

Extract – plan pages 12-44 (Apr 12, 2011)
Tri-City Sustainability Plan
Gering, Terrytown and Scottsbluff

Developed in 2009

By
Tri-City Sustainability Task Force

If we do not change our direction, we are likely to end up where we headed.
Chinese Proverb

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Introduction

Tri-City Sustainability Plan development

Background

From concerns over climate change, to drought-related water shortages, to air quality, society faces serious environmental issues locally, regionally, nationally and globally. These issues will affect the quality of life today and for generations to come.

There is a growing body of evidence that a major shift in human behavior is necessary to overcome destructive tides of over-consumption and environmental degradation; and work for a better future for ourselves, our children and the numerous species that share our planet. Our existing economic systems, agricultural systems and automobile-oriented infrastructure are inherently unsustainable.

DEPENDENCE ON NON-RENEWABLE RESOURCES

Our economy and lifestyle is dependent on vast supplies of non-renewable resources, primarily derived from fossil fuels. As these resources are consumed, they will become increasingly scarce and more expensive. We must prepare for this eventuality to prevent a crisis in supply vs. demand. In addition, reducing our dependence on non-renewable fossil fuels reduces climate changing greenhouse gases and gives us greater energy independence.

OVER & EXCESSIVE USE OF NATURAL RESOURCES

We are using some renewable resources faster than nature can replenish them. Examples of this are consumption of water, lumber, wood and paper products, over fishing and soil depletion. Over-consumption of some renewable resources will cause damage and collapse of many ecosystems.

POLLUTION

Un-intended by products of manufacturing, consumption, and combustion of resources end up in our air, water, soil, and food. Many of these by-products are toxic. Material from consumption is left over as “waste” and buried in landfills. This leads to numerous negative impacts, including consumption of valuable land for landfills, pollution of that land and associated lands and waters with potentially toxic materials, and removal of resources (such as carbon and nitrogen) from natural cycles.

Our existing economic systems, built environments and cultures are inherently unsustainable. Achieving sustainability in contemporary times will require a major paradigm shift, essentially reversing long-standing trends of consumption and traditional development, and changing our philosophies and behaviors.

“Can nine billion people be fed? Can we cope with the demands in the future on water? Can we provide enough energy? Can we do it, all that, while mitigating and adapting to climate change? And can we do all that in 21 years time? That’s when these things are going to start hitting in a really big way. We need to act now. We need investment in science and technology, and all the other ways of treating very seriously these major problems. 2030 is not very far away.” - Prof John Beddington, UK Chief Scientist, addressing SDUK 09 conference (March 2009)



In order to deal with these problems of the 21st Century, we can not do business as usual. Living sustainably in a community requires a culture change. We can not continue to consume resources as we have in the past. We must learn to conserve if our species is to survive. Our children and grandchildren are inheriting the results of our decision-making and actions, be them positive or negative.

Therefore, it is important for communities to develop a sustainability plan. A sustainability plan provides coordination of efforts, tracks progress and focuses energies on the highest priority items. The plan provides guidance as well as a system for reporting to the public on the success of meeting 21st Century challenges.

Economically, the communities could benefit from jobs and employment opportunities related to sustainability. Operation costs could be reduced by conserving natural resources, reducing waste, and limiting dependency on non-renewal fuels. Businesses and families from environmentally aware communities could be attracted to relocate to the Tri-Cities communities if a sustainability plan is embedded into daily operation and decision-making. The Tri-cities could qualify for incentives, grants and loans if they have a sustainability plan in place.

Socially, sustainable communities are healthier and safer in which to reside. The communities enjoy a higher quality of life. Innovation and creativeness become more apparent which encourages more entrepreneurship and job creation. Government becomes more transparent and collaborative in their approach to sustainability. Education in the use of sustainable practices must accompany the sustainability plan.

The environment is healthier when sustainability is practiced. The quality and quantity of natural resources are conserved. The carbon footprint and waste is reduced. Sustainability is the right thing to do.



EPA's Checklist for a Green Community

A green community strives to:

Environment

- Comply with Environmental Regulations
- Practice waste minimization and pollution prevention
- Conserve natural resources through sustainable land use

Economic

- Promote diverse, locally-owned and operated sustainable businesses (profitable, non-polluting, socially responsible)
- Provide adequate affordable housing
- Promote mixed-use residential areas which provide for open space
- Promote economic equity

Social

- Actively involve citizens from ALL sectors of the community through open, inclusive public outreach efforts
- Ensure that public actions are sustainable, while incorporating local values and historical and cultural considerations
- Create and maintain safe, clean neighborhoods and recreational facilities for ALL
- Provide adequate and efficient, infrastructure (water, sewer, etc.) that minimizes human health and environmental harm, and transportation systems that accommodate broad public access, bike and pedestrian paths
- Ensure equitable and effective educational and health-care systems



History of the Development of the Tri-Cities Sustainability Plan

After attending many conferences, workshops, and seminars on sustainability over the past several years, Al and Lois Herbel decided to visit with the cities of the community about the information they had learned. Measures were taken to visit with city officials and to receive their support to proceed with the development of a Tri-city Sustainability Plan. The following outlines a timeline of events leading to the completion of a plan for the communities.

July, 2008 – Al and Lois Herbel visit with City Administrators Lane Danielzuk and Rick Kuckkhan about the possibility of developing a sustainability plan

August, 2008 – Al and Lois Herbel meet with Terrytown City Council to propose their involvement in a Tri-Cities Sustainability Plan.

September, 2008 – Al and Lois Herbel meet with the Public Works sub-committee of Gering City Council to discuss Gering's involvement in the Tri-City Sustainability Plan. Lane Danielzuk was appointed city liaison to this task force. Al Herbel visited with Scottsbluff Mayor Randy Meininger about Scottsbluff's involvement in the Tri-City Sustainability Plan Development. A list of potential task force members was presented and approved by Lane Danielzuk. Letters from the city were sent to task force members inviting and welcoming them to serve.

October, 2008 to November, 2009 – Tri-City Sustainability meetings were held the first and third Tuesday of each month from 7:00 PM – 8:30 PM.

November – February, 2009 – a comprehensive sustainability assessment of the communities was conducted by the Tri-City Sustainability Planning Committee.

March, 2009 – a sustainability workshop was held for mayors, council members and city administrators to provide information about the benefits of a sustainability plan. A symposium was held in Gering to help educate governmental leaders, businesses and the general public about sustainability in a community.

March-July, 2009 – input was gathered from city department supervisors and community experts with regard what we have in place and what we need in the future to be more sustainable in each of the ten areas of the plan.

August-November, 2009 – the Tri-City Sustainability Planning Team wrote goals, strategies and indicators to address the ten categories in the plan.

November, 2009 – The Tri-city Sustainability Planning team reviewed and revised the plan. The completed Tri-City Sustainability Plan was given to the city administrators of Gering and Scottsbluff and to the Mayor of Terrytown.

It is the desire of the Tri-City Sustainability Team that the plan be embedded into the daily operations of the cities. Hopefully, baselines will be established and indicators will be used to measure success of the strategies. An annual report needs to be made available to the public regarding the success of sustainable measures that have been achieved in meeting the goals. As new information and technology become available, adjustments and additions need to be made when the plan is revisited. The plan is designed to be revisited and re-evaluated annually or sooner as needs arise.



Definition of Sustainability and Sustainable Communities

Definition of Sustainability:

“Meeting our needs of the present without compromising the ability of future generations to meet their own needs” – from the 1987 World Commission on Environment and Development (Brundtland Report). This report introduced the concepts of **environmental, economic and social sustainability** for equal consideration.

- *Environmental sustainability* deals with natural resources.
- *Economic sustainability* deals with capital.
- *Social Sustainability* deals with communities and societies through cooperation rather than competition.

Sustainable communities have taken steps to remain healthy over the long term.

These steps include the following:

- Strong sense of place
- Have a vision that is embraced and actively promoted by all the key sectors of society including businesses, disadvantaged groups, environmentalists, civic associations, government agencies, and religious organizations
- Build on their assets and dare to be innovative
- Value healthy ecosystems and use resources efficiently
- Actively seek to retain and enhance a locally based economy
- Have a pervasive volunteer spirit that is rewarded by concrete results
- Encourage partnerships between and among governments, the business sector, and nonprofit organizations are common.
- Public debate is engaging, inclusive and constructive.
- Emphasize the whole community instead of just disadvantaged neighborhoods
- Protect ecosystems
- Have a meaningful and broad-based citizen participation
- Are economically self-reliant

Institute for Sustainable Communities

“Treat the Earth well. It was not given to you by your parents. It was loaned to you by your children”

Kenyan Proverb



Tri-City Sustainability Plan (TCSP) development team

The Stakeholders

The team of stakeholders was chosen from the three communities at large. It was comprised of business leaders, community-based organizations, public agency representatives and youth who have an interest in sustainability. The diversity of knowledge and background that individuals brought to the team enhanced the quality and depth of the plan. City administration requested that city employees and council members not be asked to serve on the team due to their busy schedules. The table below lists the members and their agency or business they represent.

Stakeholder	Agency/Business
David Boeckner	Scottsbluff City Council member; owner Trim Line Inc
Holly Brandt	Nebraska Health & Human Resources; Airbourne sales
Chris Conway	Valley Bank IT Dept; Green Team member
Larry Cooper	Regional West IT Dept; owner Nebraska Wind & Solar
Lane Danielzuk	Administrator, City of Gering
Howard Duncan	Building Designer and Planner, retired Architect
Dr. Don Gentry	Retired Physician; Wildcat Hills Audubon; Gering Parks Committee
Jarred Haberman	Executive Director, Panhandle Area Development District
Al Herbel, LEED AP co-chair TCSP	Owner Great Plains Sustainability Consulting; owner First Home Inspections
Lois Herbel, co-chair TCSP	Retired educator; Consultant LSA Projects Nebr. Dept. of Education, Environmental Education
Mandalyn Kautz	Student, Gering High School
Carolee Koehn	Evergreen House; retired educator
Rick Kuckkahn	City Manager, City of Scottsbluff
Roy Lyles	North Platte NRD; owner Circle Arrow Longhorns
Robert Manasek	Resource Management Specialist, Scotts Bluff National Monument
Tony Mendes	Owner Mendez Excavating; Advisory Board Member NDEQ
Ron Moore	Panhandle Resource Conservation and Development
Lynda Morrison	Terrytown City Council member
Jennifer Rogers	Sen. Ben Nelson panhandle representative
Jodi Velde	Valley Bank, Green Team chairperson

In addition to these task force members, several community experts and city department supervisors were invited to meetings of their expertise to provide valuable input.

Mission/Vision, Tri-City Sustainability Plan

Thirty years ago, if you said the country was living beyond its means, people would have thought about economics. Now, if you talk about the country, or the planet living beyond its means, you think about the environment. We are taking out more than we are giving back. We are consuming energy, water, and other natural resources in a way that is leading to huge and often irreversible damage to the planet. So too are most other developed nations. And so too will China and India if they follow the same path of economic development as us – David Miliband, Secretary of State for the Environment, Food and Rural Affairs addressing the Royal Agricultural Show, Stoneleigh, Warwickshire (July 2006)

Mission:

The Mission of the Tri-City Sustainability effort is to promote the healthy well-being of its citizens in a sustainable environment that brings economic benefits to the citizens and governmental entities, now and in the future.

