest that citizens, communities, local governments, and the private sector cooperate and coordinate with one another in comprehensive land use planning. Further, the legislature finds that it is in the public interest that economic development programs be shared with communities experiencing insufficient economic growth. (Growth Management Act)

The law requires that any county with a population of 150,000 or which had experienced greater than 10 percent population growth in the previous ten years is required to plan under the act. Counties passing the minimum population or growth threshold after 1995 are also required to begin planning under the act. Thurston County, with a population of over 160,000 in 1990, was one of the original counties immediately impacted by the law.

The goals of GMA included reducing urban sprawl, creating efficient transportation systems, providing affordable housing, promoting economic development, improving the environment, promoting citizen participation, protecting property rights and maintaining agriculture and other resource based industries. The land use pattern that the act envisions creating are well designed compact urban core areas, surrounded by economically productive natural resource and agricultural lands and rural areas. The primary means of achieving the preferred land use pattern rely on each city adopting urban growth boundaries beyond which it will no longer allow certain types of development nor provide an urban level of infrastructure service.

To continue to be eligible to receive state funds, a critical source of revenue for local transportation and other infrastructure projects, counties impacted by the law and each of the jurisdictions within the county are required to develop comprehensive 20 year land use plans that will accommodate the projected population increase for each jurisdiction. Cities and counties must also develop shorter term capital facilities plans that are consistent with their land use plans. Both the land use plans and the capital facilities plans are required to be internally consistent with other policies and plans in each jurisdiction and externally consistent with the plans developed by adjacent jurisdictions.

Following passage of GMA, TRPC served a vital role in bringing together elected officials and their staff to develop strategies to implement the new requirements. Building on their previous role as a clearinghouse for demographic and other data, TRPC developed 20 year growth projections for the county and facilitated decisions about allocating the projected growth between the various jurisdictions. Updating the growth projections on an annual basis continues to be an important service provided by the agency. The local jurisdictions continue to use the projections as the basis for state required updates to their comprehensive plans.

TRPC also played an important in role in ensuring that the various comprehensive plans developed by jurisdictions within the county met the state requirement for external consistency. The primary means for ensuring consistency was through the development of countywide planning policies, and TRPC provided the table around which these policies were developed. The countywide planning policies were ratified by each of the impacted jurisdictions

and officially adopted by the Thurston County Board of Commissioners in September, 1993.

TRPC's long history as a regional planning agency and the critical role it plays in promoting consistent countywide implementation of GMA highlights the value of the organization as a forum for policymakers and planning professionals from each jurisdiction to gather, address issues of mutual concern, and forge a shared vision for the future of the region. In addition, by generating, analyzing and providing consistent data to member jurisdictions TRPC helps ensure that regional and jurisdictional planning in Thurston County is based on a common set of assumptions. Over time, TRPC has fostered and nurtured the development of relationships between staff and elected officials in the various jurisdictions and agencies within the county, relationships that are necessary to address the complex challenges confronted by a rapidly growing community.

While the range and scope of planning activities undertaken by TRPC has grown significantly over time, one of the areas in which it has not had significant engagement until quite recently is food system planning. The GMA, which sets the primary context for most of TRPC's planning activities, does not require counties or jurisdictions to engage in food system planning. While one of the goals of GMA is to preserve agricultural opportunities, and the law requires counties to designate and zone long term agricultural lands, there are no requirements to address broader planning issues related to the development or maintenance of local or regional food systems.

The lack of food system planning requirements in the GMA and TRPC's lack of engagement in food system planning are not unique. Pothukuchi and Kaufman (2000) note that "the food system, however, is notable by its absence from the writing of planning scholars, from the plans prepared by planning practitioners, and from the classrooms in which planning practitioners are taught" (p.113).

However, this was not always the case. Samina, Born & Russell (2010) note that in the early 1900s planners operating within a variety of theoretical frameworks routinely included food within the scope of their planning activities. A variety of possible explanations have been offered for why food system

planning took a back seat to other issues through most of the last century, but one of the primary reasons is rooted in the growing specialization within the field of planning itself, as urban planning became differentiated from rural planning and the former took on an increasingly prominent role within the discipline.

The increased emphasis on urban planning reflected the demographic changes underway in the country, as increasing numbers of people left the countryside and agricultural activities to move into rapidly growing cities which offered greater economic opportunities. In the first years of the twentieth century most Americans still lived in rural areas. In 1920 the U.S. Census Bureau found for the first time that more people were living in urban areas than in rural areas. By 1990, there were over 180 million urban residents compared to 62 million people living in rural areas (United States Census Bureau, 1995).

As professional planners increasingly shifted their focus towards urban issues, food came to be seen as beyond their scope of interest or influence. Pothukuchi and Kaufman (1999) identify four primary factors that explain why food systems had such low visibility among urban planners, elected officials and city residents. First, in the absence of shortages, urbanites take the food system for granted. Second, agriculture and food were seen as rural issues. Third, rural issues largely go unnoticed in cities. And fourth, the federal policy framework increasingly created a growing dichotomy between rural and urban policy.

One exception to the general lack of attention paid to food systems by urban planners and officials in the twentieth century was the Victory Garden movement during World War Two and to a lesser extent a similar movement during World War One. During the wars diversion of materials for military use and labor shortages in the agricultural sector resulted in concentrated efforts to produce food in urban areas. By some accounts, small urban gardens supplied nearly 40 percent of the fresh fruits and vegetables consumed in the US at the height of their popularity during World War II (Nordahl, 2009). The productivity of these urban gardens was encouraged and made possible by widespread public information campaigns and planning programs that supported the conversion of public and private space in urban areas to food production. The economic prosperity that returned following the end of the Second World War once again pushed food system issues to the back of the planning agenda. Even prominent planners such as Lewis Mumford and Benton MacKaye, who argued for comprehensive land use planning based on principles of equity and vitality, failed to make the connection between food systems and other planning topics (Pothukuchi & Kaufman, 2000).

Beginning in the last decades of the twentieth century, food system issues once again began to find their place on the planning agenda. A variety of factors explain the renewed interests in food systems among planners and planning organizations. Many of the issues identified in Chapter Two, including environmental and health concerns and the emergence of various communitybased alternative food movements, have all combined to push planning professionals to take a fresh look at food systems.

A survey of planning agencies in 22 U.S. communities conducted between 1997 and 1998 by Pothukuchi and Kaufman (2000) found a small but growing number of these organizations involved in food system issues, though the level of involvement varied greatly with most organizations only slightly involved in the topic. The primary areas in which planners were engaged with the food system were zoning, siting and design of grocery stores, establishing and regulating community gardens and farmers markets and food related economic development. The survey also found that most planners' involvement with the food system was on a case-by-case basis and lacked a systemic approach to addressing issues. The low level of planner involvement in food system issues could be attributed to a number of factors. Some planners still felt that food issues are not a core urban planning issue, or that it was primarily an issue to be addressed by the private sector. Others cited a lack of funding for food system planning or insufficient information about the topic to make meaningful contributions to the issue.

A more comprehensive on-line follow up survey conducted by Samina, Born & Russell (2010) ten years later provided additional insight into planners' perspectives on food system issues. Conducted under the auspices of the American Planning Association (APA), the leading organization for professional

planners in the U.S., the results of this survey were based on 192 responses from planners working in a wide range of planning organizations and on a wide range of planning issues. This survey found widespread support among planners for involvement in food system issues, with a majority responding that food system planning should be a top tier priority for their organization. This survey found planners engaged in an increasing variety of food system issues, ranging from farmland preservation and promoting food access through public transportation planning to developing local food policy and promoting healthy food in schools. One of the key findings from the survey was that "despite the involvement of planning organizations in food issues, it is quite clear that a significant gap exists between planners' preferred level of involvement in the area of food systems and their planning organizations' actual involvement" and that many of the barriers identified by Pothukuchi and Kaufman still exist (p. 31).

The growing interest in food system issues among professional planners prompted the APA in 2005 to include for the first time a full conference track on the topic as part of its annual meeting. Since that time, food system topics have become a regular feature of the meeting. In 2006, the APA appointed a Food Systems Steering Committee to develop tools to help planners integrate food system planning into more traditional planning approaches (Samina, Born & Russell, 2010). Over the past few years, the APA has produced a variety of reports and documents designed to enhance the capacity of planners to address critical food system issues.

