

**THE LEAGUE OF WOMEN VOTERS  
OF BENTON AND FRANKLIN COUNTIES**

**SUSTAINABLE COMMUNITIES**



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## Sustainable Communities Summary Report

### Introduction

Sustainable communities are planned, built or modified to promote sustainable living. Sustainability is simply meeting the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability is not an end goal, but a journey that local governments can take to improve the quality of life and economic vitality of a community.

The local Alliance for a Livable and Sustainable Community (ALSC) provides the following definition of a livable and sustainable community:

*“A livable and sustainable Tri-City community is one where local governments including municipalities, Counties, Port Authorities, and Special Districts partner with Educational, Community Health, Business and Citizen stakeholders to create a vibrant local community through a long-term policy, planning, and investment strategy that:*

- Promotes community health and wellness
- Protects and preserves the unique attributes of our natural environment
- Encourages local enterprise innovation and economic diversity
- Serves the short term and long term needs of local residents
- Promotes stable employment and revenues by building competitive advantage in the global marketplace”

A group of concerned citizens, led but not limited to the Benton-Franklin League of Women Voters, formed a study group to develop a better understanding of how the Tri-Cities governments are currently incorporating sustainable practices and provide for a livable and sustainable community. *Our premise is that sustainable practices lead to more cost-effective provision of services, which means a more efficient use of revenue and/or taxes. Sustainable communities attract businesses and people, because of a higher quality of life through reduced energy costs, energy and food security, transportation and recreation options, and a healthier environment.*

Young professionals in particular are attracted to livable and sustainable communities. More than other demographic groups, they take advantage of recreation opportunities such as biking, walking and jogging, especially on those paths that are separated from heavy traffic.

Retaining talent and jobs will be especially important as Hanford transitions to a national center for innovative research and development in alternative energy. In addition, according to a recent survey the Tri-Cities has a significant obesity problem. Obesity drives up health insurance costs, which discourages businesses from locating in the Tri-Cities. Communities that provide easy access to services via walking and biking have a healthier workforce and community.

Although we believe the quality of life is good in the Tri-Cities, there are many facets that may benefit from an integrated approach to sustainable development. The purpose of this study is to understand the current sustainable practices by local governments, identify best practices in our community, and suggest additional best practices that would promote a more livable and sustainable community.

The approach to our study was to develop a list of questions that could be used to interview local stakeholders. Specifically, we conducted interviews with the city governments, public utility districts (PUDs), Ben Franklin Transit, and the Benton-Franklin Council of Governments. The interviews were conducted in 2011 and 2012. In September of 2014, the Cities of Pasco and Kennewick provided updates to the survey questions. The City of Richland only provided updates to the section on Buildings and Energy in 2014. These responses reflect a snapshot in time. The topic areas included Planning, Analysis and Vision; Transportation and Mobility; Buildings and Energy; Waste Management; Food and Agriculture; Community Outreach/Education. The questions and survey results are found in the Appendix and highlights are summarized below.

A significant challenge for public employees is the citizens' not understanding government's role, which can create unreasonable expectations while overlooking the critical services governments provide. The Tri-Cities is very fortunate to have extremely competent and capable public employees. Across the board, the city and PUD employees we interviewed were outstanding stewards of public funds, cared deeply about their community, and were constantly looking for ways to reduce energy costs and improve efficiencies of public services. As one Pasco city employee commented, "we adhere to best business practices and are always looking for ways to improve services while reducing costs."

### **Summary of Baseline Highlights**

In the interview summary below we have tried to bring out similarities and contrasts on how each of the local governments and PUDs have approached sustainability in their planning and operations. Detailed information from the interviews is found in the appendixes.

#### ***Planning, Analysis and Vision:***

The purpose of this section was to explore the understanding and commitment of the cities and utilities to the development of a sustainable and livable community. In particular, we looked for projects supporting sustainable development and how the city or utility measured the project effectiveness and reporting the results. In order to plan with a sustainable vision in mind, the cities/utilities must take a longer view on costs rather than first costs.

Often, a calculated carbon footprint is used to measure a sustainable and livable community because low carbon footprints usually correlate with high energy efficiency, better air quality, low transportation congestion and a healthier population. To date, only Pasco has calculated a carbon footprint as part of a requirement that came with a \$500,000 grant from the Department of Energy (DOE) for low energy induction lighting for street lamps.

It should be noted that, although the Tri-Cities was somewhat buffered from the economic downturn in late 2008 and 2009, public servants strive to reduce costs wherever possible. Energy efficiency is one of the most obvious approaches to reducing operating budgets. However, it is more difficult to assess the value of a higher quality of life for bringing new people and businesses to a community if one has not lived or at least visited a sustainable, livable community. Ultimately, it will take leadership at the city council level to commit to the development of a sustainable and livable community.