Vision:

In the coming decades, the Tri-City – made up of Gering, Terrytown and Scottsbluff – will work to preserve and promote its assets. Those assets include: a strong history and cultural diversity, a great place to raise children, a small town feel, good schools, regional medical facilities, airport, and shopping center, higher education opportunities through Western Nebraska Community College, University of Nebraska and Chadron State College, Summit Christian College, family-oriented neighborhoods, quality city parks, a wide variety of leisure activities, retirement and elderly facilities, diversity of housing, 4-lane highway linking to Interstate, and employment opportunities.

In addition, the three communities will work to continue to provide high quality of life while limiting carbon emissions, conserving natural resources and becoming more self-reliant. They will enact high quality standards for planned growth, promote enhanced transportation, preserve our history and heritage, embrace spiritual and cultural diversity, protect natural environments, provide accessible greenspaces and appropriate economic development while leaving no neighborhood behind.

The tri-cities will strive to make our communities more sustainable through developed goals with a creative environment that provides a “Sense of Place”. We will focus on becoming a self-sustaining community with little waste, no carbon footprint, who utilizes power generated from renewable resources by doing the following:

- Decisions will be made based on equal consideration of each of the five domains as identified by Joslyn Castle Institute: Environmental (planet), Socio –Cultural (people), Economical (profit), Technological and Public Policy.
- Utilizing the five domains in problem identification and assessment, problem solving, design, planning, management and administration.
- Collectively bringing the five domains together in language and principle to guide our endeavors into awareness of a much needed strategically, holistic system for a sustainable community.
- Develop a sustained education effort to understand and strengthen our efforts toward a sustainable community.
- Engage our youth and their ideas in problem identification and assessment, problem solving, design, planning and management.

Topics of Consideration for the Sustainability of the Tri-Cities

The Tri-City Sustainability Team determined the following areas of importance when considering a sustainability plan for the communities:

Renewable energy	Recreation
Biodiversity	Alternative Transportation
Consider opportunities for business Incubator	Aggressive greenhouse gas reduction
Sustainable building practices	Waste reduction to our landfill
Sustainable uses of wastewater	Conversion of waste to energy
Sustainable building codes practiced	Re-tree the tri-cities
Protect and preserve native species	Increase greenspaces throughout the Cities
Reduce resource consumption	Improve municipal energy efficiency
Provide designated walkways and bikeways throughout the cities	Energy conservation – energy efficient appliances and fixtures
Recycling increased	Increase educational attainment levels by attracting higher education
Mandatory high school graduation	Encourage sustainable businesses to locate in the tri-cities area to address population decline
Encourage a job market that provides viable employment closer to home, telecommuting, flexible work schedules	Technology = infrastructure
Affordable and accessible healthcare for all	Encourage a thriving art community
Support for an aging population	

Alternative Transportation



Pathway connecting various sections of a community

Alternative Transportation Definition:

- Modes of travel other than private cars, such as walking, bicycling, rollerblading, carpooling and transit
- Transportation that cuts carbon emissions and the dependency on fossil fuels.

*"Today's problems cannot be solved if we still think the way we thought when we created them."
Albert Einstein*

Area: Alternative Transportation

Goals:

1. Encourage safe, convenient and environmentally responsible alternative modes of transportation, both private and public.
2. Continue to design the community so services are within walkable distances.
3. Provide community education opportunities that are conducive to sustainability efforts regarding alternative transportation.

Strategies (Alternative Transportation)	2012	2020	2030
1. Reduce dependence on automobiles by city residents.		X	
2. Design pedestrian and bicycle major linkages between Tri-City streets and as appropriate between adjoining land uses throughout the community routes (school / downtown / etc) via planning commission, city sub-committees, etc.	X		
3. Provide pedestrian and bicycle major linkages between Tri-City streets and as appropriate between adjoining land uses throughout the community using designated streets.		X	
4. Provide facilities and furnishings that support and encourage pedestrian and bicycle transportation.		X	
5. Encourage carpooling among Tri-City employers and citizens, encouraging consolidating of tasks, trip scheduling.	X		
6. Re-design the downtown areas to limit the use of automobiles.			X
7. Plan for shorter blocks and connectivity in new community developments for walkability. Educate the community on increased housing density versus sprawl.		X	
8. Encourage the development of a walkable community, both residential and commercial.		X	
9. Design comfortable sidewalks taking into account width, lighting and trees, and continue in ongoing processes.	X		
10. Revise policies and ordinances to allow alternative transportation. Educate the community on increased housing density versus sprawl.	X		
11. Encourage re-development and inhabiting of the residence in the downtown area.	X		

12. Educate the community of the benefits to increased housing density versus sprawl.	X		
13. Continue to design pathways to meet size regulations.	X		
14. Continue to educate Tri-City (community wide) commonality of alternative transportation goals.	X		

Possible Indicators (Alternative Transportation):

- Number of persons using the pathways
- Number of bicycles ridden to school or work
- Number of workshops or trainings informing the public about alternative transportation
- Data on Health Benefits of sustainable measures implemented
- Number of miles of pathways available to the public
- Number of persons using mass transportation
- Number of mass transportation options
- Amount of distance to services in downtown area

Built Environment



The **built environment** refers to everything constructed, arranged or maintained by humans. It includes buildings, streets, sewer systems, green spaces, parks, pathways – anything that has been done to the environment by humans. Understanding the built environment, helps us see the value of well-designed spaces, and to understand the relationship between the natural environment and the local community.

“Man shapes himself through decisions that shape his environment.”
Rene Dubos

“The good building is not one that hurts the landscape, but one which makes the landscape more beautiful than it was before the building was built.”
Frank Lloyd Wright

THIS PAGE is additional background information from the AIA/IUA Goals, Strategies and POSSIBLE Indicators are considered to be the plan

Seven Principles for the Design of a Sustainable Built Environment

A sustainable built environment depends on...

1. An integrative, human-ecological design approach
 - the design must be integrative, multidisciplinary versus more conventional linear, disciplinary process
 - man's impact on nature is greater than ecosystems can adapt and adjust to
2. Changing approaches to land use and community fabric
 - mixed-use community planning allows for pedestrian linkages among residential, institutional, commercial and recreational places that support daily lives
 - move away from single-use, car-dependent developments and move toward the increased use of existing infrastructure, revitalization, infill and reuse of existing communities with more pedestrian friendly, mixed-use quality of life (cut commute time, quality of life for those who do not have cars)
3. Effective use of natural, local, and global resources to reduce infrastructure loading and maximize infrastructure use
4. The use of locally harvested and crafted materials and assemblies
5. The design of forgiving and adaptive systems, including structure, enclosure, mechanical, lighting, networking, and interior systems.
6. Design for life-cycle instead of minimum first cost
7. The promotion of infrastructures to neighborhood amenities

Sustainable design integrates consideration of resource and energy efficiency, healthy buildings, ecologically and socially sensitive land use, and an aesthetic sensitivity that inspires, affirms, and ennobles - AIA/IUA

Must change our thinking...

- building to last instead of privatizing the profits while socializing the costs to life-cycle ownership
- from thinning out America to making American communities pedestrian friendly
- from paving of America to landscaping of America
- From the crumbling of American infrastructures to engineering longevity
- From a widening of the haves and have-nots to a shared future

How this can be achieved...

- Multiple-family housing – reduce land, infrastructure, etc. consumption
- Multiple options for recycling, reuse and remanufacturing materials and skilled people to operate these activities
- Car-free mobility – walking, cycling and public transit viable
- Co-generation of electricity and use of industrial waste heat to reduce per capita energy consumption, cleaner air, easy access to amenities, closer to shopping/employment
- Cities become more self-reliant – rethink cities as complete ecosystems (bioregional)

*"We are living on this planet as if we had another one to go to."
Terri Swearingen*

Area: Built Environment

Definitions

¹ **High Performance (Certified)** – those facilities built with a focus of the triple bottom line (affects on people, profit and planet), with reduced impacts from materials use and resources utilized that are independently certified by 3rd party to have met or exceeded levels of performance in design, construction and operation of a facility. Certification examples are:

- Leadership in Energy and Environmental Design (LEED) by the US Green Building Council, Green Globes by the Green Built Institute
- Energy Star, a joint program of the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE)
- Green Globes, a building environmental design and management tool developed by the Green Building Initiative
- CHPS, the Collaborative for High Performance Schools, oversees a green building rating program specifically designed for K-12 schools
- And other 3rd party verifiable tools of credibility for facility owners.

² **High Performance Products** – Products that are non-toxic may carry the Green Seal, are produced locally or regionally from quick renewable sources, and have a high sustainability value.

³ **High Performance Builder** –Engineers, Architects, Builders, Consultants, Planners, etc., who understand the value of building certified facilities and can have them built with certification of a high performance building.

Goals (Built Environment):

1. Establish and continuously improve “green” building standards for both residential and public commercial development – new and remodeled.
2. Continue to develop city parks to provide equity access for residents.
3. Develop and maintain greenspaces in our communities to create a sense of place.
4. Preserve prime farmland and critical habitat resources.
5. Protect and restore the quality and quantity of the North Platte River in the Tri-Cities area.
6. Use sustainable maintenance practices.
7. Continue to promote a walkable community design.
8. Encourage compact building design.

Strategies (Built Environment)	2012	2020	2030
1. Provide education on high performance ¹ building for community leaders, policy makers, designers, contractors, architects and residents.	X		
2. Develop a clearinghouse for information on high performance ¹ building and high performance building products ² .	X		
3. Increase local availability of high performance building products ² .	X		
4. Collaborate in developing summer youth internships with high performance builders ³ .	X		

5. Implement a high performance ¹ home tour.	X		
6. Develop a unified high performance ¹ building code.	X		
7. Plan and continue development of walkable communities.	X		
8. Continue to develop and designate extensive network of trails for bikes and pedestrians (employment, recreation, shopping).	X		
9. Encourage local shopping.	X		
10. Adequate, quality housing available to residents.		X	
11. Encourage remodeling or retrofitting of existing buildings reducing urban sprawl.	X		
12. Encourage multiple family housing.	X		
13. Urban planning that addresses storm water quality.	X		
14. Urban planning that addresses control of exotic vegetation that significantly reduces water quantity.	X		
15. Encourage multifamily housing.	X		
16. Encourage brownfield redevelopment.	X		
17. Encourage use of non-toxic cleaning supplies for public, commercial and residential use.	X		

Indicators (Built Environment):

- Number of certified green builders in the community (LEED, Energy Star, etc.)
- Miles of pedestrian/bike route designation
- Number of bicycle licenses annually
- Number of businesses carrying green building products
- Number of building permits used in retrofitting buildings in the downtown area for living space
- Number of building permits for green buildings (LEED, Energy Star, etc.)
- Number of available houses, apartments, townhouses, elderly residents requested versus waiting lists
- Number of internship programs for young builders
- Amount of increase in local sales tax
- Amount of requests for LB 840 money to start local businesses
- Number of greenspaces connecting hubs in the community
- Number of greenspaces being restored with native plants
- Location and ratio of city parks to population of community
- Population density and distribution
- Percent of green space per neighborhood
- Vehicle miles traveled per capita and average commute times
- Frequency of walking or bike trips per capita
- Results of surveys of neighborhood safety

Community Health & Safety



Community Health and Safety includes wellness programs, diversity tolerance, quality and accessibility of natural resources (ex. Air, water, soil, etc.), adequate housing for all and a safe feeling in the neighborhood. A high level of quality of life is accessible to all, socially, economically, psychologically and spiritually. Policies are implemented to achieve quality of life in a fair, open and democratic manner.