Both studies discussed above found that one of the primary issues driving planners' interest in the food system was a growing recognition of the close linkages between food system planning and other traditional planning topics. A recent report by Hatfield (2012) notes that "Food systems are fundamentally linked to issues such as health, equity, environmental sustainability and economic development" (p.1). In a special edition of the Oregon Planner's Journal, Abrams (2009) writes that:

As we recognize the effects our current food system has on community health and environmental sustainability, it is increasingly clear that we need to address food production and delivery through planning. In fact, food systems planning should be given an equal footing with efforts already undertaken for housing, land use, transportation and economic development... From land use and transportation, to economic development and community building, food systems touch on nearly every part of a planner's work. (p.3)

The field of planning is inherently interdisciplinary. Professional planners must juggle a plethora of economic, environmental and social factors while working to find common ground among elected officials and the public and develop blueprints for the growth and development of the communities in which they work. Campbell (2004) writes that planners have a critically important role in the food system by acting as "bridgers" charged with mediating the needs and desires of various food system stakeholders while simultaneously advancing issues of economic viability, environmental sustainability, social equity, environmental justice and civic participation. Similarly, Samina, Born & Russell (2010) write that "Planners have an especially important role in tying many of these fields by facilitating the planning and design of communities where healthy food systems and healthy eating become possible" (p.100). Campbell (2004) identifies a number of key methods by which planning professionals contribute to the development of local food systems including collecting and analyzing data, participating in specific food system projects, developing and revising land use plans, facilitating public participation in food system issues and the development of food system policy.

While there is growing recognition that planners have a valuable role to play in creating sustainable food systems, and the inherent interdisciplinary nature of the planning field lends itself well to fulfilling that role, the institutional framework in which planning often occurs limits the engagement and effectiveness of planning professionals in food system issues. Most planning organizations operate at a local or regional scale, with the scope of their activities determined by political borders. For example, a city planning department plans for the development of land inside of the city's boundaries, while a different

public agency, usually another city or a county, plans for the development of lands just outside of the first city. Even if there is coordination of planning efforts, as required by the Washington State GMA, planning responsibilities are fragmented between different agencies with different elected leadership charged with responding to potentially different public interests.

The fragmentation of planning is especially problematic when it comes to food system planning because food systems usually transcend jurisdiction boundaries. Kloppenburg, Hendrickson & Stevenson (1996) use the term "foodshed" to describe the geographical context within which local and regional food systems exist, a term that encompasses the places where food is produced, the places where it is consumed, and the linkages between the two. In Thurston County, most food production takes place on farms located in unincorporated parts of the county, while most food consumption takes place in the cities. This disconnect between the political scale at which food system planning occurs and the geographic and ecological scales in which agricultural and other natural systems exist limits the effectiveness of planning efforts.

Brunckhorst (2002) recognizes the importance and challenges of linking these social and ecological systems more intimately in the planning process, writing that "Studies of cities, urban infrastructure and services, rural (and indigenous) community development and development of aid projects should, therefore, be approached from a regional-landscape context that addresses both landscape ecological processes (services) and social processes and functions. In a later paper, Brunkhhorst, Coop & Reeve (2006) notes that "opportunities to improve resource management outcomes significantly will rely on our ability to modify our social systems to serve our long term interest in the natural world" (p. 266). **Regional Sustainability Planning**

The need to work in a wider geographic and ecological context to address an ever-expanding range of environmental and social issues is pushing planning agencies and institutions at all levels to develop new tools and approaches. In recent years, a growing number of planning organizations have looked towards the development of local and regional sustainability plans as a means to bring all

of these factors and issues together within the context of a single planning approach. While many communities in Washington State and elsewhere have for years been required to develop and implement comprehensive plans to guide their long-term development, there are no similar requirements to develop sustainability plans. Hodgson (2012) writes that "While not typically required by state statute and lacking the legal standing of comprehensive plans, sustainability scholars are recognizing the importance of the sustainability plan for guiding local government actions and achieving sustainable development" (p.7). In contrast to comprehensive plans she describes sustainability plans as a type of strategic plan that are:

used to expand the transportation, resource conservation, climate protection, air and water quality, open space, economic development, health and education components of the comprehensive plan and address new and emerging issues, such as the health and sustainability of the local and regional food system. (Hodgson, 2012, p.7)

The development of local and regional sustainability plans is still a relatively new planning approach. In her survey of 888 planning professional across the U.S. Hodgson found only 15 percent of respondents reported that their jurisdictions were either drafting or had adopted sustainability plans, and only 18 percent of these respondents reported that food systems issues were addressed in the plan.

One of the forces driving local and regional planning agencies to consider the development of sustainability plans is the federal government. The election of Barack Obama in 2008, in the middle of a severe recession that was negatively impacting federal revenues, prompted several newly appointed members of his cabinet to begin discussing ways to leverage the impacts of various federal programs housed in multiple agencies in order to increase each program's overall impact. After meeting for several months to identify potential areas of collaboration, Housing and Urban Development (HUD) Secretary Shaun Donovan, Transportation Secretary Ray LaHood and Environmental Protection Agency Administrator Lisa Jackson announced the creation of a new program, the

Partnership for Sustainable Communities. The program is housed in the new HUD office of Sustainable Housing and Communities. The goals of the program are to better coordinate federal transportation and housing investments with local land use decisions, to foster innovation and the development of a green economy and to create more sustainable communities.

The primary means by which the new program hopes to achieve its goals is through the Sustainable Communities Regional Planning Grant program. According to information from the HUD website:

The Sustainable Communities Regional Planning Grant Program supports metropolitan and multijurisdictional planning efforts that integrate housing, land use, economic and workforce development, transportation, and infrastructure investments in a manner that empowers jurisdictions to consider the interdependent challenges of: (1) economic competitiveness and revitalization; (2) social equity, inclusion, and access to opportunity; (3) energy use and climate change; and (4) public health and environmental impact. The Program places a priority on investing in partnerships, including nontraditional partnerships (e.g., arts and culture, recreation, public health, food systems, regional planning agencies and public education entities) that translate the Federal Livability Principles into strategies that direct long-term development and reinvestment, demonstrate a commitment to addressing issues of regional significance, use data to set and monitor progress toward performance goals, and engage stakeholders and residents in meaningful decision-making roles. (United States Department of Housing and Urban Development, n.d., para. 1)

In 2010, HUD received over 200 applications in response to its first round of requests for grant applications. According to Shelley Poticha, Director of the Office of Sustainable Housing and Communities "The response to the program is huge. We were inundated with applicants from every state and two territories – from central cities to rural areas and tribal governments" (United States Department of Housing and Urban Development, 2010, n.p.).

In October, 2010 the agency announced it was awarding nearly \$100 million to 45 regional applicants. In announcing the grants Secretary Donovan noted the federal money will "leverage existing infrastructure and reward local collaboration and innovation" and that "rather than sticking to the old Washington playbook of dictating how communities can invest their grants, HUD's application process encouraged creative, locally focused thinking" (United States Department of Housing and Urban Development, 2010, n.p.). Grant recipients were distributed throughout the country, including two in Washington State. The Puget Sound Regional Council, responsible for planning in King, Pierce, Kitsap and Snohomish counties received nearly \$5 million. The other recipient was TRPC, which received a \$1.5 million, three year planning grant.

TRPC submitted the grant application on behalf of a multi-jurisdictional and multi-sector partnership. In addition to including the minimum partners required by the federal program - in this case Thurston County, all of the jurisdictions within the county, and the non-profit Housing Authority of Thurston County - the consortium assembled by TRPC also included five school districts, three fire districts, two colleges, two state agencies, Intercity Transit, the Economic Development Council, several chambers of commerce and a local utility provider. Also represented were several local non-profits including the League of Women Voters Education Fund and the Thurston Climate Action Team (Thurston Regional Planning Council n.d.b., p. 2).

The grant application states as its goal the creation of a Regional Plan for Sustainable Development (RPSD) that "will provide a clear and integrated regional vision and implementation plan that pulls all of the individual plans together" (Thurston Regional Planning Council, n.d.b., p. 2). The application extensively documents TRPC's experience and capacity as a regional planning organization, highlighting its role in developing comprehensive plans under GMA, regional transportation, housing and other infrastructure plans, evaluating and monitoring progress, and fostering citizen engagement in planning processes.

The application also identifies a variety of specific systems and issues that would be analyzed and included in the plan. While the application did identify the continued conversion of agricultural lands to non-agricultural uses as a land use issue of regional concern, the application did not specifically address the larger issue of the condition or future of the local food system.

Development of the regional sustainability plan will rely on existing economic, land use and transportation models. TRPC will develop a baseline of existing conditions and a range of projections for future growth, and will identify barriers for achieving a more sustainable future. The final steps in the process involve forging a regional consensus on a preferred growth scenario, taking steps to implement the vision, and establishing and tracking metrics for monitoring progress.

Existing regional planning staff are charged with day to day management of the project. According to Thurston Regional Planning Council (n.d.a.), of the total \$1.5 million budget, seven percent (\$105,458) is allocated to project management. Eight percent of the budget (\$123,267) is allocated for coordination of consortium members. Outreach, education and public input is allotted 24 percent (\$358,823) while research, data support, monitoring and metrics accounts for 27 percent (\$399,252). The largest pool of funding, 34 percent (\$513,200), is reserved for development of the plan. Considered from a different perspective, 75 percent of the total grant funding (\$1,127,825) is retained by TRPC, while the remainder is spilt among local jurisdictions, other public agencies and non-profit partners.

Project oversight resides with the RPSD task force, which includes one representative from each of the consortium partners. The task force is charged with recommending a final plan for adoption by TRPC policymakers at the end of 2013. All of the partners identified in the application have committed to actively participate in the process, though the level of commitment varies. Once adopted, the partners agree to use the plan to update the County Wide Planning Policies (CWPP), which have not been updated since their adoption in 1993. The CWPP

will then be used to guide each jurisdiction's required comprehensive plan updates.