*Kennewick:* In June of 2010, the city passed a resolution acknowledging the importance of having a sustainability policy. The resolution highlighted Kennewick's access to hydro-power and nuclear energy, neither of which produce greenhouse gases. Kennewick requires developers to provide park space in new developments. This rule has resulted in at least four new parks in the city. The city maintains parks over 5 acres. Energy efficiency and other sustainability practices are still largely market driven in new developments. The Army Corps of Engineers has final say over development in Columbia Park.

Kennewick has been using energy efficient Light Emitting Diodes (LEDs) in traffic lights since the late 1990's and has replaced all of their street lamps in the last few years with induction lamps that use 50% less energy.

Kennewick does not foresee a water shortage in our area, even with growth. The city has built a one million gallon storage facility in the Southridge area. Kennewick also has an innovative aquifer storage and recovery project that is in the testing phase. In this facility water is pumped underground into basalt in the winter when river flows are high and retrieved in the summer when demand is higher. This is an inexpensive alternative to building more storage.

*Pasco:* Although the Pasco City Council has not articulated a policy or a formalized plan for a sustainable community, the city staff is committed to operating under the highest standards of business practices that may achieve the goals of a sustainable community. For example, the city works closely with Franklin PUD to reduce energy costs associated with city buildings and operations. In 2011 the city received a \$500,000 grant from the U.S. Department of Energy to replace 50% of their street lamps with low energy induction lighting, which saves the City \$50,000 per year in energy costs. The remaining street lamps will be replaced this year with LEDs. Pasco supports the Rivers to Ridges plan and participates in the jurisdictional council. Similar to Kennewick, Pasco requires developers to provide park space, 5-7 acres in large developments and 3 acres in smaller.

*Richland:* Richland's main focus is to promote good consumer education and leverage technologies that reduce both waste disposal and energy consumption. The City Council adopted a strategic plan in 2008 that identified "Seven Keys to Unlock Our Future", with associated goals. Within this strategic plan the city instituted elements of a sustainable community. Some examples of projects that were completed in 2011 include improving pedestrian connections between Richland's Central Business District and neighborhoods, which involved sidewalk and streetscape improvements to Lee Boulevard; the addition of a

wood recycler in the Horn Rapids Eco Park; participation in the planning effort to preserve open space resources and provide interconnectivity between jurisdictions; construction of a highly energy-efficient house as part of the city's affordable housing program.

The city belongs to a number of organizations and receives many sustainable living newsletters. Richland routinely applies for state and national awards, and sometimes receives state grants and utility funds for sustainable projects.

***Transportation and Mobility:***

The Tri-Cities was largely formed around the automobile. Although the automobile greatly increased mobility, convenience and access for people, the automobile has also been associated with the disconnection of community, the rise in obesity, air and noise pollution, urban sprawl, and even urban decay. Planning and enabling alternatives, including walking, biking, and public transportation, is an important aspect of a sustainable and livable community.

Some terms that are often used in transportation planning are *complete streets* and *multi-modal*. Complete streets are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders. Complete streets are easy to cross, walk to shops and bicycle to work. Multimodal transportation is planning for commuters who may use more than one form of transportation, such as a walking or biking path that provides easy access to a bus stop.

Coordinated regional transportation planning can be somewhat disjointed due to three separate cities and two counties comprising the Tri-Cities urban area. The Benton-Franklin Council of Governments (BFCG) is responsible for administration of a federally mandated metropolitan area transportation planning process and a state-mandated regional transportation planning process. The BFCG is the Regional Transportation Planning Organization (RTPO) as designated in the Washington State Growth Management Act (GMA) and is responsible for review of transportation components of jurisdictional comprehensive plans for this region. The twenty-year Metropolitan/Regional Transportation Plan, 2011–2032, includes both motorized and non-motorized transportation. Adopted in November 2011, the plan was revised in the spring of 2012 to extend the metropolitan planning horizon two years and address issues related to fiscal constraint (<http://www.bfcog.us/RTP.html>).

BFCG reviews the transportation elements in GMA comprehensive plans from all jurisdictions in Benton and Franklin Counties. The metropolitan jurisdictions submit annual Transportation Improvement Plans to BFCG. Metropolitan and regional transportation issues are discussed at monthly meetings with representatives from jurisdictions in Benton and Franklin counties as well as Ben Franklin Transit and the Washington State Department of Transportation. The individual Transportation Improvement Plans are rolled into a state plan, a requirement for state and federal funding.