"The future is literally in our hands to mold as we like. But we cannot wait until tomorrow. Tomorrow is now."

Eleanor Roosevelt

Area: Community Health & Safety

Goals:

1. Develop, improve and maintain the air quality standards in the community.
2. Encourage city employees to drive less and engage in clean air practices.
3. Continue to promote the arts in the community.
4. Increase respect for and appreciation of the value added to the community by differences among its members in race, religion, gender, age, economic status, sexual orientation, disabilities, immigration status and other special needs.
5. Increase access among community members to housing, health services, education, economic opportunity and cultural recreational resources.

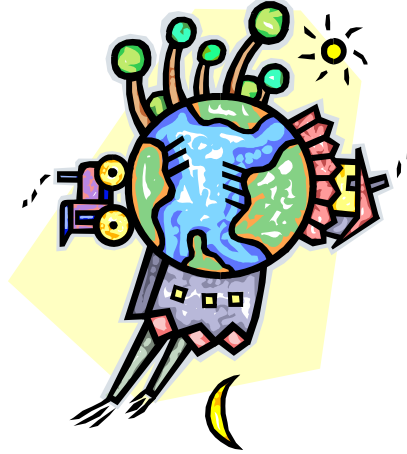
Strategies (Community Health & Safety)	2012	2020	2030
1. The janitorial staff will use sustainable, safe cleaning products.	X		
2. Model and educate the public on proper techniques for recycling CFLs, batteries, electronics, chemicals, and medications.	X		
3. Continue to maintain “Tree City” designation and promote Retree Nebraska.	X		
4. Continue to conduct or engage in an annual health fair for employees.	X		
5. Continue and expand the wellness program for employees.	X		
6. Work with community partners to reduce the number of “unhealthy” air quality days.	X		
7. Work to acquire air monitoring equipment.	X		
8. Reduce vehicle idle times by optimizing traffic signals throughout the city.	X		
9. Work to implement a regional policy to reduce the percentage of commute trips by single occupancy vehicles by 10%, relative to an established baseline year.		X	
10. Work with community partners to establish citywide air quality policies and to implement clean air measures for new developments.		X	
11. Continue to create bike routes to be used for traveling to work, shop, school, etc. as well as recreation.	X		
12. Mark pathways with GPS locations for safety response location.	X		
13. Concentrate access to services and shopping within ½ mile radius.		X	
14. Install bike racks throughout the communities.	X		
15. Continue to host art festivals, celebrations, etc.	X		
16. Continue to increase the number of public art projects.	X		
17. Increase the availability of all dental health resources.	X		

18. Continue to work on strategies to reduce the dropout rate among students.	X		
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Possible Indicators (Community Health & Safety):

- Number of families low-income families receiving dental care
- Number of participants participating in art events
- Number of art events held throughout the year
- Number of types of art events held
- Records of measurement in air quality in various locations throughout the cities
- Number of days when air quality is below EPA good air quality index range
- Numbers attending cultural events in the community
- Life expectancy at birth for male and female
- Morbidity rate by disease, type, age and gender
- Percentage of residents living with mental disorders
- Number of offenses against another person recorded annually
- Percentage of people who feel safe on their street, alone after dark
- Percentage of residents who participate in a wellness program or regular exercise routine
- Number of arrests of 12-15 year olds
- Number of domestic violence arrests

Economic Development



Sustainable **economic development** involves decision-making that is based on the Triple Bottom Line. Those decisions equally consider benefits to people, profit and the planet. Available technologies and policies paradigms also play an important role in sustainable economic development.

"The future will be green, or not at all. This truth lies at the heart of humankind's most pressing challenge: to learn to live in harmony with the Earth on a genuinely sustainable basis."

Sir Jonathon Porritt

Area: Economic Development

Goals:

1. Maintain and grow the economic vitality of the entire community in a sustainable manner.
2. Nurture a diverse, stable, local economy that supports basic needs of all segments of the community.
3. Encourage businesses, organizations and local government agencies in the community to continue to increase the efficiency of their use of resources through the adoption of sustainable business practices.
4. Encourage sustainable businesses to locate in the tri-cities.
5. Support and promote doing business locally.

Strategies (Economic Development)	2012	2020	2030
1. Maintain and increase business sustainability.	X		
2. Increase brownfield redevelopment.		X	
3. Create and maintain gainful employment.	X		
4. Maintain and increase smart growth.	X		
5. Promote eco-tourism.	X		
6. Develop an eco- industrial park.		X	
7. Promote and encourage a sustainable approach and initiatives for private land development.		X	
8. Ensure that populations of all ages and cultural backgrounds within the community are able to live sustainably.	X		
9. Continue to promote commerce, services and cooperatives within the community that support more sustainable practices in the daily lives of the residents.	X		
10. Encourage government and businesses to conduct energy and water audits.	X		
11. Continue to provide workshops and trainings to educate businesses, organizations and agencies to conduct daily activities in a sustainable manner.	X		
12. Promote and inform prospective businesses of the importance of sustainability in our community.	X		
13. Develop a business certification plan that gives recognition to businesses who adopt various sustainable ideas: reduce energy use, recycle, compost, use green building materials, use alternative energy, etc.	X		
14. Encourage innovation and creativity in business operations.	X		
15. Encourage the development of businesses producing and marketing locally produced products.	X		

16. Develop programs and incentives for entrepreneurship.	X		
17. Support local businesses by buying local.	X		

Possible indicators (Economic Development):

- Number of vendors at Farmer’s Market over time
- Number of times in a week that Farmer’s Market is held
- Amount of sales tax revenue generated annually within the cities
- Number of new businesses started in the community annually
- Number of businesses that meet the criteria for a sustainable shopping guide
- Number of brownfields that are redeveloped
- Percentage of increase in jobs created
- Percentage increase in retail square footage available downtown
- Number of jobs with benefits included as well as wage
- Number of families owning their home
- Number of bankruptcies
- Employment rate
- Unemployment rate
- Percentage of 15-20 year olds enrolled in vocational/education training courses

Educate/train Staff and Community about Sustainable Practices



"If all mankind were to disappear, the world would regenerate back to the rich state of equilibrium that existed ten thousand years ago. If insects were to vanish, the environment would collapse into chaos.

~Edward O. Wilson

Area: Educate/train staff and Community about Sustainable Practices

Definitions

¹ **Triple Bottom Line** – decision based upon effects to people (who it affects and how it affects them), planet (affects upon environment in regard to resources on flora, fauna, or the atmosphere), and profit (economic implications to operations and being socially responsible).

² **Example wording – On all governmental (City) Application forms (all cities, any application form) to include question:**

“How does this _____ promote sustainability for our community?” Question must be answered. If this question is unanswered, it (application or request or permit) is denied. Community sustainability education must be ongoing and available for application process.

Application Examples:

- “Hot water heater replacement” - (water heater is an Energy Star performance unit, reducing energy requirements for this owner and our community)
- “ream of paper” – (is 100% recycled content, reduces raw resource consumption of trees and water)
- “Patio construction” - (materials are Forest Stewardship Council certified, promoting managed wood consumption), **or** (decking materials are all recycled), **or** (all materials are made from recycled plastic and renewable resources)
- “new automobile” – (flex fuel machine which utilizes alternative energy sources) or (hybrid electric has smaller carbon footprint than conventional vehicle)
- “Home construction” - (plans are registered with USGBC using Leadership in Energy and Environmental Design, certification building award pending construction completion. This home will be among the most energy efficient and healthy environment with reduced natural resource demands built today.)

Goals (Educate/train staff and Community about Sustainable Practices):

1. Inform new and current residents, visitors, businesses and city employees about sustainability issues in general by bringing forward fresh information, best management practices, new ideas and products.
2. Validate that any daily operation, purchase or project can be justified in terms of sustainability and Triple Bottom Line¹.
3. Encourage community schools and colleges to teach sustainability principles to students.
4. Continue to educate the community and city staffs on sustainability by encourage decision making based on the Triple Bottom Line¹.
5. Develop a Tri-City Sustainability Team and hire a sustainability coordinator to implement, guide and monitor sustainability.

Strategies (Educate/train staff and Community about Sustainable Practices)	2012	2020	2030
1. Publish regular columns, newsletters, etc. on sustainability tips and practices.	X		
2. Continue to work with the media to educate the public about sustainability.	X		
3. Continue to train and orientate new employees on sustainability practices at work.	X		
4. Provide internal sustainability education to all employees at staff meetings.	X		
5. Develop webpage for links to online sustainability training.	X		
6. Provide recognitions/awards for employees who practice sustainability in their jobs.	X		
7. Lead by example at facilities and events.	X		
8. Publish an annual report of savings for the public.	X		
9. Sign the US Mayors Climate Protection Agreement. www.usmayors.org	X		
10. Have staff and volunteers prepare informational booths for community events (ex. Fair, home/garden show, symposiums, etc.)	X		
11. Provide resources to support the Tri-City Sustainability team and coordinator position.	X		
12. Continue to give tours to city facilities in promoting sustainability. (ex. Landfill, waste water facility, stormwater drainage, etc.)	X		
13. Work with community schools, colleges and community to provide participants with training using Triple Bottom Line ¹ in decision-making.	X		
14. Include a space on all purchase orders, bid sheets, work orders, permits, etc. for explanation as to how the request (etc) addresses sustainability. (see example wording ²)	X		
15. Continue to encourage employees to attend workshops, conferences and conventions to keep updated and learn new technology to implement sustainable techniques in their work.	X		

16. Include the sustainability mission statement on city business documents (ex. Agendas, bid sheets, website, newsletter, etc.)	X		
17. Encourage carpooling among Tri-City employers and citizens, encouraging consolidating of tasks, trip scheduling.	X		
18. Use public access media to promote sustainability education.	X		
19. Conduct meetings, conferences, etc. over the internet, avoiding physical travel whenever possible.	X		

Possible Indicators (Educate/train staff and Community about Sustainable Practices):

- Number of participants attending training sessions
- Number of training opportunities offered annually (ex. Conferences, workshops, symposiums, etc.)
- Number of times a booth was present at community events to educate about sustainability
- Number of staff attending sustainability training
- Amount of savings represented in an annual report
- Number of hits on sustainability webpage

Energy



Energy refers to the renewable or non-renewable sources of energy used to power our vehicles and heat or cool our buildings.

“Economic theory was built on the experience of the Industrial Revolution, which in turn relied on a cheap and abundant flow of energy, first from coal and later from oil and gas. Man was perceived to be master of his environment. But now rising population and dwindling resources have reversed the relationship. The imminent decline in the world’s supply of oil, which currently provides 40% of traded energy, calls for a radical change in the economic principles on which the World is run, with far-reaching political consequences.”

Colin Campbell, Association for the Study of Peak Oil and Gas (2002)

Area: Energy

Goals:

1. Significantly reduce the use of fossil fuel.
2. Improve the availability of locally and regionally produced renewable energy.
3. Improve energy efficiency.
4. Reduce peak electrical demand.
5. Provide long term affordable and reliable energy.
6. Replace or renovate obsolete energy or resource inefficient infrastructure.
(buildings, facilities, systems, etc.)
7. Encourage and recruit green technology companies to locate in the tri-cities.