The general public has a significant opportunity to become involved in the process. The grant application identifies a goal of actively engaging a broad cross section of over 4,000 community members in the project, using a variety of outreach tools and strategies. The project was officially launched in 2011 with several public meetings that were widely advertised throughout the region. This was followed by a survey of over 1,200 county residents conducted in collaboration with Washington State University. One of the goals of the survey was to identify community perceptions about regional growth and quality of life issues. In addition, TRPC established an interactive website which allows the individuals and organizations to provide input, suggestions and comments on the planning effort.

In early 2012, nearly 350 people attended seven "Build Our Future" workshops. An additional 49 people participated on-line. The goals of the workshops were to identify the issues that were most important to residents when it comes to growth planning for the region, to identify how different responses to growth would impact the things people care about and to engage participants in a hands-on exercise to allocate the projected regional population increase across the landscape using county maps and Lego blocks.

In addition to the public engagement process and detailed data analysis and input from professional planners at TRPC, the plan recommended by the task force will be based on input and advice from a variety of expert panels. The creation of expert panels is identified in the grant application. The panels are designed to ensure broad input from issue experts on the full range of topics that will be addressed as part of a robust and comprehensive regional sustainability plan.

In 2011 TRPC staff established the following nine panels: Blue Ribbon Economic Development, Housing, Public Safety, Water Infrastructure, Health and Human Services, North County Schools and Transportation, South County Schools and Transportation, Outreach and Education, and Land Use,

Transportation and Climate Change. Following initial input from the public and the task force, additional panels were added on Energy, Solid Waste and Local Food Systems. The chairs of each panel also serve on the project task force.

Panel members were recruited by TRPC staff, and a set of norms and operating procedures were established to ensure clear expectations for participants and timely completion of work. Following several meetings at which panel participants discussed issues and ideas relevant to their topic, each panel produced a white paper for the task force. The white papers summarize the panel's discussion and identify how the topic relates to other topics and panels that are part of the project. The white papers also identify things that are working well today, challenges and opportunities for the future, and short term actions.

After the white papers were presented to the task force, the task force asked each panel to reconvene and develop a list of "modest" and "mighty" measures. These measures are intended to be specific, practical actions that could be taken to address identified problems and move the region in a more sustainable direction. "Modest" measures are intended to be actions that could be implemented in the short term, on which there is widespread agreement, and which don't require significant additional resources. "Mighty" measures are those things that would be more complicated to implement or would require additional resources. After identifying these additional measures, each panel made final recommendations to the task force, which reviewed and in some cases modified or added additional ideas.

All of the public input, panel information and other data generated and compiled through February 4, 2013 were used by TRPC staff to generate a series of growth scenarios for the region (Thurston Regional Planning Council, 2013c) The scenarios identify potential paths for future development in the region, and are supported by 14 key sustainability indicators that measure each scenario's impact. In March 2013, the public was invited to provide feedback on the scenarios through an interactive website and two community meetings. The website drew about 100 participants, but neither of the public meetings drew more than two dozen participants. Based on the public feedback, the scenarios will be

refined and a proposed growth vision approved by the task force and presented for final public comment in the summer of 2013. Final public comments on the proposed vision will be considered prior to task force adoption of a regional sustainability plan that it will recommend to TRPC policymakers by the end of 2013.

Food System Planning

The Local Food Systems panel convened its first meeting on November 30, 2011. The panel consists of 18 individuals representing a cross section of food system stakeholders, including citizens, several non-profits, emergency feeding programs, the local agricultural extension office, state agencies, school districts, local jurisdictions, public health agencies, and farmland preservation advocates. At the first meeting, the staff to the panel reported that they had sought broader food system representation, particularly from food retailers, wholesalers and processers, but had been unsuccessful at attracting these interests to the table.

Although the operating norms for each panel that had been developed by TRPC staff prior to the meeting required that each panel would select its own chair, for reasons never articulated to other panel members the chair of the Local Food Systems panel, the executive director of the regional food bank, had already been identified by TRPC staff prior to the time the panel had its first meeting. However, the other operating norms were explained and agreed to by all of the panel members.

The panel spent several meetings reviewing existing data on a range of food systems topics including the results of a recent local food system assessment, the annual user survey conducted by the Thurston County Food Bank, and priorities identified by over two hundred participants at the recent community Food Summit organized by Sustainable South Sound. Additional written materials and reports were presented by TRPC staff and panel members, and the cumulative information used to brainstorm a long list of opportunities and challenges for the local food system. In addition, the panel identified additional food system stakeholders that were not members of the panel but whose input would be critical for understanding current realities and establishing a vision for future of the local

food system. Some of these additional stakeholders were subsequently interviewed by TRPC staff and their perspectives reported back to the panel.

The panel completed its draft white paper and presented it to the Task Force in January, 2012. The white paper defines a local food system as "the ways that the people of the Thurston Region grow, produce, process, distribute, access, consume and dispose of food. This includes all types of food, both from within and outside the Thurston Region" (Thurston Regional Planning Council, 2012a, p.4). The report notes that additional discussion is required before it will be possible to define a "sustainable" local food system.

In stressing the relevance of addressing the local food system within sustainability planning, the white paper notes high public interest in food systems throughout the region, the lack of basic data available about the local food system and economic and other vulnerabilities exposed by inadequate attention to food system issues in the planning process. In addition the report identifies a number of other challenges including "geographic and seasonal constraints; logistical and marketing issues; policies and politics; and – perhaps most daunting – the changing of personal habits" before noting that "Thurston Regional Policymakers are up to those challenges." (Thurston Regional Planning Council, 2012a p. 8).

The white paper includes a long list of what is currently working well, existing challenges and future opportunities for the local food system. The panel's recommendations to the task force include identifying opportunities for integrating the food system into community and public sector activities, considering the formation of a local Food Policy Council, completing a full food system assessment, reaching out to the business community, and developing a community-based food system plan.

After receiving feedback from the task force and direction to identify "modest" and "mighty" measures intended to create a more sustainable local food system, the panel engaged in on-line discussion over the next few months before agreeing on final recommendations. After several delays in scheduling due to extended task force discussion about the recommendations from other panels, the panel results were presented to the task force in January, 2013.

The information presented includes a general explanation of how food systems support a more sustainable community and the relationship between food systems and the other elements of Sustainable Thurston. It also "envisions a thriving, inclusive and just local food system that enhances the health of people, diverse communities, economies and environments" (Thurston Regional Planning Council, 2013b, p.1) while supporting family farms, reducing chemical and energy use, improving working conditions for farm labor, fostering a strong business environment, creating more direct links between producers and consumers, educating the community, reducing waste and improving access to food and eliminating food insecurity.

The modest and mighty measures identified by the panel include conducting a production/capacity analysis to determine how much food and land is needed to feed the future population, actions to increase agricultural production while encouraging sustainable farming practices and reducing waste and the environmental impacts of food production and developing more efficient transportation and distribution systems and a vibrant agricultural economy. The panel also highlighted the importance of food system education and celebration.

After considering the panel's input, the task force engaged in a lengthy discussion of the recommendations. During the discussion additional issues were identified in both the modest and mighty categories, and some movement of actions between the categories took place. The final version of the panel's recommendations, which includes modifications made by the Task Force, includes creating a food policy council or advisory group charged with developing a local food system action plan (Thurston Regional Planning Council, 2013b).

The indicators for the growth scenarios developed by TRPC in the spring of 2013 include one indicator for the health of the local food system, farmland preservation. If future development mirrors past development the county will lose 32 percent (15,600 acres) of its remaining farmland by 2035. If the county adopts the most aggressive sustainable development scenario currently being considered

it will still lose 18 percent (13,300 acres) of its remaining farmland by 2035 (Thurston Regional Planning Council, 2013c, p. 54).

Chapter 4: Sustainable Thurston and Food System Planning: Key Participant Perspectives

Chapter Overview

This chapter presents the results of research interviews conducted with two key groups of informants involved in the Sustainable Thurston project. The first group are professional planners employed by the Thurston Regional Planning Council (TRPC) and include Lon Wyrick, the Executive Director of TRPC, and Senior Planners Kathy McCormick and Karen Parkhurst. The second group are elected officials who serve on the Sustainable Thurston task force, the oversight committee for the project, and include: Dennis McVey, Rainier City Councilmember and Task Force Chair, County Commissioner Karen Valenzuela, Olympia Mayor Stephen Buxbaum, Lacey City Councilmember Andy Ryder, and Yelm City Councilmember Bob Isom.

The chapter begins with a review of each of the subjects professional backgrounds and perspectives on food and agriculture, followed by analysis of TRPC's role in community planning and the origin, goals and potential outcomes of Sustainable Thurston. The chapter concludes with an examination of the potential for advancing a sustainable local food system through the Sustainable Thurston planning process.