***Ben Franklin Transit (BFT):*** Public transportation is a key element for promoting a sustainable community. Ben Franklin Transit is involved at the ground level in land-use planning

throughout the Tri-Cities to facilitate the use of public transportation. They have been an advocate for bicycle and walking pathways integrated with public transportation because all bus ridership begins with walking or biking to a bus stop. One of the biggest challenges for Tri-Cities transportation is that much of the community evolved around automobiles, so any new system must be retrofitted to be more conducive to walking, bicycling and mass transportation.

Ben Franklin Transit receives 80% of their funding from the federal government and are mandated to provide community services such as Dial-A-Ride. To increase ridership, BFT is making public transportation more accessible and convenient. Innovations include plans for wireless internet access and GPS on buses. This would allow transit riders to communicate with work and use their smart phones to access bus stop arrival times.

*Kennewick:* Kennewick is very proud of its transportation infrastructure and leads the state in roundabouts with 20 installed, one under construction, 3 in design, and another in the planning stage. Although there is a steep learning curve for people not accustomed to them, roundabouts have been shown to be safer and avoid the high annual cost of maintaining traffic lights. Kennewick has a signal priority/pre-emption system in place that gives mass transit, buses, priority at signals. Kennewick's street design standards encourage alternative transportation usages. All street reconstructions have planned bicycling provisions. The city invested in low energy LED traffic lights in 1999/2000 to reduce energy costs. Kennewick received a Federal energy grant and replaced 5,000 streetlights with more energy efficient induction lighting that reduced electricity costs by 50% and should last 20-24 years.

Many city employees bike or walk to work, which has reduced the city's health insurance costs. The state requires electric vehicle (EV) charging stations, but the city cannot implement until the demand is greater. The city has four hybrid vehicles.

*Pasco:* Pasco currently has excess capacity in its roadways, so they are looking at ways to enhance multimodal transportation. Although Pasco does not currently subscribe to "complete streets," this practice will be evaluated as part of revising their Transportation System Plan (TSP). The city is also starting to plan single lane roundabouts to facilitate traffic flow and avoid the high cost of maintaining traffic lights (\$10,000 per year per intersection). Charging stations could be part of the new TSP and are strongly endorsed by the Franklin PUD, but this will depend on demand from electric vehicles.

Pasco is installing adaptive traffic light controllers over the next few years that will keep delays at lights to a minimum and reduce fuel consumption. As part of their normal budget, they are changing existing traffic signals to LEDs.

To enhance multimodal transportation, Pasco has revised their bicycle/pedestrian plan to improve access to public schools and connecting the shoreline bike path to points of interest in Pasco –connecting new parts of town with old parts of town. A proposed new bike path that would run east/west along an irrigation canal is costly and will be difficult to

adopt. Pasco is currently working with the railroad to get permission to have the bike/pedestrian river shore path go under the rail bed.

*Richland:* The Richland Citywide Transportation Plan, completed in 2005, is the first formal, multimodal plan for the City's transportation system. This report presented a thorough assessment of the transportation system in 2005 and alternatives for improving transportation flow over the next 20 years. An action plan addresses the needs for each mode of transportation: vehicular, bike and pedestrian. Many of the recommended projects in this plan would enhance a livable, sustainable community, but the status of these projects has been difficult to obtain. A 2011 Richland Annual Performance report indicated completion of improvements to Leslie Road, enhanced pedestrian connections completed for Lee Boulevard as mentioned above, and improvements to Keene Road and adjacent amenities.

Richland is involved with others in the Mid-Columbia Energy Initiative (MCEI) group that is developing information and potential partnerships regarding electric vehicle use and charging stations.

***Buildings and Energy:***

The cities of Kennewick and Pasco are associated with separate Public Utility Districts (PUDs) that deliver electricity to residents and businesses. In contrast, the City of Richland provides the delivery of electricity as part of its city services. Richland, the Benton PUD and the Franklin PUD all buy power from Bonneville Power Administration (BPA). The fuel mix is usually posted on the city/PUD websites. It can be a year or more before the actual fuel mix is posted, hence the latest one for this report is calendar year 2012.

<b>2012 Fuel Mix</b>	<b>Benton PUD (Kennewick)</b>	<b>Franklin PUD (Pasco)</b>	<b>City of Richland</b>
Generation Type	% of Total	% of Total	% of Total
Biomass	0.13%	0.12%	0.09%
Coal	4.72%	4.13%	2.07%
Hydro	79.91%	82.74%	87.48%
Landfill Gases	---	0.02%	0.01%
Natural Gas	3.87%	2.60%	0.80%
Nuclear	8.34%	8.67%	9.47%
Petroleum	---	0.05%	0.03%
Waste	0.09%	0.08%	0.04%
Wind	2.85%	1.58%	0.00%
Other	0.09%	0.01%	0.01%

The Pacific Northwest Power Act of 1980 gave energy conservation top priority in meeting future energy needs. Washington's Initiative 937<sup>1</sup> was passed by voters in November 2006 and directs all utilities with more than 25,000 customers to gradually increase the amount

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<sup>1</sup> Washington State's Energy Independence Act:  
<http://apps.leg.wa.gov/rcw/default.aspx?cite=19.285&full=true>



of new renewable resources in their electric supply to 15% by 2020 and to undertake all cost-effective energy conservation. Under I-937 hydropower is not considered renewable because the state legislature was trying to incentivize growth in wind, solar and other non-hydro renewable energy. This has been one of the most contentious issues with I-937.