Strategies (Energy)	2012	2020	2030
1. Vehicle idle time no more than 15 seconds.	X		
2. Install light sensors.	X		
3. Install programmable thermostats.	X		
4. Turn off lights when room not in use.	X		
5. Carpool to meetings, conferences, etc.	X		
6. Replace light bulbs with high efficiency bulbs.	X		
7. Research wind and solar energy to use in city buildings, museum, etc.	X		
8. Update state policy, ordinances, etc. as new technology becomes available to encourage the installation and use of renewable energy.	X		
9. Update local policy, ordinances, etc. as new technology becomes available to encourage the installation and use of renewable energy.		X	
10. Install infrastructure to use renewable energy.			X
11. Use renewable energy for 30% of energy needs.			X
12. Continue to replace bulbs in traffic lights to LED.		X	
13. Replace streetlights to LED bulbs and focus to reduce light pollution.		X	
14. Educate the public about energy efficiency (Talk of Town, newspaper, tips on bills, modeling, workshops, town hall meetings, etc.)	X		
15. Weatherize buildings including insulation, caulking, etc.	X		
16. Purchase energy star equipment when replacing older equipment.	X		
17. Publish annually the energy consumption in the city.	X		
18. Determine the feasibility to replace city fleet with alternative fuel vehicles.	X		

Possible Indicators (Energy):

- Number of kilowatts used in the city
- Share of household income spent on energy
- Population of the city
- Energy use per capita
- Efficiency of energy conversion and distribution
- Energy use in industry
- Energy use in services
- Amount of renewable energy used
- Fuel consumption for city fleet
- Net energy import dependency
- Ambient concentrations in urban areas
- Quantity of greenhouse emissions (kind and amount)
- Number of vehicles in city fleet using alternative fuel

Food Security



Food security means being able to provide a secure, sustainable food supply that is adequate in amount and quality for all. As population rates continue to grow, the demand for more food is increasing. The average bite of food travels 1,500 miles from the field to the table. With increasing fuel costs, sustainable communities are becoming more self-reliant in the production of their food. Sustainable communities are encouraging organic farming, farmer's markets, community gardens and food coops.

*"The packaging for a microwavable "microwave" dinner is programmed for a shelf life of maybe six months, a cook time of two minutes and a landfill dead-time of centuries."
~David Wann, Buzzworm, November 1990*

Area: Food Security

Goals:

1. Promote the availability of locally produced food.
2. Educate businesses and the public about the benefits of locally grown foods.
3. Educate the residents about food production and safe food storage.
4. Encourage production and distribution of organic foods.

Strategies (Food Security)	2012	2020	2030
1. Gather information for a local food inventory for the region.	X		
2. Develop contacts for growers to increase local food supplies.	X		
3. Encourage local businesses and liquor stores to display and prioritize local food sources.	X		
4. Encourage the development of a food coop.	X		
5. Continue to encourage production of more humus in the soil for a reduction of land erosion.	X		
6. Educate and encourage composting.	X		
7. Provide incentives for production of organic foods.	X		
8. Encourage the production of locally grown foods.	X		
9. Encourage residents to purchase locally grown foods.	X		
10. Revise policies and ordinances so they allow for self-sufficiency.	X		
11. Encourage food stuff to be grown in alley ways and between buildings.	X		
12. Encourage edible landscapes.	X		
13. Continue to promote farmer's markets.	X		
14. Continue to encourage and expand the use of community gardens.	X		
15. Continue to hold soup kitchens.	X		
16. Continue to support food pantries.	X		
17. Provide educational materials, workshops, newsletter articles, etc. to inform the public about sustainable food production, benefits and storage.	X		

Possible Indicators (Food Security):

- Number of Farmer's Markets
- Frequency of Farmer's Markets being held
- Number of organic farmers in the area from year to year
- Number of additions of farmers added to the resource list
- Number of community gardens from year to year
- Number attending soup kitchens
- Number participating in the food pantries
- Amount of public /private transportation available for access to food sources
- Amount of barriers to influence people use of community food source
(inconvenient hours, poor customer service, lack of information, stigma,
distance to resources, and insufficient food available)

Resource Management

(Reduce, Reuse, Recovery, Recycling, Compost,
Reduce Pollutant Release)



Resource management refers to diverting waste from the landfill. That can be accomplished through practicing reduce, reuse, recycle, rethink, composting, mining for energy, etc. It also refers to protecting the air, water and soil from the release of pollutants.

Zero Waste means not only 100% recovery of society's discards, but also a redesign of the products and packaging of our lives such that everything produced for our consumer economy is non-toxic and designed to be recovered for re-use, recycling or composting.

"The future will be green, or not at all. This truth lies at the heart of humankind's most pressing challenge: to learn to live in harmony with the Earth on a genuinely sustainable basis."

~Sir Jonathon Porritt

Area: Resource Management (Reduce, Reuse, Recovery, Recycling, Compost, Reduce Pollutant Release)

Goals:

1. Reduce the amount of waste being landfilled.
2. Create new jobs and business opportunities by using wastes as resources.
3. Strive to be zero waste by 2030.
4. Continue to encourage reduce, reuse, recycle, rethink (in that order).
5. Identify and mitigate pollutant releases.

Strategies (Resource Management)	2012	2020	2030
1. Develop a Pay-As-You-Throw Plan.		X	
2. Continue to encourage curbside recycling.	X		
3. Have recycling available at community events.	X		
4. Expand the placement of recycle bins in all city owned facilities.	X		
5. Continue education process to inform the community how and where to recycle.	X		
6. Continue recycling programs in the schools.	X		
7. Compost food materials.		X	
8. Continue to host an open house at the landfill.	X		
9. Continue school field trips to the landfill.	X		
10. Encourage development of recovery business (ex. Construction & demolition of building materials, etc.)	X		
11. Continue proclamation or letter from mayors encouraging recycling.	X		
12. Ban the use of plastic bags in the cities.		X	
13. Educate residents and businesses about green office practices that include double side copying, changing margins, electronic versions, etc.	X		
14. Identify materials and educate public of products that can be reused.	X		
15. Landfill zero waste.			X
16. Continue to track and publish the amount of waste diverted from the landfill.	X		
17. Encourage community garage sale/flea market.	X		

18. Educate public on proper pharmaceutical disposal	X		
19. Year-around disposal facilities for everything (pharmaceutical, electronics, etc)	X		

Indicators (Resource Management):

- Landfilled data compared annually
- Recycled data compared annually
- Amount of compost generated
- Number of garage sales annually
- Amount of packaging in purchased products
- Number of recycle containers located in the community
- Number of businesses participating in a recycling program on annual basis
- Number of whole school recycling programs
- Number of mini grants requested from Keep America Beautiful for trash pick up
- Amount of recycling during annual recycling events – electronics, medications, paints, etc.
- Number of curb-side recycling households in Tri-Cities

Sustainable Community Development

(Green Space, Brownfield Redevelopment)



Sustainable community development takes into account redeveloping brownfields, creating and protecting green spaces, designing walkable communities, protecting natural ecosystems, and limiting urban sprawl.

*"Suburbia is where the developer bulldozes out the trees, then names the streets after them."
~Bill Vaughn*

Area: Sustainable Community Development (Green Space, Brownfield Redevelopment)

Goals:

1. Continue to upgrade and expand the green infrastructure of the communities.
2. Protect the natural services provided by natural systems (wetlands, pollution control, etc).
3. Plan land development and land conservation together so it is consistent with natural environmental patterns.
4. Provide space to participate in healthy activity for the public.
5. Develop a policy to balance environmental and economic factors in the community.
6. Plan and design green spaces to provide linkage to other community components.

Strategies (Sustainable Community Development)	2012	2020	2030
1. Improve the marketability and resale of homes and businesses in the community that are near a green space.	X		
2. Encourage physical activities such as bicycling, walking in natural areas, etc. to combat public health problems such as obesity.	X		
3. Protect natural systems to provide flood control, stormwater management and filtration of pollutants.	X		
4. Reclaim disturbed areas along roadways to their natural state.	X		
5. Conserve local natural ecosystems to protect biodiversity.	X		

Possible Indicators (Sustainable Community Development):

- Number of acres of greenspace
- Number of acres of Brownfield Redevelopment
- Number of Brownfields
- Number of acres reclaimed for animal and plant biodiversity (native)
- Wildlife habitat restoration programs
- Rare species identified in community
- Wildlife endangered
- Population perceiving pollution as a priority
- Metro area that is open space
- Residences per acre in community 1970 vs 2009 (Change in the residential density)
- Suburban residences per acre in community
- Distribution of acres of land per capita for different land uses (Diversity of land use in the community by distribution)

- Rate of development occurring within urban area
- Miles of adopted highway and litter bags collected per mile
- Acres multipurpose land available for recreation
- Acres of wilderness versus acres of public land
- Acres parks and protected land per capita
- Recreational trail miles
- Public park acreage per 1000 population
- Number of acres of wetlands 1970 vs 2009

Water Quality



*“Our use of water in all aspects of our lives has a direct impact on the rivers and wetlands...We cannot expect our environment to provide a constantly increasing supply of water.”
Dr David King, Director of Water Management, Environment Agency (2006)*

Area: Water Quality

Goals:

1. Conserve water quantity.
2. Reduce negative impacts of storm water and waste water discharge.
3. Continue to manage and maintain water quality.
4. Continue to educate the residents about efficient water conservation practices.
5. Improve and preserve existing natural ecosystems. (flora, fauna, soil, water, air)

Strategies (Water Quality)	2012	2020	2030
1. Incorporate proper water conservation practices.	X		
2. Promote installation of rain gardens, barrow pits, French drains, permeable surfaces etc. to prevent runoff of storm water.	X		
3. Remove snow to areas that can benefit from the moisture.		X	
4. Continue to use xeriscaping to plant drought-tolerant and native plants in city landscapes.	X		
5. Continue to install signage to help educate the public.	X		
6. Continue to install meters in the Tri-City community.	X		
7. Prevent storm water pollution before it enters the waterways.	X		
8. Restore and protect wetlands.	X		
9. Continue to educate the public about water quality and conservation through, PSAs, newsletters, workshops, etc.	X		
10. Develop a grey water system for irrigation of landscape.			X
11. Continue to maintain all water fixtures in the city to prevent leakage and contamination.	X		
12. Review policies and ordinances to guarantee they encourage water conservation techniques.	X		
13. Continue to guard against point and non-point pollution of storm water.	X		
14. Continue to report annually the use of water by the city and residents.	X		
15. Encourage the installation of low-flow fixtures.	X		
16. Provide residents with the ability to use non-potable water in their irrigation of landscapes.		X	

Possible indicators (Water Quality):

- Water quality sample results
- Water usage amounts measured and recorded
- Number of native green spaces in the communities
- Number and types of educational programs conducted annually
- Number of participants who attend/receive educational information
- Number of educational opportunities on storm water returns
- Number of attendees at workshops, conferences, etc. relating to water conservation issues

DISCUSSIONS within TCSP team and among invited guests,
department supervisors, etc

<i>Alternative Transportation</i> - Discussion within TCSP team and among invited guests, department supervisors, etc	
What we have	What we need
<ul style="list-style-type: none"> • Bicycle/pedestrian pathway for recreation and exercise easily accessible to part of the community • All city offices, post office and library are consolidated into one area in Gering. • Some proposed development in place to accommodate alternative transportation (Unzicker's PUD) • Some public transportation in place (handi-bus, etc.) • Zoning is already in place • County Facilities in Gering • Zoning density already at Gering Library, Post Office, City Administrative Services, County Courthouse & Administration Building is two (2) blocks away. • Alternative Transportation from United Way survey, for all transportation needs in communities, proposal for Alt.Trans. Director in works. 	<ul style="list-style-type: none"> • Equitable access to pathway for all citizens of the community • Designated bike/pedestrian routes on the streets • Gering needs a grocery store and variety store. • Update the current plan • Update and connect modes of alternative transportation with the communities to connect the three communities. • Educate to change attitudes and behaviors to use alternative transportation versus driving. • Educate staff, councils, administration, boards and commissions on commonality of alternative transportation goals • Create pathways to provide connections • Mark pathways with GPS locations to be used for emergency response • Design pathways to meet the regulations for size • Although zoning is in place, ask developers to change attitudes to plan smaller lots with more housing density versus sprawl • Educate the public to accept density housing in neighborhoods.