Background and Perspectives on Food and Agriculture

The subjects interviewed for this research have diverse educational and professional backgrounds that help provide context for understanding each person's perspective. Among the planners interviewed only one, Wyrick, has academic training in community planning. McCormick and Parkhurst are both graduates from The Evergreen State College (TESC). McCormick has a general liberal arts degree and is a board certified planner through the American Institute of Certified Planners (AICP). Parkhurst's degree focused on labor studies; she holds no formal planning certification. Each was drawn to the field of planning because they like the complexity of dealing with a myriad of interrelated issues and identifying opportunities to engage people in active discussions about the future of their community. Each of the planners acknowledged a personal political philosophy, but stressed that as professional planners they are required to approach their work with objectivity and without political bias. Wyrick notes that "we all have our own biases of what we'd like to see, what we think is right, but I really push back at my staff if they are putting too much personal views in, trying to drive the discussion too much" (personal communication, January 23, 2013).

The background of the elected officials interviewed is even more diverse. All were active in community organizations or local government before being elected to office. Isom holds an associate degree in legal assistance, and has worked in various program coordination and contract positions for the State of Washington. McVey has a degree in political science and spent 31 years in the U.S. army. Ryder's degree is in political science with a minor in chemistry and biology; he studied to be a dentist, and currently owns several small businesses. Buxbaum has a MPA from TESC; he spent several decades working on various community development issues, including agriculture, in both the private and public sectors and is currently an adjunct member of the faculty at TESC. Valenzuela holds graduate degrees in both anthropology and public administration, and has worked for the state legislature and in the field of public health.

Valenzuela is a Democrat and the only elected officials interviewed who holds a partisan political office. All of the other elected officials ran as non-partisan candidates, though several campaigned with the support or endorsement of a particular political party and all agree that their political orientation shapes their views and public work. Ryder is an active member of the local Democratic party. As a candidate Buxbaum received support from the local Democratic party, but considers himself a socialist. McVey describes himself as fiscally conservative and socially liberal, while Isom identifies himself as an independent.

A common theme that emerges from the interviews is that each of the subjects have significant personal histories with food and agriculture which has shaped their views on the issue. Wyrick, McVey and Isom all grew up and worked on farms, and all realized early in their lives that they did not want to be farmers. McVey said his experience helps him "understand the difficulty that producers

face economically and environmentally" and that protecting the land and water is essential for continued agricultural production (personal communication, February 16, 2013). Ryder remembers growing up in Lacey, Washington when it was still filled with farms and recalls that "in the 1980s you started to see the local farms go away, the meat lockers disappear. The whole idea of self-sufficiency almost went out of fashion" (personal communication, January 22, 2013). Parkhurst, Ryder, Buxbaum and Valenzuela all grow some of their own food today, and McCormick, Valenzuela and Buxbaum all expressed strong support for local and organic food, with Buxbaum noting that:

sourcing food locally is a critical part of maintaining a community's vitality. Food is so much more than just being about food. It really is, as far as I'm concerned, the thing that is one of the fundamental common denominators in a community, and a healthy community really comes together around the table. (personal communication, January 23, 2013)

The Impact of Planning and the Role of the Planner

While there is general agreement on the need for planning to ensure the orderly development of a community, there are significant differences in how the subjects viewed the importance of planning and the role of the planners. As a group, the planners view planning more as a process of engaging elected officials and the public in a conversation, and they express a stronger belief in the role of planning in terms of actively shaping the form and function of communities. McCormick calls planning "a very powerful process for communities to be thoughtful about the actions they take (personal communication, January 18, 2013). According to Parkhurst, "absent planning, a community develops by accident, sometime happy, sometimes not so happy" (personal communication, January 15, 2013).

In contrast, most of the elected officials view planning as both a process and a product, and the importance of planning was more mixed among the elected officials. Isom describes his views as "laissez-fair" and feels strongly that planning should not be used to tell people what they can and can't do (personal communication, January 24, 2013). McVey notes that:

planning is probably 50 percent of the end product. Plans are nice, they are ideas or philosophies. The reality is that the people with the ability to provide money to make something happen don't always have the same idea or philosophy. (personal communication, January 16, 2013).

Buxbaum believes that planning is important because it "is a way of making sure that we integrate our systems and make things work together" but that "we can't do everything in a plan" (personal communication, January 23, 2013) . Valenzuela expresses a similar sentiment, paraphrasing Peter Drucker by saying "plans are just good intentions unless they deteriorate into hard work" and noting that planning is one of the three main responsibilities of elected officials (personal communication, January 29, 2013).

There are also differences among the subjects in terms of how they view the role of planners in the planning process. All of the planners describe their primary role as providers of information and facilitators of an ongoing conversation, but are clear that decision making resides with the elected officials. Wyrick states that "we don't make decisions, we make recommendations based upon technical information, science and public input" and quotes his academic mentor saying that "if as a planner you find yourself making decisions you've taken a wrong turn" (personal communication, January 23, 2013).

Several of the elected officials view the planners as more active participants in shaping the final products of a planning process than the planners see themselves. Valenzuela agrees that planners have an important role as conveners and facilitators of conversations, but that "sometimes they go into these community conversations with their minds already made up, and they have a variety of ways of making sure their made up minds are what happens out the other end" (personal communication, January 29, 2013). Ryder also states that planners have more power to shape outcomes than they give themselves credit for, saying:

it is the staff and the planners that are really the ones who move policy in Thurston County, because they are tapped into what is probably the most important thing in municipal government or county government or

probably state government right now which is finances. They know how to receive money. (personal communication, January 22, 2013)

TRPC's Role in Community Planning

There is broad agreement among all of the interview subjects on the regional planning council's role in the community. McVey describes TRPC as a "big tent" where people can come together to think about larger regional issues (personal communication, January 16, 2013) while Buxbaum says that he thinks of it as "an interesting place for people to get together and work as a learning community" (personal communication, January 23, 2013). Parkhurst describes TRPC as:

the place where all the jurisdictions and other members come together and are able to take off their jurisdictional hats and think about the fact that our community doesn't recognize political boundaries in perhaps the same way elected officials do in their governance structure. (personal communication, January 15, 2013)

Both planners and elected officials recognize the expertise and resources that TRPC makes available to support its member jurisdictions. Wyrick states that "they pay us to be their extended staff and look at bigger issues" (personal communication, January 23, 2013) and Valenzuela says she looks to TRPC as "the sort of planning super-organization that can help us, can provide assistance to us in our planning efforts" (personal communication, January 29, 2013).

There is also a shared understanding that TRPC is not a regulatory agency. According to Wyrick "we are not regional government, we are regional planning" (personal communication, January 23, 2013). Ryder notes that "TRPC doesn't really have any true power" and that jurisdictions are not bound to implement plans developed by TRPC (personal communication, January 22, 2013). Isom views the role of TRPC as "guidance and counseling" and notes that "they have no enforcement role nor should they ever" in terms of controlling what happens in individual jurisdictions (personal communication, January 24, 2013).

Mirroring changes in the community and the legal and financial framework in which it operates, all of the subjects agree that the range and types of issues that TRPC tackles change over time. Ryder notes that in recent years TRPC has
helped facilitate "more interjurisdictional cooperation than we ever have" (personal communication, January 22, 2013). The agency's annual work program is approved by the elected officials that oversee the agency and Buxbaum notes that "as with any loose confederation it can sort of ramble and move in all kinds of directions" (personal communication, January 23, 2013). McVey observes that the agency sometimes "gets too far into the weeds" and loses focus on the bigger picture (personal communication, January 16, 2013). Several subjects cited TRPC's increased focus on sustainability planning and making stronger connections between transportation, land use, economic development, housing and other issues as evidence of the agency's flexibility to adapt to the concerns of a changing community.

Sustainable Thurston: Origin, Goals and Outcomes

There are distinctly different perspectives on the origin of the Sustainable Thurston project. The planners that were interviewed all see the project as being initiated by the elected officials. All three planners trace the origin of the project to a TRPC retreat in 2009 where the elected officials expressed interest in a project that would build on previous policy maker discussions about sustainability and allow them to make more connections between a broader range of planning issues. McCormick recalls "the frustration of the policy makers for the lack of opportunity to delve more deeply into issues that they cared about or to have more ways to make connections they were beginning to see were so important" (personal communication, January 18, 2013). Wyrick says that "the Council laid out what they wanted us to do. Our job was to find out how we can do it, what kind of resources were out there so we can accomplish the task" (personal communication, January 23, 1013).

The elected officials see the origin of Sustainable Thurston as primarily driven by the planners. Isom states that "the project was launched by TRPC staff as the result of a grant they applied for and received. It was a means to, quite frankly, go after some money" (personal communication, January 24, 2013). Buxbaum, Ryder and Valenzuela agree that the project was initiated by staff, with Valenzuela stating that "it was probably planners at TRPC noticing a grant

opportunity they could use to support this work" (personal communication, January 29, 2013). McVey believes "it was a grant opportunity from HUD. One of the realities of life is that TRPC primarily survives through grant funded projects. However, there was a desire to work towards sustainability" (personal communication, January 16, 2013).