Bonneville Power Administration incorporates a conservation tax into its rate base to cover the cost of conservation efforts. The local utilities administer the Residential Rebate Program (insulation, heating, cooling, air sealing, windows), and the Appliance Rebate Program. After inspection, the PUD bills BPA directly for the rebate. Aggressive PUD conservation programs are able to capture larger portions of the BPA conservation budget.

When interviewing the utilities, we used the term *variable rates*, which caused some initial confusion, because our intent was *time-of-use rates*. *Fixed* electric energy rates still predominate in the U.S. and are the standard pricing mechanism in the Tri-Cities. Some utilities in the U.S. offer variable rates that fluctuate by billing period based on market impacts on cost. Yet another pricing system is *tiered rates*, which means different levels of consumption carry different prices per kilowatt hour. The theory behind tiered rates is that if a house consumes small amounts of electricity, the lowest tier, the bill is based on the lowest rate per kilowatt hour. Studies in California on tiered rates have shown that this pricing system neither promotes conservation nor smaller houses.<sup>2</sup> A recent analysis has shown that U.S. homes built in 2000 and later consume only 2% more energy on average than homes built prior to 2000, despite being on average 30% larger.<sup>3</sup> The increased efficiency of new homes is based on the heating/cooling systems improvements, energy star appliances, and more demanding energy codes.

Studies have shown that the ideal way to promote energy conservation is to use *time-of-day* or *time-of-use pricing*.<sup>4</sup> In this system consumers are charged a rate based on the time of day they consume a kilowatt hour, with higher prices during peak times and lower prices during off-peak times. This system encourages people to consume power when it is cheaper and discourages use at peak hours. Many appliances (dishwashers, washing machines and dryers) allow delayed timing to operate during the night. Electric car charging would also most likely occur during the night. Our intent during this survey was to understand if time-of-use pricing was being considered.

*Kennewick:* Newer buildings are built to be more energy efficient. Although not a city project, a good example of energy efficiency is the new Kennewick School District Administration building. Taking advantage of daylight by using skylights can add efficiency and quality to the work environment. Kennewick city buildings use timers on thermostats, motion sensor lights, energy efficient lighting. The city also replaces old HVAC systems whenever possible. Kennewick recently retrofitted the lighting fixtures in 18 City buildings, as well as HVAC systems at city hall. A pending project at Kennewick's waste

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<sup>2</sup> *Pricing of electricity could use a jolt.* Los Angeles Time Op-Ed, Nov 13, 2011 by Frederick Taylor-Hochberg.

<sup>3</sup> Today in Energy, Feb 12, 2013, U.S. Energy Information Administration.

<sup>4</sup> *Pacific Northwest GridWise Testbed Demonstration Project, Part I. Olympic Peninsula Project*, Oct 2007, D.J. Hammerstrom et al., PNNL-17167, Richland, WA.

water treatment plant will reduce energy consumption by an estimated 1 million kilowatt hours (~700 metric tons greenhouse gas reduction).

*Benton PUD:* The Benton PUD uses conservation within its own buildings and works with Kennewick business to provide recommendations and financial incentives to improve the efficiency of energy use. The Benton PUD has an extensive conservation and renewable plan, reviewed quarterly, which meets the Washington State Energy Independence Act requirements. Their conservation program for residential, business and agricultural will exceed 12 million dollars in 2012.

The PUD is researching options for time-of-use power rates, but this would require an advanced metering infrastructure (AMI), consisting of a smart meter (electric meter with a clock) in the building or home that records consumption in intervals of an hour or less and communicates that information at least daily to the utility. According to a study in 2012,<sup>5</sup> almost one in three households in the US have smart meters. By 2014, more than half of all homes will have smart meters. Washington and Montana lag other states in the west in smart meter installations and are predicted to have less than half of homes equipped with smart meters by 2015. The PUD is working closely with Battelle's managed Smart Grid Demonstration project.

*Pasco:* The City of Pasco does not require, but does encourage LEED building standards. They provide a list of builders in the Tri-Cities that specialize in LEED. Similar to Kennewick, Pasco has updated to energy efficient lighting, new HVAC systems and segregated heating and cooling depending on room use, all in order to reduce energy use in city buildings. Pasco staff work closely with Franklin PUD to reduce energy use.