Built Environment - Discussion within TCSP team and among invited guests, department supervisors, etc

What we have	What we need
<ul style="list-style-type: none"> • City parks located in different neighborhoods in the cities • Haskell's (Terry's) Lake • Natural prairie surrounding the Monument • Several businesses investigating green building • Removal of invasive species • Riverfront Development • Arboretums • Remodeling / New facilities (private / public) 	<ul style="list-style-type: none"> • Implement Parks and Recreation Master Plan which includes green infrastructure • Develop an inventory and restoration/management plan for the communities' natural open spaces. • Implement a policy requiring LEED Silver certification or an equivalent certification for all new city-owned buildings • Work with community partners and adopt LEED type rating program for new and retrofit commercial and residential single family, multi-family and neighborhood development. • Plan for development of walkable community • More lower income housing

Community Health & Safety - Discussion within TCSP team and among invited guests, department supervisors, etc

What we have	What we need
<ul style="list-style-type: none"> • Wellness program • Annual art festival • Featured artists • Cultural celebrations • Rehabilitation of some housing • Ergonomic chairs purchased for staff • Safe Routes to Schools program awarded • Tree City USA • Work on indoor air quality • Lighting changed (for lighting efficiency and pollution reduction) • Child car seat check • Bicycle rodeo • League of Bicycles – education to ride in traffic, etc. • Grants for pathways • Bicycle recycling so others can have and ride bikes • Public Health Committee of professionals promoting public health • Fire Prevention Week in schools and community • Pandemic Flu Committee • Emergency Management coordinator • NRD – regional hazard mitigation • Schools have written safety plans • Local Emergency Operations Plan • Community Emergency Response Team • Amber Alert • Code Red • Red Cross • CPR training • Resource officer available in Scottsbluff • Life Line Alert • Capstone • Court Appointed Special Advocacy (children) • Native American Center • Youth shelter <p><i>(continued)</i></p> <ul style="list-style-type: none"> • Panhandle Community Services 	<ul style="list-style-type: none"> • More tolerance of diversity • More opportunities to explore the arts • More access to dental care for needy families • Green cleaning products • Address puncture vine infestation along bicycle paths • Safety academy for college • Community Treatment Center • Self-defense classes available on a regular basis • Resource officer in schools • Policy Academy • Education available for teens about dating, sexual assault, domestic violence, etc. • Sweat lodge available in the area • Parenting classes • Railroad crossing training in schools • Motorcycle safety – more than basics • Motorcycle patrol established by 2010 • Co-location of police departments • Combining of police departments, Emergency Management System, fire, building inspectors, etc. (2030) • Proactive stance on drug problems (mental help to prevent wanting an escape) • Funding for court systems that have proven to be successful • Encourage schools, youth groups and students to participate in service learning • Advertise information about youth groups in the area (ex. Boy Scouts, Girl Scouts, 4-H, etc.)

<p>educational programs</p> <ul style="list-style-type: none">• Educational programs for the mentally ill such as the Hart Program• Courts with a success rate such as Family Court, Drug Court, etc.• Diversion program for traffic and drug offenses• Workforce – youth qualify based on income to work in the public or private sector to learn job skills	
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Economic Development - Discussion within TCSP team and among invited guests, department supervisors, etc

What we have	What we need
<ul style="list-style-type: none"> • Agriculture-based economy • Tourism (ex. Trails, Fossil Freeway, landmarks, etc.) • Manufacturing • Natural resources • Training opportunities • Workforce • Symposiums and workshops on sustainability topics • Alternative crops • Ethanol plant • Brownfield Redevelopment work 	<ul style="list-style-type: none"> • More information and opportunity for organic farming • Continue to promote and market agricultural products and opportunities • More information and opportunity for eco-tourism • More opportunities to “experience” for the visitor (tourism) • More training to frontline employees on local tourism • Educational opportunities for workforce in green collar jobs • More community participation in sustainability educational opportunities • Provide incentives to companies coming to our communities that practice natural resource conservation • More long-term planning for Brownfield redevelopment • Listing of businesses who produce, sell and use sustainability practices • Countywide recycling center • Deconstruction recycling • • More education about green construction • Need to find out if existing businesses have needs • More transparency whenever possible • Current demographics • Increased community self-reliance • More concern and care for natural resources • Training and opportunities for more entrepreneurship

Educate/train staff and Community about Sustainable Practices -
 Discussion within TCSP team and among invited guests,
 department supervisors, etc

What we have	What we need
<ul style="list-style-type: none"> • A city newsletter • Annual symposium and some workshops • Buffalo grass signs • Newsletter for employees • Orientation for new employees • Recycle containers in visible locations • Mandatory staff meetings 	<ul style="list-style-type: none"> • More education on how to be sustainable in the community • City employees continue to take a lead and model sustainability practices. • City departments educate the public on existing sustainable practices • Training and certification/degrees for sustainable jobs • Webpage detailing sustainability tips, practices and training opportunities • Training for businesses on how to be sustainable • During orientation, include sustainability training • Signage to indicate sustainability practices in place • All agendas, newsletters, request for proposals, etc. to include the sustainability mission statement • Ask the question – how does this transaction meet the guidelines for sustainability • Incorporate sustainable information/tips in employee newsletter • Include sustainability tip on bottom of city utility bill • Include sustainability articles frequently in the Gering Citizen • Include sustainability topics in mandatory staff meetings

**Energy - Discussion within TCSP team and among invited guests,
department supervisors, etc**

What we have	What we need
<ul style="list-style-type: none"> • LED light bulbs installed in Civic Center • Crosswalk lights changed to LED • Lighting changed in city buildings to t-8 fluorescent (City hall, library, offices, shop, etc.) • Street lights converted to 240 volt with flat lens for light pollution reduction • Replaced lights at Diamond 1 at ball diamond to save energy and prevent light pollution • Gering – has 7 substations but has 1 offline to conserve energy • Receive 6% of energy through wind farm at Kimball – Gering • Scottsbluff – traffic signals are LED • Have a load management system in place to provide baseline • (NPPD) Cooling System Tune-up program for air conditioners, air and water source heat pumps for residents • (NPPD) Energy Star Window A/C program provide incentive to purchase Energy Star window air conditioner • (NPPD) Premium Efficiency Motors program provides incentive to purchase premium efficiency motors from 1 – 200 HP • (NPPD) Variable Frequency Drives program provides incentives for the purchase of variable frequency drives from 1-200 HP, for commercial and industrial customers • Terrytown – bought CFL’s for housing apartments • Terrytown – replace appliances with Energy Star • Terrytown – motion sensors in rooms • Terrytown – replaced lights in shop, Carpenter Center 	<ul style="list-style-type: none"> • Incorporate renewable energy (wind, solar, etc.) production into our energy source • Provide renewable energy infrastructure • Incorporate energy saving habits into the daily operations of the cities at all levels • Serve as a model to the residents • Continue to conduct an energy audit to update a baseline • Motion activated sensors installed in public restrooms • Continue to convert street lights to 240 volts with flat lens • Replace street lights to LED in next ten years • Funding to replace street lights with LED • Communication to the public indicating energy saving measures and cost savings that city is/has implemented • Wind energy to be less expensive • Beneficial if hydropower could be included in green energy • More efficiency in wind power • Need infrastructure updated for renewable energy • Conversion to step up voltage • Provide incentives for energy conservation measures which would serve as a model to others to be more proactive

<i>Food Security</i> - Discussion within TCSP team and among invited guests, department supervisors, etc	
What we have	What we need
<ul style="list-style-type: none"> • Community gardens • Farmer's Markets • Some producers of organic foods • Soup kitchens • Food pantries • Local business selling organic and natural food products • Local producers selling produce (ex. Eggs, chickens, sweet corn, etc.) 	<ul style="list-style-type: none"> • Policies and ordinances to support the growing of foods in the urban setting. • Education about the benefits from eating organically grown foods • Availability to purchase a selection of organic foods • Education about producing organic foods • Resource list of places to purchase organic foods • Education and promotion to purchase locally grown foods • Education about safely storing food • Education about becoming self-sufficient • Ordinances and policies to allow for self-sufficiency • Develop a food coop • Grocery store needed • Technology to grow produce in winter months (ex. Hot beds, etc.) • Availability of locally grown cream, milk, eggs, etc. • A network or organization of local producers • Advertise what organic foods are available, when and where • Relocation of dairies in the community

<i>Resource Management (Reduce, Reuse, Recovery, Recycling, Compost, Reduce Pollutant Release)</i> - Discussion within TCSP team and among invited guests, department supervisors, etc	
What we have	What we need
<ul style="list-style-type: none"> • Recycling bins at specific locations • Education programs for youth on recycling • Limited curbside collection for fee • Annual collection such as medications, electronics, etc. 	<ul style="list-style-type: none"> • Easier method of recycling • More education on how and where to recycle • Better understanding of reduce, reuse, recycle in that order • Recycling bins at community events and city facilities • Year-around recycling of electronics, etc • Year-around disposal of all products (pharmaceuticals, etc)

Sustainable Community Development (Green Space, Brownfield Redevelopment) - Discussion within TCSP team and among invited guests, department supervisors, etc

What we have	What we need
<ul style="list-style-type: none"> • Pathway to monument • Dike in Terrytown along the river • Terry’s Lake • Buffalo Grass planted in low traffic areas (golf course, RV Park, islands at intersections, cemetery) • Xeriscaping at Civic Center • Cemetery – water deficient trial plot, study conducted with UNL, 3-5 year study • Buffalo Grass rebate program for homeowners • Tree Rebate program for home owners • Northfield Arboretum – part is natural and part landscaped, native species/biodiversity • Tree windbreak/concealment near 10th Street 	<ul style="list-style-type: none"> • Schools to convert large grassed areas that do not have foot traffic to Buffalo Grass • Build addition to existing pathway to the south ending at the Robidoux RV Park • Update control system for watering so it is computer controlled • Update the older section of irrigating at the golf course so it has variable speed much like the new section has • Terrytown – continue the process of updating pumps

Water Quality - Discussion within TCSP team and among invited guests, department supervisors, etc