McVey's observation seems to be the most accurate. TRPC planning staff likely saw a grant opportunity to fund work they perceived was increasingly important to the elected officials, while some of the elected officials perhaps overlooked the recent history of their sustainability discussions when the grant opportunity was presented to them by the planners.

Regardless of who originally conceived of the project, both planners and elected officials agree that receiving the grant allowed them to initiate a broad dialogue about future growth in the region. Wyrick notes that the first major product that has come out of Sustainable Thurston is the conversation, because "people are talking about these things. That is a product – awareness, bringing ideas forward" (personal communication, January 23, 2013). Buxbaum observes that the project "builds upon an ongoing dialogue among professional planners in the region, exploring ways to knit together different community development and planning efforts" (personal communication, January 23, 2013).

The degree to which Sustainable Thurston is related to the other planning activities traditionally performed by TRPC, and the project's importance to the agency and the region, vary. The planners see the project as one of the most important or the most important activity taking place at TRPC. Parkhurst identifies it as "the top priority" (personal communication, January 15, 2013) and McCormick says "it makes everything else that TRPC does more effective" (personal communication, January 18, 2013). Wyrick believes:

It incorporates all the other programs we have. Everything. Everything we work on has to do with community and region, and sustainability has to do with community and region. It incorporates our environmental work, our community outreach work, our small town planning, our water and transportation work, our GIS work, our mapping, our public information.

Sustainability encompasses everything we do, and it brought new ideas to our table. (personal communication, January 23, 2013)

The elected officials have more diverse opinions about the importance of Sustainable Thurston and its relationship to other planning programs within TRPC. Isom believes that "on a scale of one to ten, I would say this is a two or three right now. It's a pretty low priority" (personal communication, January 24, 2013). Buxbaum thinks that "relationship wise the work is very important because I get to talk and connect with other elected and appointed officials on things of common interest" (personal communication, January 23, 2013). Valenzuela believes the importance of the project "will depend on the end product, the plan" (personal communication, January 29, 2013). McVey says that he thinks Sustainable Thurston is a good fit with other work undertaken by TRPC saying "this dovetails pretty well. If you do not have sustainability – clean water, plentiful healthy food, shelter – then there is no reason to have a planning organization to develop communities" (personal communication, January 16, 2013).

Both the planners and the elected officials see two goals for the project; providing an opportunity for public discussion about the future of the region and producing a document to guide development. For Parkhurst, an important goal is to "get people to the table that need a voice, and ensure that our plan reflects as much as we can a really broad range of thoughts and ideas in our community" (personal communication, January 15, 2013). Buxbaum believes that "enhancing relationships regionally and building a common vocabulary around sustainable development and regional relationships... is a good goal in and of itself" (personal communication, January 23, 2013). McCormick agrees and is optimistic that the process will "define what sustainability means for this region" (personal communication, January 18, 2013).

McVey hopes that the process results in "a real plan that the communities and the county can implement, not just a dream document that we are going to put on a shelf for nice reading. We want to have a realistic, achievable method of delivering sustainability" (personal communication, January 16, 2013). Ryder

agrees, saying that "the best case scenario at the end of the day is that we will have a product that can look at sustainability from a ground-up approach" (personal communication, January 22, 1013).

While there is broad agreement on the goals of the project, there is less concurrence on what the likely outcome of the project will be. The planners believe that the discussion that have taken place and the relationships forged through the process will continue beyond the life of the project and the information accumulated will be used to shape future decisions made at the county and local levels. Wyrick says that he is "positive we'll come up with a product that reflects all the input on the issues, and that we will be able to pull that into a document that reflects a regional vision" (personal communication, January 23, 2013). McCormick agrees and believes that the outcome will be more than "just a plan that sits on a shelf, but has an action plan, has some kind of tracking mechanism and performance measures attached to it" (personal communication, January 18, 2013).

The elected officials are more cautious about the likely outcome. Ryder says that "I may be a little jaded, but my feeling is that what this is turning into is a planning tool that is being set up in a certain way so the end result is more funding to do some things, and not necessarily solve the problems" (personal communication, January 22, 2013). Valenzuela agrees, saying that:

The jury is still out because of the troubling conversation we continue to have at the Sustainable Thurston table. My issue is always this. You can tell around the table there is vast variation among the participants in understanding of the problem statement, and I would argue even a lack of agreement on the problem statement. There is everything from "there is no problem" to "we are too late to solve this problem" and most of us of course are somewhere between those two extremes. So, I don't know what to hope given the situation. (personal communication, January 29, 2013)

Isom agrees, saying that "I think there are too many divergent ideas and I don't think a group that size can ever come to consensus" (personal

communication, January 24, 1013). Buxbaum feels that the likely outcome will be "a large body of information that chronicles the conversations we've had at a leadership level as well as a sampling of perspectives from different factional interests around the county" and that there may be some spinoff projects to advance particular issues in the future (personal communication, January 23, 2013). McVey agrees, noting that "some jurisdictions and some communities will actually pursue sustainability, and some will find it too difficult and they won't" (personal communication, January 16, 2013).

The original intention was that the regional sustainable development plan produced through this process would be used to update the county wide planning policies (CWPP) and the updated CWPPs would be used by elected officials in each jurisdiction to update their comprehensive plans and development regulations. However, none of the elected officials interviewed expressed strong commitment to implementing the full range of recommendations likely to be contained in the final plan, though most agreed they would consider the recommendations and potentially implement those that make sense in their jurisdiction. Isom says that "I would hope that certain parts of the document are such that they can be implemented on a local basis" (personal communication, January 24, 2013) and Buxbaum says that "I see this conversation leading to some things, its just hard to know what at this point" (personal communication, January 23, 2013).

The Local Food System and Sustainable Thurston

The original Sustainable Thurston grant application did not identify the local food system as an issue to be included in the planning process. Both the planners and the elected officials agree that not including the local food system in the original grant application was a largely due to the structure of the grant program itself, which emphasized transportation, housing and economic development, and the short timeline for preparing the application. According to McCormick "this was a fast process. There was not a huge amount of time to put this whole thing together" (personal communication, January 18, 2013). Parkurst notes that "it was not obvious that food could be addressed by this grant funding, and food

seemed really big, we didn't know how to do it and we can't do everything so we needed to narrow our focus" (personal communication, January 15, 2013). Buxbaum agrees that the structure of the grant application itself and the fact that the program was largely designed by TRPC staff were probably the reasons that the local food system was not originally included, noting:

I would not say that was a policy maker decision. I think the basic framework of Sustainable Thurston was primarily driven, from my observation, by professional planners at TRPC. The framework itself I think was a logical and reasonable framework, but it was not consciously driven by policy maker decisions. The framework was very structured and laid out before the Task Force was really even formed. Some policy makers may have an illusion that this was a policy maker, leadership driven structure but I don't see it that way. (personal communication, January 23, 2013)

Another reason the local food system was not originally included in Sustainable Thurston was the fact that it was not an issue that had been previously discussed by TRPC. Wyrick explains that "it was not a high level discussion with the policy makers at that time. People talked about preserving agricultural lands, but there was never a food systems or local food discussion" (personal communication, January 23, 2013). Ryder believes that the oversight was due to the fact that "the food thing is something that has been taken for granted" (personal communication, January 22, 2013). Valenzuela admits that it was an oversight, noting that there had not been much previous discussion of the topic and that "I don't know that the planners who put together this grant know the size of the carbon footprint attached to the food we all consume everyday" (personal communication, January 29, 2013).

While the local food system was not originally included in the project, according to both the planners and elected officials the scope of the project was expanded to include the local food system shortly after the project began due to strong public advocacy of the issue. Wyrick says that early in the process "the community brought it up" (personal communication, January 23, 2013). Parkhurst

agrees, saying "we heard from our community. They asked why food was not at this table" (personal communication, January 15, 2013). Ryder recalls that it was "a combination of the public saying hey, what about food and hearing what other sustainability projects were doing" (personal communication, January 22, 2013). Isom says food was added because "I think there was enough community interest expressed, or at least a vocal interest" (personal communication, January 24, 2013).

Once identified as an issue of concern and an important part of the sustainability planning effort, both the planners and elected officials agreed to include it in the project. Valenzuela says that "I'm proud that neither Mayor Buxbaum nor I had to argue too strenuously to get food included" (personal communication, January 29, 2013). McVey adds that when people said "hey, this is something we need to talk about it was pretty much a consensus to include it" (personal communication, January 16, 2013). According to Wyrick, the decision to include the local food system in the project is "a huge product of the conversation. Citizens may disagree, but that kind of stuff shows that we are listening, we are trying to incorporate things" (personal communication, January 23, 2013).

Both planners and elected officials agree that the local food system is closely connected to multiple other issues being addressed in the planning process. Parkhurst believes "it is an integral part of everything else in the grant. I can't think of anything else in the grant its not involved with" (personal communication, January 15, 2013) and Wyrick says that "I can tie it back to everything we do" (personal communication, January 23, 2013). According to Buxbaum "I don't think there is an element in the plan that I could not find a concrete, tangible connection to food policy, and I'd be happy to be challenged on that" (personal communication, January 23, 2013). For Valenzuela, "its not a complete plan if you are not talking about food. I mean what other thing do people do every single day that sustains us, that we will die without? I mean water, ok, but food is so basic" (personal communication, January 29, 2013).