*Franklin PUD:* In low energy building concepts, the Franklin PUD leads by example with their LEED certified administrative facility. The Franklin PUD promotes LEED incentives for new buildings, especially public buildings. Through the BPA rebate program the PUD paid the incremental costs to improve efficiency for new buildings at Columbia Basin College and a new elementary school in Connell.

Reducing energy use in buildings falls under the BPA energy rebate program and is administered in Pasco and Franklin County by the Franklin PUD. The Franklin PUD has led the community in education and promotion of energy conservation. Their proactive approach has resulted in Franklin County receiving substantially more funding from BPA for reducing energy use in buildings than the amount paid by residents through a tax on power. Whereas Richland will charge residents a nominal fee for an energy audit, Franklin PUD does selective audits at no cost. When a resident requests an audit, the PUD checks the resident's energy pattern over the year and compares it with similar age and size houses. If this indicates a problem, then the PUD will work with the home or business owner to install energy-saving systems. Franklin PUD acknowledges that time-of-use rates may be considered in the future, but would require smart meters in every home.

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<sup>5</sup> 2012, *Utility-Scale Smart Meter Deployments, Plans, and Proposals*. Institute for Electric Efficiency (IEE), May, 16 pgs.

*Richland:* Richland is not yet subject to the state's Energy Independence Act,<sup>6</sup> although they voluntarily conscribe to it in principle and within budget limits. Energy Services staff encourage Energy Star residential construction, which exceeds state code. Richland provides appliance rebates, and low interest loans for qualifying residential and small commercial conservation measures, and BPA provides incentives for industrial and large commercial customers. There is a low interest loan and cash incentives for solar programs.

Richland is creating a database on residential, commercial and industrial structures to facilitate the identification and capture of past, present, and potential energy conservation activity. These records detail the type and number of installed conservation measures and the first year energy savings. Richland is also upgrading city facilities to save energy. Richland's new library is a prime example of a structure incorporating energy efficiency. High efficiency lighting has been installed in the city's water and wastewater plants. Low energy LEDs have been installed in traffic lights.

The Innovation Center, a sustainable business park in the middle of the Tri-Cities Research District (north Richland) includes a demonstration site for integration & demonstration of new renewables and energy storage technology. Richland is working with Benton PUD on the demonstration of a new grid energy storage device. Richland also has a number of roles with MCEI, (Mid-Columbia Energy Initiative) and is part of the team on the Energy Park.

***Waste Management:***

Kennewick, Pasco and Richland have taken different approaches to residential and commercial waste management. Given the different approaches, a good measure of the efficiency would be to estimate the per capita, or per customer cost of waste management in the city budgets. This was not done as part of this report and could be a major study by itself.

None of the cities incentivize recycling; in fact, Richland charges higher rates for those who elect to recycle. When the waste stream is reduced through recycling, the life span of a landfill is extended, reducing overall costs of disposal at the landfill managed by the City of Richland. Therefore households that recycle in Richland are helping to lower the City's waste management costs, while households that do *not* recycle are contributing to higher waste management costs. Richland picks up green waste at no extra charge to residents and uses this waste to make compost at the City's landfill. The City is a member of the U.S. Composting Council, which allows Richland to sell compost to nurseries and landscaping companies. Both Kennewick and Pasco do not own nor operate a city landfill, so curbside green waste removal would cost extra to residents.

Washington State enacted recycling for electronic products in 2007. The program for collection, transportation and recycling of e-waste is administered through the state

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<sup>6</sup> A qualifying utility serves more than 25,000 customers.  
<http://apps.leg.wa.gov/rcw/default.aspx?cite=19.285&full=true>

Department of Ecology. Each city has drop-off sites for electronic devices, including monitors, laptops, tablet computers, televisions and e-readers. Residents can find the nearest drop-off point through the E-Cycle Washington website:

<https://fortress.wa.gov/ecy/recycle/UISearch/ServiceSearch.aspx>

*Kennewick:* Kennewick has had voluntary curbside recycling for several years, including used motor oil, with no extra cost to residents. However, yard waste is not collected separately and would be an extra cost to Waste Management, who holds the current contract. The contract is up for renewal in 2015. Plastics present a special problem, since the market for types beyond 1 & 2's is not good.

The waste treatment plant for the city is about 60% capacity, and tries to operate below 80-85% capacity. Biosolids are used for fertilizer and not deposited in landfills. Low flow toilets and other efficient water fixtures can help to extend the life of current facilities. Some improvements to efficiency are not yet cost efficient.

Kennewick uses recycled materials in playgrounds. They work closely with other jurisdictions in the county to collect household hazardous waste. Kennewick is moving towards more electronic media. The city's current copier contract does not allow them to use recycled paper. The Benton PUD recycles as much equipment as possible.