What we have	What we need
<ul style="list-style-type: none"> • Some buffalo grass programs to replace turf • Some xeriscaping – Civic Center, Carpenter Center, some businesses, etc. • Grass test plots in Westlawn Cemetery • Regular monitoring of water quality • Terrytown – xeriscaping in front of housing authority and Carpenter Center • Terrytown – low flow toilets • Terrytown – high efficient water pumps • Water management – irrigation wells used to water grass, not treated water • Supplement to city newsletter about water quality • Employ professional water staff at the city level • UNL – irrigation division expertise available • Gering – although does not have MS4 Permit, it does several techniques described in plan • Replenishing MS4 Permit water back to waterways • Street sweeper used to improve water quality • Metering done in Gering and Scottsbluff with Terrytown to soon have meters 	<ul style="list-style-type: none"> • Rain gardens, barrow pits, permeable surfaces, etc. to prevent runoff • Less turf, more native plants and buffalo grass/grama grass, etc. • More xeriscaping • More education for residents on proper irrigating techniques, soil testing, limit fertilization • Curb design to prevent stormwater runoff • Metering for Terrytown • Treat storm water before it enters waterways • Restore and protect wetlands • Develop drainage swales

Sustainability Terms

Majority of terms fostering environmental education were gathered from the Frostburg State University's website and its "Learning Green, Living Green" sustainability initiative.

www.frostburg.edu/lglg/index.htm

The information on this page is gathered from various sources including: the Environmental Protection Agency, Clean Air-Cool Planet, National Health Council, the Natural Resource Defense Council, the University Corporation for Atmospheric Research, the International Organization for Standardization, the Association of New Jersey Environmental Commission, the National Oceanic & Atmospheric Association, and Carbonfund.org. To view a comprehensive listing of environmental terms, acronyms, and abbreviations developed by the U.S. Environmental Protection Agency, go to: <http://www.epa.gov/OCEPAterms>

A - D

Aerosol - Particulate matter, solid or liquid, larger than a molecule but small enough to remain suspended in the atmosphere. Natural sources can include salt, dust, or clay particles that are carried by the wind. Aerosols can also originate as a result of human activities and are often considered pollutants.

Afforestation - The process of planting trees on land that is not a forest, or has not been a forest for a long period of time.

Alternative energy - Energy derived from nontraditional sources such as natural gas, solar, hydroelectric, wind.

Anthropogenic - of, relating to, or resulting from the influence of human beings on nature

Atmosphere - A mixture of gases surrounding the Earth. By volume, the Earth's atmosphere consists of about 79 percent nitrogen, 21 percent oxygen, less than one percent carbon, and other trace gases.

Atmospheric lifetime - The approximate amount of time it would take for an atmospheric pollutant concentration to return to its natural level (assuming emissions cease) as a result of being converted to another chemical compound or being taken out of the atmosphere via a carbon sink.

Baseline emissions - The emissions that would occur without policy intervention. Baseline estimates are needed to determine the effectiveness of emissions reduction programs.

Bio-fuel - Gas or liquid fuel made from plant material. Includes wood, wood waste, wood liquors, peat, wood sludge, and spent sulfite liquors.

Biomass - Total dry weight of all living organisms that can be supported at each tropic level in the food chain. Also, materials that are biological in origin, including organic material from above or below ground.

Brownfield - an industrial or commercial site that is idle or underused because of real or perceived environmental pollution.

Carbon capture and storage - An artificial form of sequestration that prevents carbon emissions by capturing the gases and either chemically changing them or diverting them underground or in deep ocean water.

Carbon dioxide equivalent - A measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP). The CO2 equivalent is commonly expressed as million metric tons of CO2, and is derived by multiplying the tons of the gas by the associated GWP.

Carbon footprint - The total amount of carbon dioxide (CO2) and other greenhouse gases emitted over the full life cycle of a person, product, or service. Similar to GHG emissions inventory.

Carbon offset - The act of mitigating ("offsetting") greenhouse gas emissions. An example of this is planting trees to compensate for emissions generated through personal air travel.

Carbon sequestration - The removal and storage of carbon from the atmosphere in carbon sinks (such as oceans, forests or soils) through physical or biological processes, such as photosynthesis.

Carbon sink - A carbon reservoir that absorbs, rather than emits, carbon dioxide. The main natural sinks are oceans and plants that use photosynthesis.

Climate change - Commonly used to refer to all forms of climatic inconsistency; however, because the Earth's climate is never static, the term is more properly used to imply a significant change from one climatic condition to another.

Climate neutrality - Having no net greenhouse gas emissions. This can be achieved by minimizing emissions and using carbon offsets.

Cogeneration power - Production of two useful forms of energy such as high-temperature heat and electricity from the same process.

Compost - Partially decomposed organic plant and animal matter that can be used as a soil conditioner or fertilizer.

Deforestation - The conversion of forested areas to non-forest land for urban development, arable land, pasture, logging, or wasteland.

De minimis emissions- Emissions from any source or group of sources, for one type of gas or several gases, which when summed, are materially insignificant (less than 5 percent of the total).

E - H

Eco-industrial park (EIP) - is an industrial park in which businesses cooperate with each other and with the local community in an attempt to reduce waste and pollution, efficiently share resources (such as information, materials, water, energy, infrastructure, and natural resources), and help achieve sustainable development, with the intention of increasing economic gains and improving environmental quality. An EIP may also be planned, designed, and built in such a way that it makes it easier for businesses to cooperate, and that results in a more financially sound, environmentally friendly project

for the developer. The Eco-industrial Park Handbook states that "An Eco-Industrial Park is a community of manufacturing and service businesses located together on a common property. Members seek enhanced environmental, economic, and social performance through collaboration in managing environmental and resource issues."

Ecosystem - The complex system of plant, animal, fungal, and microorganism communities and their associated non-living environment interacting as an ecological unit.

Ecotourism - appeals to ecologically and socially conscious individuals. Generally speaking, it focuses on volunteering, personal growth and learning new ways to live on the planet. It typically involves travel to destinations where flora, fauna, and cultural heritage are the primary attractions. Ecotourism is a conceptual experience, enriching those who delve into researching and understanding the environment around them. It gives us insight into our impacts as human beings and also a greater appreciation of our own natural habitats. Responsible ecotourism includes programs that minimize the negative aspects of conventional tourism on the environment and enhance the cultural integrity of local people. Therefore, in addition to evaluating environmental and cultural factors, an integral part of ecotourism is the promotion of recycling, energy efficiency, water conservation and creation of economic opportunities for the local communities.

Emissions - The release of a substance into the atmosphere, usually a gas when referring to the subject of climate change.

Emissions trading - A government-created market to buy and sell greenhouse gas credits. Companies that generate less than the allowed emissions can sell credits allowing buyers to emit more gases than the cap allows.

Energy cap - A government-imposed limit on carbon emissions.

Energy efficiency - The ratio of the useful output of services from an article of industrial equipment to the energy use by such an article. An example would be vehicle miles traveled per gallon of fuel.

Flaring - The burning of waste gases through a flare stack or other device before releasing them to the air.

Fluidized bed combustion (FBC) - A process for burning coal more efficiently, cleanly, and cheaply. A stream of hot air is used to suspend a mixture of powdered coal and limestone during combustion. About 90 to 98 percent of the sulfur dioxide produced during combustion is removed by reaction with limestone to produce solid calcium sulfate.

Fossil fuels - Fuels containing carbon that can be burned to provide heat that can be used directly. They all contain carbon formed through geologic processes over hundreds of millions of years. These include coal, petroleum, and natural gas.

Fugitive emissions - Emissions that are not physically controlled but result from the intentional or unintentional release of greenhouse gases. They commonly arise from the production, processing, transmission, storage, and use of fuels and chemicals, often through joints, seals, packing, gaskets, etc.

Gasohol - Vehicle fuel consisting of a mixture of gasoline and ethyl or methyl alcohol.

General Circulation Model (GCM) - A global, three-dimensional computer model of the climate system which can be used to simulate human-induced climate change.

Geothermal power - Using heat from below the earth's surface to generate electricity with virtually no emissions.

Global warming - The progressive gradual rise of the earth's surface temperature thought to be caused by the greenhouse effect and responsible for changes in global climate patterns.

Global warming potential (GWP) - The index used to translate the level of emissions of various gases into a common measure in order to compare the relative radiative forcing of different gases without directly calculating the changes in atmospheric concentrations.

Greenhouse effect - The effect produced as greenhouse gases allow incoming solar radiation to pass through the Earth's atmosphere, but prevent part of the outgoing infrared radiation from the Earth's surface and lower atmosphere from escaping into outer space.

Greenhouse gas (GHG) - The six gases covered under the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydro fluorocarbons (HFCs), per fluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Greenhouse gas (GHG) emissions inventory - An entity's baseline quantification of GHG emissions, from which emissions reductions can be measured and progress towards climate neutrality can be tracked.

Green washing – The practice of making an unsubstantiated or misleading claim about the environmental benefits of a product, service, technology or company practice.

High Performance Builder –Engineers, Architects, Builders, Consultants, Planners, etc., who understand the value of building certified facilities and can have them built with certification of a high performance building.

High Performance Building - Facilities built with a focus of the triple bottom line (affects on people, profit and planet), with reduced impacts from materials and resources used for reduced life cycle costs, maximizing health and environmental performance across a wide range of measures from energy savings to habitat protection. Best building examples are independently certified by 3rd party to have met or exceeded levels of performance in design, construction and operation of a facility.

High Performance Products – Products that are non-toxic may carry the Green Seal, are produced locally or regionally from quick renewable sources, and have a high sustainability value.

Hydrogen cell - An energy conversion device that can efficiently capture and use hydrogen to generate pollution-free power for a variety of applications.

Hydropower - Electrical energy produced by falling or flowing water.

I - P

Intergovernmental Panel on Climate Change (IPCC) - Established by the United Nations Environmental Programme and the World Meteorological Organization, this panel assesses scientific, technical and socioeconomic information relevant for the understanding of climate change, its potential impacts and options for adaptation and mitigation.

International Organization for Standardization (ISO) - The world's largest developer and publisher of International Standards. ISO is a non-governmental organization with a network of national standards institutes with membership in 157 countries. In particular, ISO 14044 specifies requirements and provides guidelines for life cycle assessment.

Irreversibility - A change that cannot be reversed once it is set in motion, , at least on human time scales.

Kyoto Protocol - Adopted at the Third Session of the Conference of the Parties (COP) to the UN Framework Convention on Climate Change (UNFCCC) in 1997 in Kyoto, Japan. Country signatories to the Protocol agreed to reduce greenhouse gas emissions by at least 5 percent below 1990 levels in the commitment period 2008 to 2012.

Landfill - Land waste disposal site in which waste is generally spread in thin layers, compacted, and covered with a fresh layer of soil regularly.

Leadership in Energy & Environmental Design (LEED) certification - The nationally accepted benchmark for the design, construction, and operation of high performance green buildings, by the US Green Building Council.

Life cycle assessment (LCA) - The assessment of the environmental impact of a given product or service throughout its life span.

Methane (CH₄) - A greenhouse gas hydrocarbon that is produced through anaerobic decomposition of waste in landfills, animal digestion, decomposition of animal wastes, production and distribution of natural gas, and incomplete fossil fuel combustion.

Montreal Protocol - The Montreal Protocol and its amendments control the phase-out of ozone depleting substances production and use. In the United States, the Protocol is implemented under the Clean Air Act Amendments of 1990.