While the local food system is being addressed in the planning process, there is disagreement about its importance relative to other issues. From the planners' perspective, the original grant program emphasized land use, transportation, housing and economic development and all of the other issues, including food, are anchored to these core issues. Parkhurst says that "there was a real focus on land use and transportation" (personal communication, January 15, 2013) and McCormick notes that "the economic development piece was key" (personal communication, January 18, 2013). Ryder also identifies the economic development piece as "extremely important" (personal communication, January 22, 2013) while Isom says "I'm glad that economic development is at the forefront because without economic development you have no sustainability" (personal communication, January 24, 2013). Valenzuela points to housing, transportation and economic development as key factors to address in sustainability planning noting that "where we live and the way we get around are big nuts to crack if we are serious about sustainability and reducing our carbon footprint" and that one of the reasons for highlighting economic development is that "what we do as business in our future will be more centered around a different kind of economy, a green economy" (personal communication, January 29, 2013).

While there are other issues that may be more high-profile or important in the planning process, most of the interview subjects express recognition that developing a more sustainable local food system is an important element of achieving regional sustainability. McCormick calls it a "key piece" of the overall sustainability plan (personal communication, January 18, 2013) and Parkhurst notes that in light of climate, economic and cultural changes "we have to figure out how our children will be able to eat and have healthy food and access to food" (personal communication, January 15, 2013). McVey links a sustainable local food system to healthy people, and notes that "healthy people make healthy communities. If you are not well fed, then you are not going to be as healthy or productive as you could be, and your ability to have a sustainable community is

going to decline" (personal communication, January 16, 2013). Buxbaum believes that:

How we go about sourcing our food determines a lot of the other patterns about how we behave and function. Sourcing food determines what kind of waste streams we create, how we use energy, how healthy we are. Working and thinking about food systems gives us an opportunity to work and think about how we function as a community. (personal communication, January 23, 2013)

There is generally shared agreement that creating a sustainable local food system is a key piece of a realizing a sustainable community. However, there is less agreement about what constitutes a sustainable local food system. Isom says that "I have not given it enough thought to even worry about it" and that "no one has been able to define for me what a sustainable food system is" (personal communication, January 24, 2013). For several of the subjects, the concept is linked to notions of social justice. For Parkhurst "the biggest element is equal access and justice. No matter what economic strata you are or what area of the community you live, in I believe it is sustainable only if you have access to healthy and culturally appropriate foods" (personal communication, January 15, 2013). Ryder says that "we have huge poverty issues when it comes to our children" and a "huge problem when it comes to hunger in Thurston County" and indicates that he would like to see more emphasis on growing food at schools (personal communication, January 22, 2013). Valenzuela argues that "any food system plan has got to have as part of it the whole notion of equitability and social justice... it has got to take into account access by people no matter their ability to pay for it" (personal communication, January 29, 2013).

Other definitions centered around the local production of food. To McCormick it means "producing as many different products as we can locally and making those readily available and accessible to people" (personal communication, January 18, 2013). McVey "would like to see more home-based food production for personal consumption and sale" and says that recent changes to development codes in the City of Olympia that encourage more home-based food production are a step in the right direction. He is also concerned about the loss of agricultural land and the impact of regulations on local beef and dairy producers (personal communication, January 16, 2013).

For Buxbaum "a truly sustainable food system is one that is regenerative, it is highly self-reliant and has the basis of sourcing all aspects of the food production system in a way that is renewable and not self-depleting" (personal communication, January 23, 2013). Valenzuela indicates that her definition of a sustainable local food system is still evolving but that:

It does have something to do with all of the concepts we've been mulling over the past 5 years or so. So, eating from within 100 miles of where I live. Eating within season. Growing either myself, or my neighbors, or my neighbor farmers growing as much of it as possible. Not relying heavily on the meat-centered diet as we do, but a much more plant-based way of eating. (personal communication, January 29, 2013)

In contrast to Valenzuela's emphasis on food produced in close proximity to Thurston County, Wyrick is concerned that "sustainability is often confused with isolation. It is not. We are not going to live on only the food we produce. We could, but people still want pineapple" (personal communication, January 23, 2013).

Regardless of their definition, almost everyone agrees that achieving a more sustainable local food system will require deliberate planning aimed at achieving specific goals and that it is too soon to tell the seriousness and urgency with which regional leaders and the public will address the issue. McCormick says that "it will be up to regional leaders and the community to decide what role, or if there is a role" for TRPC in food planning at the end of Sustainable Thurston (personal communication, January 18, 2013). McVey says that "unfortunately it is probably a low priority" for his jurisdiction and TRPC in the future due to competing demands and finite resources (personal communication, January 16, 2013). Isom sees a limited role for government in food system planning, primarily in terms of providing "infrastructure – roads – to have the ability to get food into the area" (personal communication, January 24, 2013).

Ryder believes food system planning as critical because "food is a security issue in my opinion. Its just as important in many ways as our police, our fire, our other major services" and he notes that climate change "is wiping out crops" and that "food security and water security are going to become the two biggest issues that my children are probably going to have to face" (personal communication, January 22, 2013). Valenzuela says that food system planning is an important part of land use planning and needs to be made a higher priority because "we can't pave the whole place over because we need water and we need food …to make sure you have a drinking water supply and a food supply you can't cover the place in asphalt" (personal communication, January 29, 2013).

There is shared optimism among all but one of the subjects interviewed that the Sustainable Thurston planning process will help advance a more sustainable local food system. The lone exception is Isom, who says that he "would be surprised if it did" (personal communication, January 24, 2013). Reflecting their focus on planning as a process as well as a product, all of the planners believe this effort has actually already created a more sustainable local food system. Parkhurst says "it has raised awareness with policy makers of different voices and different ways of looking at the food system" (personal communication, January 15, 2013) and Wyrick says "it already has made a difference, with this discussion" (personal communication, January 23, 2013). Valenzuela believes that while this process will not be enough to make fundamental change towards a more sustainable local food system, it is a step in the right direction. She notes that "Prior to Sustainable Thurston, the conversations about a local food system were pretty confined to a small number of us in this county. If nothing else we've broadened the conversation" (personal communication, January 29, 2013). Ryder calls it "a necessary first step" and is "encouraged that we are heading in the right direction" and hopes that the planning effort will result in the region acquiring additional resources to "start moving the pendulum" (personal communication, January 22, 2013).

Challenges and Barriers

While there is agreement that Sustainable Thurston has nurtured interest in the local food system and that the conversations that have taken place so far are positive steps, both planners and elected officials identify a number of issues and barriers that will need to be addressed to transition to a more sustainable local food system. One of the major issues to confront is continued population growth in the county. The assumption on which the entire planning process rests is that there will be an additional 170,000 people to feed in Thurston County by the year 2035. None of the planners interviewed raised continued population growth as a potential barrier to achieving a sustainable community or a more sustainable local food system. However, for several of the elected officials it was a major or even the most significant barrier. McVey noted that:

A good community is like a magnet. It causes more people to come because they like that and you reach a tipping point where you may not be able to stay sustainable because you become overloaded. How do you reach a balance and say enough is enough? (personal communication, January 16, 2013)

For Valenzuela, failure to address the issue of population growth and its consequences is a significant flaw in the planning process:

This goes back to the question we haven't confronted yet at the Sustainable Thurston table, which is the notion of what's the carrying capacity of Thurston County? How many people can Thurston County reasonably support if we are looking to be more locally self-reliant with food and other things? At some point we have to confront that problem because otherwise we are stuck with this other paradigm which is the one called 'we have to plan for 170,000 more people in Thurston County in the next thirty years' and I'm not there. I'm not accepting that as my future. (personal communication, January 29, 2013)

Both McVey and Valenzuela link population growth and urban development to the disappearance of agricultural lands. McVey notes that when Black Hills High School was built "we took some of the best farmland in the county and put asphalt on top of it. If we don't stop doing that we are not going to be able to grow the food to support our community" (personal communication, January 16, 2013). Valenzuela is concerned that "we don't want to be the people who preside over the loss of our farmland in Thurston County" (personal communication, January 29, 2013).