*Pasco:* Pasco lags the Tri-Cities in instituting a curbside recycling program because the City Council is not convinced that curbside recycling can be done without additional cost to taxpayers. By Pasco subcontracting their waste program to Basin Disposal, Inc. (BDI), they avoid many of the issues involved with owning or maintaining a landfill and a fleet of waste disposal trucks. This survey did not evaluate important trade-offs between the waste programs of the three cities, such as relative costs and convenience to customers.

Neighborhood recycle centers are made available in Pasco through a contract with BDI. BDI has presented information in the past on the profitability of yard waste collection to the City Council, but no action has been taken on this issue. Pasco staff believe that a curbside green waste program may be cost effective, and will be revisiting this issue this year. BDI accepts green waste at their Transfer Facility at 1721 Dietrich Rd and selling it to Royal Basin Organic Farms in Basin City.

In the areas of water and sewage treatment, Pasco is growing rapidly and most of their infrastructure is relatively new. Pasco's new water treatment plant began operation in 2011. This modern facility recycles biogas, which saves \$60,000 per year in operating costs. The city is planning to build another wastewater facility on the west side of town. Pasco will be upgrading their clarifiers to higher efficiency to reduce energy consumption. The city's goal is to get an "A" certification level for biowaste, so that it can be used as fertilizer for public parks and farms.

Pasco established a separate facility northeast of town to treat wastewater from food processing businesses. The treated wastewater is used to irrigate circles that the city owns and leases to farmers. Pasco is currently expanding the process water reuse facility by add-

ing settling lagoons and biological treatment and expanding to new companies in northeast Pasco.

*Richland:* Richland owns and operates its own landfill, Horn Rapids. The city has residential curbside garbage pickup and offers green waste pickup, at no extra charge. Richland charges residents and businesses for voluntary curbside recycling. They have a new partnership with E-Cycle, WA and Goodwill Industries for recycling electronic waste.

The Horn Rapids Compost Facility is the new treatment facility for bio solids coming from the City's Wastewater Treatment Plant, the new residential green waste program, and green waste self-haul. This program will save landfill space, achieve the State's recycling goal and provide compost materials to the public. Richland saved \$100,000 when they closed the western portion of the Horn Rapids Compost Facility by using the compost they made from the green waste program. The beneficial aspect of the green waste and recycle program (diversion programs, e.g., recycling of metal, lumber, etc.) is that the city has extended the lifespan of the Horn Rapids landfill by six years to 2019, deferring a major new City investment. Richland started selling its compost in June 2012 at \$15 per ton with a ten-yard minimum. So far this adds up to \$8,000, but they are confident their sales will increase over time.

Richland is promoting the use of agricultural waste for energy production through economic incentives such as tax breaks or land use designations. The City is partnering with the BioProducts Sciences and Engineering Lab (BSEL) at Washington State University, Tri Cities to test different technologies to extract energy from organic waste material.

### ***Food and Agriculture:***

The Tri-Cities is surrounded by a vibrant agricultural business. For every dollar of raw agricultural product, an additional \$4-6 is generated as the product moves through the processing chain to market. Commercial vegetable crops include asparagus, carrots, sweet corn, squash, garlic, peas, beans, onions, pumpkin, eggplant, watermelon and potatoes. Commercial fruits include apples, berries, cherries and grapes. Crop sales run around a half billion dollars per year. In short, agriculture is an important part of the local economy. Local produce is also an important component of a sustainable and healthy community.

Kennewick, Pasco and Richland support local agriculture in many ways, from farmer's markets to infrastructure. All three cities have weekly farmer's markets during the spring, summer and fall for those who want to "eat local." Pasco has the largest farmer's market and provides space in the downtown area free of charge. To support local food processing businesses, Pasco built a separate wastewater treatment facility northeast of the city.

The three cities also promote community gardening. Pasco has a "Right to Garden" ordinance that allows property owners to garden on empty lots within the city limits. A new community garden in the Kurtzman area of Pasco, near Virgie Robinson Elementary has been extremely popular. The city established about 30 plots and now have a waiting list of people who want a plot. Some of the plots are raised for wheelchair access. Community gardens are more successful and popular in areas of high density living. Kennewick is start-

ing a community garden near Newport Street in 2013. Richland launched an economic gardening program in 2011 working with TRIDEC, Western Washington University and the city library.

The cost of electricity for irrigation can be substantial for local farmers running \$500,000 or more per year depending on the size of the farm. The Benton PUD offers conservation rebates to agricultural businesses, making them more energy efficient and reducing their operating costs to be more competitive in local and world markets. The PUD also encourages irrigation users to monitor soil moisture to prevent overwatering which saves water and energy needed for irrigation.