National Oceanic & Atmospheric Association (NOAA) - An agency within the US Department of Commerce that provides environmental information relevant to economic vitality. This includes daily weather forecasts, severe storm warnings, climate monitoring for fisheries management, coastal restoration, and support of marine commerce.

Natural gas - Underground deposits of gases consisting of 50 to 90 percent methane and small amounts of heavier gaseous hydrocarbon compounds such as propane and butane.

Non-point source - Large land areas such as a crop fields or urban areas that discharge pollutants into surface and underground water over a large area.

Nuclear energy - Energy released when atomic nuclei undergo a nuclear reaction such as the spontaneous emission of radioactivity, nuclear fission, or nuclear fusion.

Ozone - A colorless gas (O₃) found in the atmosphere, stratosphere, and troposphere which provides a protective layer shielding the Earth from UV radiation.

Ozone depleting substance (ODS)- A family of man-made compounds that includes, but is not limited to, chlorofluorocarbons (CFCs), bromo-fluorocarbons (halons), methyl chloroform, carbon tetrachloride, methyl bromide, and hydro chlorofluorocarbons (HCFCs). These compounds have been shown to deplete stratospheric ozone.

Particulate matter - Solid particles or liquid droplets suspended or carried in the air. Examples include soot, dust, fumes, and mist.

Petroleum - A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oils, natural gas liquids, and finished petroleum products.

Photovoltaic energy - Energy radiated by the sun as electromagnetic waves that is converted into electricity or useable heat.

Point source - A single identifiable source that discharges pollutants into the environment. Examples include smokestacks, sewers, ditches, or pipes.

Pollution - A change in the physical, chemical, or biological characteristics of the air, water, or soil that can affect the health, survival, or activities of organisms in an unwanted way.

Power purchase agreement - A long-term agreement to buy power from a company that produces electricity. Traditionally refers to the purchase of electricity from a power plant. Can also include renewable energy purchases.

R - Z

Recycling - Collecting and reprocessing a resource so it can be used again.

Reforestation - The process of replanting native trees in areas that were once considered forests, but have since been deforested.

Renewable energy - Energy obtained from sources that are essentially inexhaustible, unlike, for example, the fossil fuels, of which there is a finite supply. Renewable sources include wood, waste, geothermal, wind, photovoltaic, and solar thermal.

Sink - A reservoir that uptakes a chemical element or compound from another part of its cycle. For example, soil and trees tend to act as natural sinks for carbon.

Solar energy - Direct radiant energy from the sun, producing no emissions.

Source - Any process or activity that releases a greenhouse gas, an aerosol, or a precursor of a greenhouse gas into the atmosphere.

Sulfur dioxide (SO₂) - A compound composed of sulfur and oxygen molecules. Once emitted into the atmosphere, SO₂ is changed to sulfate aerosols and often results in acid rain.

Sustainability - Meeting our needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable development - Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Terrestrial - Pertaining to land.

Trace gas - Any one of the less common gases found in the Earth's atmosphere. Includes carbon dioxide, water vapor, methane, nitrogen oxides, ozone, and ammonia. Although relatively unimportant in terms of their absolute volume, trace gases have significant effects on the Earth's weather and climate.

Triple Bottom Line - (abbreviated as "TBL" or "3BL", and also known as "people, planet, profit" or "the three pillars") captures an expanded spectrum of values and criteria for measuring organizational (and societal) success: economic, ecological and social. With the ratification of the United Nations and ICLEI TBL standard for urban and community accounting in early 2007, this became the dominant approach to public sector full cost accounting. Similar UN standards apply to natural capital and human capital measurement to assist in measurements required by TBL, e.g. the ecoBudget standard for reporting ecological footprint.

Ultraviolet radiation (UV) - A portion of the electromagnetic spectrum with wavelengths shorter than visible sight. Shorter wavelength radiation has a greater potential to cause biological damage on living organisms.

United Nations Framework Convention on Climate Change (UNFCC) - The international treaty unveiled in 1992 that commits signatory countries to stabilize anthropogenic greenhouse gas emissions.

Volatile organic compounds (VOCs) - Organic compounds that evaporate readily into the atmosphere at normal temperatures. VOCs contribute significantly to smog production and certain health problems.

Wind energy - Turbines, similar to windmills, capture and convert the natural power of the wind into electricity without producing any emissions.

Wood energy - Wood and wood products used as fuel, including cordwood, limb wood, wood chips, bark, sawdust, forest residues, and charcoal.

References

Sources used in this plan include the **Intergovernmental Panel of Climate Change**, the leading body for the assessment of climate change, established by the [United Nations Environment Programme](#) (UNEP) and the [World Meteorological Organization](#) (WMO) to provide the world with a clear scientific view on the current state of climate change and its potential environmental and socio-economic consequences. IPCC website is www.ipcc.ch

Community Sustainability Assessment(CSA) tool used by the Tri-Cities Sustainability Plan development team was developed by the Global Ecovillage Network. www.gaia.org

Environmental consulting provided through [Foth Companies](#). Foth is recommended for future consultation if needed in regard to this Tri-City Sustainability Plan (TCSP). Foth has previously provided sustainability assistance to the TCSP development, and has knowledge of the history and progression of the TCSP. <http://climateaudit.org/>

<u>City Green/Sustainable Programs used in TCSP development:</u>		
Albuquerque, NM (albuquerquegreen)	Boulder, CO	Casper, WY (pdf)
Colorado Springs, CO	Denver, CO (GreenprintDenver)	Dallas, TX - specific Green Building Pgm specific - Ordinance Requirements
Durango, CO	Ft.Collins, CO	Grand Rapids, MI (pdf)
Greensburg, KS (Greensburg Master Plan in PDF)	La Crosse, MI	Lanark Highlands, CA
Minneapolis, MN	Palm Springs, CA (pdf)	Portland, OR
Redwood City, CA (pdf)	Sacramento, CA	San Francisco, CA
Sioux Falls, SD green program	Steam Boat Springs, CO	Telluride, Mountain Village, and San Miguel County, Colorado) New Community Coalition

Examples of initiatives at the state level throughout the United States (<http://clinton2.nara.gov/PCSD/Publications/suscomm/suscod.html>)

Sustainability Organizations, Resources, Support:

<u>Academy for Sustainable Communities</u>	<u>After School Alliance .org</u> – designing a sustainability plan	<u>Check List for a Green Community (EPA)</u>
<u>Climate Audit .org</u>	<u>Climate Institute .org</u>	<u>Community Planning .net</u>
<u>Community Sustainability Assessment</u>	<u>Copenhagen Consensus .com</u>	<u>Earth911 .com</u>
<u>Earth Easy .com</u>	<u>Ecovillage Network of the Americas</u>	<u>EPA -Energy Star, Building Design Profile</u>
<u>Facing the Future .org</u>	<u>Green Buildings + Neighborhoods</u> (for local Governments)	<u>Global Sustainable Centers Sustainable Cities</u>
<u>How to make a Community Green (EPA)</u>	<u>ICLEI-Local Governments for Sustainability</u> (International Council for Local Environmental Initiatives)	<u>Institute for Environmental Solutions</u> (Denver www.i4es.org)
<u>Institute for Sustainable Communities</u>	<u>Integrated Community Sustainability Planning Tool</u> by Drs. Chris Ling, Ann Dale, Kevin Hanna - Royal Roads University	<u>Joslyn Castle Institute</u> -(Joslyn Institute for Sustainable Communities – <u>Ecospheres.com</u>)
<u>Local Government Environmental Assistance Network</u>	<u>Mayor Council (US) Climate Protection</u> , best practices 2007 (pdf) <u>National Summit on Energy & the Environment</u> , May, 2006 (pdf)	<u>Measurements and Assessments</u> (by the <u>International Institute for Sustainable Development</u>)
<u>Mid-America Regional Council (MARC .org)</u>	<u>Millennium Ecosystem Assessment</u>	<u>National Trends / Prospectives for High-performance Green Buildings</u> (pdf)
<u>(the) Natural Step</u>	<u>Nebraska Energy Office</u>	<u>New Home Construction</u> (Nebraska Energy Office)
<u>Nebraska Sustainability Leadership Workshop</u>	<u>Planet Green</u>	<u>Planning for a Sustainable Future</u>
<u>Planning for People, why sustainability</u>	<u>Recycling and Other Complementary Programs</u> (EPA)	<u>Recycle Works .org</u> (San Mateo County, CA)
<u>Redefining Progress</u>	<u>Redirect Guide .com</u>	<u>Resources for Sustainability</u>

ScoreCard (Health risks, exposures, emissions)	Smart Community Network 10 Steps to Sustainability	Sustainability Institute
Sustainable Communities Capacity Center (Wisconsin)	Sustainable Measures	Toolkit for State and Local Government (pdf)
US Green Building Council	US Mayors Climate Protection Center	US Mayors Mainstreet Economic Recovery (Omaha)
What are Sustainable Communities?		Zero waste by EcoCycle .org

<u>Articles:</u>		
Dr. Albert Bartlett: Arithmetic, Population and Energy	Changing Direction Toward Sustainable Culture - Operation Fresh Start	Developing Sustainable Communities: The Future Is Now
FreshStart .ncat. org	Global Issues Mobile	Light pollution can affect the Environment (articles)
Plants: Pros and Cons – Aerias Air Quality Sciences, IAQ Resource Center	Sustainability (pdf) by Johnson Control	Turning Out the Lights (USNews)

<u>Tools - Carbon Footprinting:</u>		
Carbon Footprint calculators (Univ. of Arkansas)	Climate Action Toolkit (Campus Carbon Calculator) Clean Air - Cool Planet .org	Local Governments for Sustainability - Carbon Footprint
Green House Gas Calculator - (EPA)	Green House Gas Protocol .org	My Footprint .org
	Seattle Climate Partnership Tools & Resources	

<u>Other references utilized from the following (not exclusive):</u>		
25 ways to save water at home	Appreciative Inquiry (positive change. Org)	Bristol City Council – sustainable community tips
Building Sustainable Communities	Business Barometer - Scottsbluff/Gering	Car sharing
City of Scottsbluff demographics / schools / etc	“Collapse” – book by Jarred Diamond	Construction / Demolition (EPA)

Consumption of Energy	“Cradle to Cradle” – book by William McDonough & Michael Braungart	Creating an Effective Plan for Your Sustainability Efforts
Crime Rate Statistics - Scottsbluff	Earthworks2010.com	Energy Efficient Appliances
Energy Efficient Heating	Four Conditions for Sustainability or "System Conditions" (Natural Step Framework's)	Fuel Efficient Driving
Gering ancestry, family history, etc	Gering Water Quality Report, housing, etc	Greenfield Community College Sustainability Plan
“Green Source” – The Magazine of Sustainable Design	How “Green is Your Main Street?” MainStreet News	Hybrid Cars
“Inquiries into the Nature of Slow Money” – book by Woody Tasch	Institutional Sustainability Audit Sierra Club	Midwest Renewable Energy Association
Natural Cooling	Natural Insect Pest Control	Neighborhood Community Profiles - Gering
“The New Ecological Home, a Complete Guide to Green Building Options” – book by Daniel D. Chiras	Non-toxic home cleaning	“The Oil Depletion Protocol” – book by Richard Heinberg
Oregon State University Sustainability Plan	Plug-in cars	"RESUSCITATING A DYING WORLD" – By Edward Mazria Architecture 2030.org (the 2110 imperative)
Rocky Mountain Sustainable Living Fair	Scientific American - magazine	Simplify life
Sustainability: Science, Practice, Policy	Twin Cities development Association, Inc	Water facts, audit, etc
Why Perform a Sustainability Audit? - Sierra Club		“Why the Private Building Sector is Key to Economic Recovery” – By Edward Mazria Architecture 2030.org (the 2110 imperative)

Various other resources included local (Gering Citizen, StarHerald) and national newspapers, magazines, etc., were brought into meetings by team members for discussion and in support of the Tri-City Sustainability Plan throughout the course of the TCSP development.