Another challenge to advancing a more sustainable local food system through the Sustainable Thurston process is that the final plan that emerges may be so broad that it will not set priorities or provide specific focus on the most important actions needed. Parkhurst is concerned that "we are looking at so many different things that it will be hard to focus on one thing" and that "we will dabble rather than be strategic because we want to do everything" (personal communication, January 15, 2013). Ryder is concerned that the final plan will not address "how we are going to break down the major barriers that are preventing us from being sustainable" (personal communication, January 22, 2013). Valenzuela fears that the plan "will end up trying to be all things to all people" and a "compromise with that broad spectrum of people who are everywhere from 'there's no problem' to 'its too late to solve the problem'." She is also concerned that the white paper developed for the task force by the Local Food System Panel is:

Not quite what I hoped for. It reflects a lot of what the chair of the food panel's concerns are. He's concerned with a major feeding program in this county – wonderful – but that's not the sum total of the things you mean when you talk about a local food system. (personal communication, January 29, 2013)

Another barrier identified is the fact most Thurston County residents, like most Americans, take the food system for granted and believe that as long as there is food available to purchase at the grocery store then there is no problem. Wyrick observes that "the food system for the average citizen out there is rarely on the radar screen" (personal communication, January 23, 2013). McCormick recognizes the need for food system education and says "we have to start educating our kids when they are young, and then start educating the parents through the kids" (personal communication, January 18, 2013). Buxbaum also

highlights the need for greater awareness and says it is absolutely critical to get people to think about food and food systems:

One of the notions in sustainability to me is the issue of intention, that you need to have a lot more intent behind your actions. One thing we don't have much intention about at all is that we don't think about food, so guess what, we don't. (personal communication, January 23, 2013)

Several other subjects also identified lack of public awareness about the food system as a barrier, and suggested various ideas to increase local residents' awareness and support for local, sustainable food including buy local campaigns, supporting farmers' markets and encouraging more backyard and community gardens.

Most of the subjects recognize the important role that non-profit advocacy organizations play in increasing individual awareness about the local food system and pushing local governments to take action. Valenzuela says "this community is rocking with non-profits who really get it" and credits much of the success in elevating the visibility of the local food system within the Sustainable Thurston process to these groups (personal communication, January 29, 2013). McVey believes that "they are the ones right now actually making it happen. They are the people growing the food, who are trying to preserve land, who are trying to get people interested" (personal communication, January 16, 2013). Buxbaum says that these groups are "helping people discover how they can be self-reliant and contribute directly to their own well-being. To me that is embodied in local sustainable food system practices" (personal communication, January 23, 2013). Parkhurst says that:

The system works well when government does what they can do and advocates do what they can do. Governments can do planning, systems, infrastructure, they can look at policy, but advocates can say things governments can't, they can engage and speak for people in a more direct way, they can challenge government to change what seem like unchangeable rules and regulations. (personal communication, January 15, 2013)

Lack of strong private sector involvement in Sustainable Thurston by local food retailers, producers and institutional producers is also viewed as barrier to advancing a more sustainable local food system. Parkhurst notes most of the food purchased in the county is bought at major grocery stores, but that efforts to include representatives from these businesses in the process were not very successful. She wonders "how do we articulate a business case for sustainable food systems absent the voices of the major food retailers that have been difficult to get to the table (personal communication, January 15, 2013). Wyrick explains that "the biggest problem with the private sector is that they are so good at their jobs, so engaged in the job, its hard to convince them instead of leaving the shop open they should come to a meeting to discuss a vision with us" (personal communication, January 23, 2013). Isom believes that "the private sector has the major role" in creating a sustainable local food system (personal communication, January 24, 2013). McVey says that "the private sector is the one that is going to have to make it happen" adding that government should "give them some flexibility, some incentives" (personal communication, January 16, 2013). Valenzuela agrees that the private sector "ought to be much more engaged in this conversation than I currently see them" (personal communication, January 29, 2013). Buxbaum adds that:

Sustainable food systems are profit maximizing in the long run and that its critical, particularly from a local small business perspective, to invest and think about ways we can locally source and keep capital revolving locally, keep profits invested locally. I think all of those things are ways that private enterprise can more consciously engage in the development of a sustainable local food system. (personal communication, January 23, 2013)

Valenzuela summarizes the challenge and importance of building a sustainable local food system, saying:

This is absolutely important and critical work. We are not going to get to a more sustainable future until we crack this local food system nut. And it's the hardest part of the nut to crack... this is so hard. What do we take more for granted then the food we eat and the water that comes out of my tap? (personal communication, January 29, 2013)

The prospects for "cracking the local food system nut" and the potential for the Sustainable Thurston planning process to advance Eco Civic agriculture in Thurston County are the subject of the next and final chapter of this document.

Chapter 5: Conclusions and Recommendations

In his acceptance speech to the Swedish parliament after receiving the Right Livelihood Award, also known as the Alternative Nobel Prize, on December 8, 2000 Wes Jackson observed that "if we don't get sustainability in agriculture first, sustainability will not happen" (Jackson, 2001, n.p.). With Jackson's advice in mind, it is now time to consider the degree to which we have achieved agricultural sustainability and whether the Sustainable Thurston planning process is likely to foster a sustainable local food system based on the practice and principles of Eco Civic Agriculture.

In recent years it has become increasingly evident that the dominant global industrial food system is unsustainable in its current form. From an environmental standpoint the system's overwhelming dependence on inexpensive, non-renewable fossil fuels for everything from tilling the soil to global transport of food products is problematic in an era of declining supplies and increasing costs. Even without the very real supply and price challenges, the food system's major contribution to rising greenhouse gas emissions and global warming must be addressed as part of any serious climate change management strategy. Both in the U.S. and across the globe, agricultural water use is outstripping supplies, a problem likely to be exacerbated by changing precipitation patterns resulting from climate change. The system's heavy reliance on chemical fertilizers, pesticides and herbicides has reduced soil biodiversity and seriously impacted countless ecosystems. Topsoil loss due to industrial agricultural practices has reached alarming levels, and nutrient runoff from degraded soils has impacted local watersheds in agricultural regions and in the US has led to a "dead zone" in the Gulf of Mexico. Conversion of agricultural land to non-agricultural uses is a further stress on the system.

From a human and social perspective, the dominant industrial food system has resulted in nearly a third of the human population going to bed hungry or lacking access to nutritionally adequate food. Another third of the population suffers from or is at risk of obesity and diabetes due to overconsumption of calorie rich,

nutritionally deficient junk food, artificial sweeteners and excess fats. Even those who enjoy high levels of food security are increasingly concerned about the safety of their food supply, the risk of supply-chain disruptions, and the impacts of new technologies such as genetically modified seeds and crops. Neoliberal trade policies, the global mobility of capital and corporate consolidation places power over the food system in the hands of an increasingly small group of vertically and horizontally integrated global agribusiness enterprises. Lacking meaningful connection or commitment to specific locations or communities, these agribusiness giants often fail to consider the impacts of their business decisions on individuals or on existing, place-based human relationships. Jackson (1996) summarizes this final concern saying "the forces of power, particularly corporate power, are impatient with what is adequate for a coherent community. Because power gains so little from community in the short run, it does not hesitate to destroy community in the long run" (p. 115).

Various alternative frameworks, including community food security, food sovereignty, agroecology and civic agriculture, have emerged in opposition to the dominant global food regime and with the goal of promoting greater social and environmental sustainability. Each of these alternative approaches has its strengths, yet in the end each is lacking is some critical element that would achieve true food system sustainability. The framework I have proposed, Eco Civic Agriculture, combines the best elements of these emerging alternative food system models and presents them in a way that is culturally acceptable in the U.S. and likely to engender popular and political support. As such, it holds radical potential to reshape agriculture and food systems in ways that are consistent with environmental realities, ecological processes and community-based democratic renewal.

However, for Eco Civic Agriculture to realize its potential, it needs to be developed and practiced in local communities within the context of existing landscapes, institutional and individual relationships, and political and economic systems. Local and regional planning agencies like the Thurston Regional Planning Council (TRPC) exist at the intersection of these and other factors and as such are uniquely positioned to either help or hinder the realization of Eco Civic Agriculture. TRPC's current effort at sustainability planning, Sustainable Thurston, provides a unique case study to consider the degree to which regional sustainability planning can help advance Eco Civic Agriculture. The lessons to be learned from this case study provide important insights into the future prospects of Eco Civic Agriculture in Thurston County, Washington.

Sustainable Thurston represents the first time that all of the jurisdictions within Thurston County have come together to discuss potential future development of the county within the context of the larger issues of environmental, social and economic sustainability. Building on decades of coordinated planning efforts within the county, Sustainable Thurston has for the first time forced policymakers and the public to think about the various elements that contribute to a sustainable community, the relationships between the elements and the actions needed to move the needle in the right direction. This in and of itself is a significant step, and as noted by several of the individuals interviewed for this research, the conversations that have taken place and the relationships that have developed through the planning process are likely to continue beyond the three year life of Sustainable Thurston. Eco Civic Agriculture rests on a high level of popular and political engagement and the connections forged through Sustainable Thurston are a strong foundation for advancing Eco Civic Agriculture.

Sustainable Thurston has reinforced the recognition that compartmentalized planning based on arbitrary political boundaries is unlikely to lead to more sustainable outcomes, mirroring the argument by Brunckhorst (2002) that institutional realignment is necessary to achieve sustainable management of agricultural and other natural systems. The planning process has also bolstered the notion that all of the residents of the county share what Kloppenberg, Hendrickson & Stevenson (1996) call a foodshed, from rural farmers to urban eaters, and it has opened the potential of forging new rural/urban alliances to strengthen the local food system. Kemmis (1990) believes such alliances are critical to rebuilding fractured community identities and reasserting a

community's control over its future, noting that "a politics of inhabitation may well be one in which cities and their hinterlands, together, are understood as a basic political unit" (p. 123). Continued regional coordination efforts will certainly be necessary help advance Eco Civic Agriculture in the county.