***Community Outreach/Education on Sustainability:***

Franklin PUD sponsors one of the most extensive *hands-on* educational programs on sustainability topics. The PUD has a Traveling Renewable Energy Kiosk (TREK) that is used to educate the community on the benefits and challenges of renewable energy. Franklin PUD has elementary students build a solar-powered model car and race it. High school students build a solar-powered car and race it as part of the annual “Electrathon”. There are many other outreach activities that are sponsored by Franklin PUD.

The City of Richland has had an active environmental education program that includes in-school and Earth Month programs. About 100 presentations, activities, events and contests are coordinated each year from their Green Living Office. Various city departments participate in these events and outreach activities, including science nights at schools, composting and waste reduction workshops, Benton-Franklin County fair, sustainable living forums and green city conferences. The Green Living Office has an extensive website and was recognized in 2009 for sponsoring the Green Recognition Awards program.

The Benton PUD has energy tips on its web site, a newsletter and a retired science teacher that works with 4<sup>th</sup> grade classes in Kennewick about energy safety and efficiency. They also participate in outreach at community events such as the Benton-Franklin County fair.

## People and Organizations Interviewed

<b>Name</b>	<b>Organization</b>	<b>Role</b>	<b>Interviewers</b>
Darroll Clark	Franklin PUD	Head of Conservation	Ellyn Murphy & Susan Kreid
Stan Strebel	City of Pasco	Deputy City Manager	Ellyn Murphy & Susan Kreid
Rick White	City of Pasco	Director, Community & Economic Development	Ellyn Murphy & Susan Kreid
Rick Terway	City of Pasco	Director, Administrative & Community Services	Ellyn Murphy & Susan Kreid
Ahmad Qayoumi	City of Pasco	Public Works Director	Ellyn Murphy & Susan Kreid
Darrick Dietrich	Basin Disposal, Inc	Pasco Waste Disposal	Ellyn Murphy
Peter Beaudry	City of Kennewick	Municipal Services Executive Director	Marilyn Perkins & Shirley Sonnichsen
Steven Plummer	City of Kennewick	Engineering Services Manager	Marilyn Perkins, Shirley Sonnichsen & Ginny McIntyre
Karen Miller	Benton PUD <i>(Preferred to fill out form rather than interview)</i>	Manager, Communications & Governmental Relations	Marilyn Perkins & Shirley Sonnichsen
Ken Mey	City of Richland	Power & Resource Superintendent	Lora Rathbone
Dawn Senger Sandi Edgemon	City of Richland	Energy Specialist Business Services Mgr	Lora Rathbone & Ellyn Murphy
Gail Everett	City of Richland	Environmental Education	Lora Rathbone
Gary Ballew	City of Richland	Economic Development Manager	Lora Rathbone
Vern McGraw	City of Richland	Wastewater/Stormwater Operations	Lora Rathbone
Tim Fredrickson	Ben Franklin Transit	General Manager	Ginny McIntyre Marilyn Perkins
Kathy McMullen	Ben Franklin Transit	Service Development Manager	Ginny McIntyre Marilyn Perkins
Len Pavelka	Benton-Franklin Council of Governments	Transportation Planning Specialist III	Ginny McIntyre Lora Rathbone

SWMP= Solid Waste Management Plan

[www.ci.richland.wa.us/DocumentCenter/Home/View/2452](http://www.ci.richland.wa.us/DocumentCenter/Home/View/2452)

Richland Transportation Plan 2005

[www.ci.richland.wa.us/index.aspx?NID=48](http://www.ci.richland.wa.us/index.aspx?NID=48)

## **Discussion Group Comments and LWV Consensus on Sustainable Communities**

The League of Women Voters sponsored two discussion meetings on March 7<sup>th</sup> and March 12, 2013. Participants were asked to read the summary study in advance. The following comments are from these meetings.

Participants had very strong opinions on what they value most about life in the Tri-Cities and what they want to see sustained for future generations. Responses included:

- the low cost of living and free parking,
- river shore accessibility, parks, open and wild spaces,
- an excellent range of educational opportunities,
- community volunteer opportunities and spirit;
- the low cost of renewable energy (primarily hydropower).

The quality of life would be enhanced if we could preserve the ridges and river shore, and decrease urban sprawl by encouraging more high-density housing with convenient street-level shopping and recreation. Mixed income housing should be encouraged to create a healthy balance of jobs and services. This type of high-density housing and services should be used to revitalize downtown areas and in areas where we can take advantage of our rivers, while at the same time preserving public access to the shorelines.

Participants felt that the greatest pressures impacting life in the Tri-Cities in the next twenty years will be urban sprawl, preserving our landscapes, and water availability for consumption, recreation and agriculture. Laws and neighborhood covenants must allow sustainable practices, such as solar panels and clotheslines. City governments should include undeveloped (wild) space in the definition of green space and preserve connectivity between open spaces.

All the participants would like to see our governments use long-range planning and work together in regards to planning, vision and costs. With a National Laboratory in our backyard, we should take advantage of the local expertise in energy efficiency, regional climate impacts, and preservation of critical resources such as water. The smart grid partnership is a good example of cooperation among local and regional utilities and the Laboratory. Additional collaborations are necessary to create a northwest energy hub in the Tri-Cities and attract new, progressive companies in clean energy. These types of businesses will build on the highly skilled and highly educated workforce associated with Hanford.

### ***Transportation and Mobility:***

We asked discussion groups if we should encourage our communities to think of different ways to get from one place to another except by automobile. Clearly, in areas where we want to encourage pedestrian traffic, cities should provide parking away from the area of focus and facilitate walking and bicycle pathways. Overall, participants would like to see downtown neighborhoods revitalized as centers for walking, shopping, eating and living.



Of course, higher density living is needed to support businesses in walkable communities – multistory buildings with apartments above and businesses at street level. New walking and bicycle pathways should be a priority for transportation planning. Cities could also discourage businesses with drive-throughs in downtown areas and design walkways such that restaurants can provide outdoor seating.

Discussion groups also offered ideas to incentivize the use of alternative fuels for vehicles. In addition to providing the infrastructure for electric vehicle charging stations, cities should plan ahead for the transportation system of the future (2025-2035 timeframe). This might include a light rail on major thoroughfares with satellite parking lots for commuters to accommodate the rush hour traffic. Land would need to be set aside for this type of park-and-ride system.

### ***Energy***

Consistent with the theme of making the Tri-Cities a northwest hub for clean energy technologies, city governments can do more to incentivize LEED or equivalent buildings. This may be by providing discounts on building permits and providing more expertise on the latest innovations in energy efficient buildings. Tri-Cities engineering departments could collaborate to recognize a local “Builder of the Year” based on energy efficiency innovations in a recently constructed building. New public buildings, including city buildings and schools should adhere to LEED standards in order to significantly reduce the operating cost of the building over its lifetime.

The Pacific Northwest Power Act has done much to encourage energy efficiency and incentivize energy upgrades in existing buildings. As a northwest hub for clean energy, the Tri-Cities should aggressively take the next step and institute time-of-use pricing for power. This will require that smart meters be installed in every building. It will take these types of bold actions for the Tri-Cities to lead in energy efficiency and clean energy technology.

### ***Waste Management***

Much more community education is needed to reduce waste and encourage recycling. As one person whose career is in waste management said, “until we enact laws to reduce excessive packaging of products, we will continue to have a waste disposal problem.” Professionals in waste management absolutely hate plastic shopping bags. Plastic bags can be a major problem at landfills, as they are easily lofted and spread by wind and are not biodegradable.

Recycling should be incentivized, which can be done by charging customers who recycle lower fees for waste disposal, or alternatively, make everyone pay for recycling whether they recycle or not. People who recycle generate much less waste for landfill disposal, reducing costs by extending the lifespan of the landfill.

### ***Food and Agriculture***

Farmer’s Markets have become increasingly popular as people want to consume fresh foods and support local agriculture. The cities should continue to encourage Farmer’s

Markets, especially in downtown areas that need to be revitalized. The Tri-Cities is lucky to be surrounded by such a diverse agricultural system. Large supermarket chains in the Tri-Cities should support our agricultural economy by providing more local produce to customers. This approach could give consumers even greater choice than Community Supported Agriculture co-ops or CSA's.

Discussion participants would also like to see more local produce incorporated into lunch programs for the school systems. Good eating habits and sustainable practices can make a significant and lasting impression on children.

### ***Community Outreach/Education on Sustainability***

The discussion focused on how the participants could encourage sustainable growth and livability in our community. Of course, the main point was that we need to practice sustainability ourselves through recycling, saving water and other sustainable practices that fit with each individual's lifestyle. We also need to be more vocal by putting information on websites, social network sites, letters to the editor, and voicing opinions at city council meetings. It was suggested to ask Marianne Ophardt to write columns on sustainable gardening practices such as composting and reducing water use.

Sustainability is really about good business practices and being a good steward of the taxpayer's money. Sustainability promotes energy security, food security and economic security.

The Benton-Franklin League of Women Voters adopted the following consensus position:

*The League of Women Voters of Benton and Franklin Counties believes that sustainable practices lead to more cost-effective provision of services, which means a more efficient use of revenue and/or taxes. Sustainable communities attract businesses and people, because of a higher quality of life through reduced energy costs, energy and food security, transportation and recreation options, and a healthier environment.*