It is also clear from this research that planning is a necessary but insufficient step towards realizing a more sustainable community and a more sustainable local food system. The best laid plans resting on the most noble assumptions will make no difference if they are never implemented. TRPC is a regional planning agency, not a regional government, and as such it cannot force implementation of the sustainability plan that emerges from the planning process. At this point it appears that there is no strong shared commitment among regional policymakers to implement the final plan developed through Sustainable Thurston. As a group the elected officials interviewed do not feel strong ownership of the project, which they see as largely driven by the professional planning staff at TRPC. The staff considers the project extremely important, while the level of importance varies greatly among the elected officials. It appears likely that some elements of the final sustainability plan will be implemented in some jurisdictions, but that this process will take years to trickle through the system as the sustainability plan is used to revise the county wide planning policies, which will then be used to revise local comprehensive plans, which in turn will trigger code and law changes and eventually, potentially, visible differences in the community. All of this is complicated by the fact that at this point there are no specific sources of funding identified for actually implementing the final sustainability plan.

One of the concerns shared by both planners and elected officials is that that the plan that emerges from this process will not establish clear priorities and next steps and will be so vague as too be virtually meaningless, echoing DeLind (2010) who cites Dahlberg's warning that "only the language, but little of the substance of sustainability will be adopted" (p.275).

The future vision that is emerging through the planning process rests on the assumption that in 2035 the Thurston County region will look and function mostly like it does today – most people driving unsustainable cars to homes in

unsustainable subdivisions, purchasing unsustainable products (including food) from unsustainable big box retailers at the tail end of unsustainable global supply chains – but that there will also be a thin veneer of sustainability in the form of more access to local food, more buses, more vibrant city centers and reduced per capita use of energy and water.

Perhaps the biggest problem with Sustainable Thurston in terms of its ability to help realize a more sustainable future and food system is the underlying planning assumption that there will be an additional 170,000 living in Thurston County by the year 2035. None of the planners interviewed identified continued population growth as a serious challenge to sustainability, and only two of the elected officials raised this issue or the related issue of the actual carrying capacity of local food, water or other systems. Meanwhile population growth and carrying capacity are issues that have been repeatedly raised by members of the public who have participated in the planning process. Without seriously questioning the desirability of continued population growth, the plan that emerges from the process is likely to include only recommendations to accommodate the growth with less adverse impacts rather than discourage it, hence undermining sustainability objectives.

Adequate land to ensure commercial and personal food production is a key element of Eco Civic Agriculture, and continued population growth poses a significant challenge. Under the most optimistic sustainable development scenario being considered the county is still expected to lose nearly a fifth of its remaining farmland by 2035, and under less "sustainable" scenarios it could lose nearly one third of the remaining farmland. In addition, accommodating a large population increase within the bounds of the existing urban growth areas, as required by the Growth Management Act, will result in smaller lots and denser neighborhoods, making it challenging for backyard and community gardeners to find space, particularly space with sufficient solar access, to pursue some measure of food self-sufficiency. Citizens and elected officials must immediately begin aggressive efforts to protect farmland and preserve places for urban food production if the region is to develop a robust system of Eco Civic Agriculture.

The fact that the local food system is even being considered in the Sustainable Thurston planning process marks a positive departure from previous planning efforts in the county and mirrors the planning field's growing recognition of the importance of local food systems. For the first time ever, regional policymakers and the public are actively discussing food and agricultural issues in a coordinated and integrated way and with a sustainability focus. The inclusion of the food system in the process is a testament to the effectiveness of citizens, planners and policymakers who pushed to add the topic to the agenda after it was not originally included in scope of the project. This also demonstrates the vitality of civic engagement and the importance placed on democratic participation by local elected officials and institutions, key elements for advancing Eco Civic Agriculture in the region.

While there is a shared sense that the local food system is a key piece of the sustainability puzzle, it has yet to be placed on the same tier as more traditional planning elements such as transportation, economic development and housing, and policymakers disagree about whether it should receive equal footing. There are also serious questions about the degree to which regional policymakers are prepared to take specific actions and make tough political choices to strengthen the local food system in ways that would support the growth of Eco Civic Agriculture.

To date, there is no clear agreement or definition for what constitutes a sustainable local food system. Planners and policymakers interviewed for this research identified a range of issues that are part of a sustainable local food system including social justice concerns, strengthening community and multi-generational connections, preserving agricultural land, encouraging home based production and promoting economic development. Each of these are elements of Eco Civic Agriculture, so it would appear that using Eco Civic Agriculture as a framework for defining a sustainable local food system in Thurston County has significant potential.

Many of the individuals interviewed expressed concern that most people are ignorant about the food system and that there is a need for broad public education

in order to develop a more mindful and food literate public. Francis, Leiblein, Steinsholt, Breland, Helenius, Sriskandarajah & Salomonsson (2003) also stress the importance of educating citizens and consumers about the realities of food production as a pre-requisite for changing the system. Developing and implementing food system education programs is essential for creating a sense of food citizenship and is another key element of Eco Civic Agriculture.

One of the most surprising findings from this research was the almost total lack of attention paid to sustainable agricultural practices, particularly in regards to designing and operating agricultural systems based on agroecological principles. While one of the policymakers interviewed did mention the need for farming systems that were regenerative, and there are vague references to organic practices, soil fertility and minimizing waste in the Food Panel white paper, there is no clear focus on the need for food production and farming to work within the bounds of ecological cycles and natural processes. Eco Civic Agriculture is grounded in the principles of agroecology, and if Eco Civic Agriculture is to gain traction in Thurston County far greater emphasis will need to be directed in this area. Lacking a strong agroecological basis, no local food system can rightly be considered sustainable in the long term.

Much like the assumption discussed above that Thurston County in 2035 will look more or less like Thurston County in 2013, an underlying assumption for the future of the local food system is that it too will look much the same in the future and that most people will continue to acquire the majority of their food from national food retailers located throughout the county. This was a theme that came up repeatedly during the Food Panel's discussion and during the research interviews. This shared assumption about the continued prominence of a handful of large national food retailers, in many ways the most visible manifestation of the dysfunctional global industrial food system, shows the near universal acceptance of global corporate capitalism, the private sector as a mediator between producers and consumers and the belief that food should remain a market driven commodity. As such, the earnest hopes of many Sustainable Thurston participants for encouraging more direct connections between local producers and

consumers might be seen as little more than a slight softening around the jagged edges of the entrenched corporate food system, and a significant challenge to developing a culture grounded in Eco Civic Agriculture.

If the majority of the food consumed in Thurston County continues to come from outside the county or region, while agricultural products from Thurston County are exported before the needs of the local population are met, it will be hard to call the system sustainable, and it will certainly be disconnected from the principles of Eco Civic Agriculture. For the foreseeable future local and regional food systems will continue to exist as junior partners in relationship to the dominant industrial food system. However, the goal of any community intent on reclaiming control over its food future should be to prioritize and empower local food producers and citizens while at the same time actively seeking ways to disconnect itself and wrest power from the dysfunctional industrial food system. In the end perhaps the most disappointing realization from this research is that most of the key participants in Sustainable Thurston fail to see the larger ecological, political and economic context in which efforts to foster a sustainable local food system reside.

Sustainable Thurston opened a broad conversation about the future of the local food system that had previously not existed, and TRPC has an important role to play in continuing to facilitate dialogue after the end of the project if they choose to do so. The policymakers who serve on TRPC and the Sustainable Thurston Task Force have equally important roles to play in ensuring that local food system issues continue to have a seat at the table in future regional and jurisdictional planning discussions. While food system planning remains a low priority for most jurisdictions, local policymakers must realize and be continuously cognizant of the fact that their policies and actions will either help or hinder the realization of a sustainable local food system based on the framework of Eco Civic Agriculture.

If the community is to realize the transformative power of Eco Civic Agriculture, leadership must also come from the bottom up. Individuals, working through one of the many committed advocacy organizations in Thurston County,

have the opportunity to lead the way by educating themselves and their neighbors, practicing conscious food consumerism, becoming informed and engaged food citizens, forming coalitions, developing strategic action plans and exerting the political power needed to catalyze structural change.

Wendell Berry (2009) reminds us that food systems and agriculture "must mediate between nature and the human community, with ties and obligations in both directions" (p. 96). Eco Civic Agriculture is uniquely positioned at the intersection of nature and community, and recognizes and values the ties and obligations to each. Sustainable Thurston has provided an opening for the development of a sustainable local food system built on the principles of Eco Civic Agriculture. The individual and collective actions of the region's citizens and elected officials in the coming years will determine the degree to which this opening serves as a catalyst for change and, ultimately, the degree to which the citizens of the region can rightfully assert that they live in a sustainable community.

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