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Summary of Tri-City Sustainability Assessment

By Lois /Al Herbel

Assessment Subtest	Strengths	Needs
<p>Ecological Checklist:</p> <p><u><i>Sense of Place</i></u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total Points: 8</p>	<p>Some – people connected with and living harmoniously in place they live</p> <p>Some – native plant and wildlife habitat in area</p> <p>Some are reclaimed when disturbed</p> <p>Flora species diversity increasing</p> <p>Community actively plans conservation of dwindling natural resources – sometimes to rarely</p> <p>Depth of humus increasing only in food production areas</p>	<p>Minority – knowledgeable of native plants & wildlife</p> <p>Fauna species diversity decreasing</p> <p>Soil, water, air quality worse over last year</p> <p>Noise pollution frequent</p> <p>Light pollution - sometimes</p> <p>Litter – frequent</p> <p>Depth of humus is not increasing yearly in bioregion, on most land within the community</p>
<p><u><i>Food Availability, Production & Distribution</i></u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total Points: 23</p>	<p>Sufficient food – available, accessible, affordable</p> <p>Surplus food is produced in community, bioregion</p> <p>Surplus food is stored for future use, sold, fed to animals</p>	<p>Estimated 12% food produced in community</p> <p>Estimated 25% obtained from local/bioregion food producers outside the community</p> <p>0% organically grown</p> <p>0% bioregional/traditional/indigenous crops</p> <p>Food must be brought in from outside bioregion</p> <p>Surplus food not donated, composted, & discarded as trash</p> <p>No greenhouse/roof or window gardens for year round food production</p> <p>Pesticides, herbicides, chemical fertilizers used in food production</p> <p>Food scraps are not donated, fed to animals or composted but are discarded as trash</p> <p>Seed source not from open pollinated seeds</p>

Assessment Subtest	Strengths	Needs
<p><u>Physical Infrastructure, Buildings & Transportation – ecological materials, methods & designs</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total Points: 19</p>	<p>Sufficient housing available locally</p> <p>Some – natural/recyclable building materials used</p> <p>Some – design and construction planning for long life/renewability</p> <p>Added points – basements in homes</p> <p>Some – retrofit of pre-existing building for sustainability/aesthetics</p> <p>Sometimes – car-pooling</p> <p>Sometimes – mass transit available for longer distance travel</p> <p>Other sustainable methods- taxi/handi-bus</p> <p>Sometimes – opportunities are sought to work at home vs. leaving the community to work</p>	<p>Few/none – recycled/reusable materials used in building material</p> <p>Few/none – building materials from own bioregion</p> <p>Few/none – building designed to minimize energy needs & harmonize with natural environment</p> <p>Few/none – natural/non-toxic insulation used</p> <p>Few/none – orientation of buildings (light & temp)</p> <p>Few/none – creation of favorable outdoor microclimates (planting to regulate indoor temperatures for comfort)</p> <p>Few/none – design to blend with environment (colors, materials, site selection, etc)</p> <p>Rarely – some form of honoring the earth used to connect with natural environment during community design, excavating or rearrangement of landscape, infrastructure development and community activities</p> <p>Rarely – community design done with permaculture or other whole system approach (earth, local flora and fauna, human needs included & respected in design)</p> <p>Inadequately – community is designed to minimize motor vehicle use in community (cluster of buildings, etc.)</p> <p>Sometimes – frequency required to travel outside community for their needs</p> <p>Rarely – trail systems used for transportation conservation methods</p> <p>Rarely- use of vehicles powered by clean, renewable energy sources</p> <p>Rarely – sharing of vehicles</p>

Assessment Subtest	Strengths	Needs
<p><u>Consumption Patterns & Solid Waste Management</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total Points: 15</p>	<p>Some – voluntarily reduce consumption of natural resources and generation of solid wastes on personal level</p> <p>Some share resources – equipment, tools, clothing</p> <p>Extra point – coop purchasing in schools</p> <p>Sometimes - Recycling: glass, plastic, aluminum, tin, etc.</p> <p>Extra point – Lyles family Christmas – nothing bought new, instead heirloom or hand-made</p>	<p>Few/none – shared facilities – kitchens, storage space, offices, etc.</p> <p>Few/none – bulk/cooperative buying</p> <p>Very little- extent community’s needs are met by local marketplaces</p> <p>Rarely – reuse</p> <p>Rarely – repair or make things vs. buy new</p> <p>Most – know location and method of managing trash in community, landfill site, etc</p>
<p><u>Water – sources, quality & use patterns</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total Points: 32</p>	<p>Some – know, respect and protect the community water source</p> <p>Water source & supply is local and plentiful/renewable, well</p> <p>Water is naturally clean – not treated, filtering not required</p> <p>Water is filtered to remove minor natural impurities</p> <p>Water is chemically treated with chlorine, bromine, iodine or fluorine</p> <p>Water storage is clean and healthy</p> <p>Sometimes – irrigation methods used to conserve water</p> <p>Sometimes – devices used to reduce amount of water used (faucet aerators, low flow shower heads, etc.)</p> <p>Sometimes – care and maintenance of plumbing to prevent/repair leaks</p> <p>Extra points – buffalo grass, water metering in place (farms, town), Experiment Station test plots)</p>	<p>Greywater not reused</p> <p>Water source and supply is not piped from great distance, imported, extremely inconvenient, from catchment, or springs or other waterways.</p> <p>Water is not treated with environmental & health friendly additives to balance ph or mineral imbalances, treated with chlorine, bromine, iodine or fluorine and then filtered/purified</p> <p>Rarely – minimize household use</p> <p>Rarely – xeriscaping used</p> <p>Rarely – use natural/non-toxic products (cleaning, gardening, household products, etc)</p>

Assessment Subtest	Strengths	Needs
<p><u>Waste Water & Water Pollution Management</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total Points: 20</p>	<p>Some – low flush toilets or standard toilets with toilet dams</p> <p>Some- know location and method of sewage treatment</p> <p>Waste water side effects/byproducts are neutral</p> <p>Quality of water leaving community is same as when it entered</p> <p>Systems are available to properly dispose of toxic substances – paint, oil, batteries</p> <p>Community members use these disposal systems</p>	<p>Little – composting toilets, dry toilets, constructed wetlands or living machine systems</p> <p>Regular flush toilets, no conservation methods</p> <p>Water pollution exists and is not being addressed</p>
<p><u>Energy Sources & Uses</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total Points: 15</p>	<p>Some – energy brought in from outside the community that is generated from renewable source</p> <p>Some – community members aware that some energy needs are met using non-renewable energy sources</p> <p>Most households use standard appliances with conservation practices or adaptations</p> <p>Natural gas, propane, bioregional wood or biomass or heat pumps provide water heating and space heating/cooling</p> <p>Extra point – energy conservation is considered in construction of community buildings as it relates to costs of operations, considerations for decreased daily operations expense</p> <p>Sometimes – consider energy conservation in design of community buildings</p> <p>Sometimes – household energy use is minimized through conservation practices & products (turn off power when not in use, timing devices, insulation of heat sources)</p> <p>Sometimes – regular care & maintenance of appliances & equipment</p> <p>Sometimes – regular care & maintenance of buildings (windows, doors, etc.)</p> <p>20-60% - use compact fluorescent lighting</p>	<p>Little – energy generated from renewable energy sources (wind, solar, hydro, biomass, geothermal)</p> <p>Energy conservation info & education is available but not well utilized by community members</p> <p>Cooking is mostly provided by electricity from non-renewable source</p> <p>Refrigeration is mostly provided for by electricity from non-renewable source</p> <p>Rarely – appliances & electronic equipment shared by community members</p> <p>Rarely – community members select energy efficient appliances, equipment and tools</p> <p>Rarely – on-demand energy systems used</p> <p>Rarely – natural lighting for indoor spaces used</p> <p>No surplus energy is generated from renewable sources within the community</p>

	Extra Points –energy conservation practices include heat pumps, motion sensors, power strips, passive solar)	
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Assessment Subtest	Strengths	Needs
<p>Social Checklist:</p> <p><u>Sense of Openness, Trust & Safety; Communal Space Place</u></p> <p>50+ Excellent progress toward sustainability 25-49 Good start toward sustainability 0-24 Actions are needed to undertake sustainability</p> <p>Total Points: 33</p>	<p>Some - have a basic sense of safety and trust within the community</p> <p>Most – community is safe environment for women</p> <p>Most - community is safe environment for children</p> <p>Occasional adult crimes</p> <p>Often - residents know and relate supportively to neighbors in the community</p> <p>Excellent indoor spaces for communal gatherings/activities</p> <p>Adequate outdoor spaces for communal gatherings/activities</p> <p>Frequency of social gatherings for whole community is weekly, monthly, seasonally, annually</p>	<p>Frequent - juvenile crimes in community</p> <p>Minimal - places available for youth gatherings and wholesome activities</p>
<p><u>Communication – the flow of ideas & information</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total Points: 38</p>	<p>Adequate – system to regularly share information, exchange ideas, announce needs</p> <p>Sometimes – community members use this system</p> <p>Communication systems used to announce social events, encourage discussion of important community decisions, provide opportunities to share resources, skills, transportation, etc., provide personal support at times when a community member is in need</p> <p>Sometimes – community members can meet and talk face to face</p> <p>Phone, fax, regular mail service Internet/e-mail are available in the community</p>	<p>Communication systems are not used and do not work well in the community when announcing group work activities, making information about past community decisions and policies available, uncensored exchange of ideas and discussion of values and visions.</p>

Assessment Subtest	Strengths	Needs
<p><u>Networking Outreach & Services – resource exchange (internal/external)</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total Points: 43</p>	<p>Information about the community is available for others in some form</p> <p>The community provides assistance/service to those in need in the community, bioregion, country/state, other parts of the world</p> <p>Sometimes – community members engage in service projects in the community</p> <p>Sometimes – community members engage in service projects in the bioregion</p> <p>Sometimes – community builds relations and exchanges information, resources, and support with other communities and related organizations</p>	<p>The community does not provide programs and services in sustainable living methods, technologies and/or businesses to the community or general public</p> <p>Very little – Community members engage in service projects nationally/internationally</p> <p>Very little – community service opportunities available for youth</p>
<p><u>Social Sustainability – diversity & tolerance; decision-making; conflict resolution</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total Points: 9</p>	<p>Some – community members value diversity and practice tolerance within the community</p> <p>Some – community members value diversity and practice tolerance outside the community</p> <p>Some – community has power of self-governance regarding community issues</p> <p>In par or sometimes – non-discriminatory method agreeable to the community is used for important community decisions and directions</p> <p>Sometimes – information about decision topics is available to all (transparency)</p> <p>Sometimes – any member of the community can attend decision making meetings</p> <p>Some – community members regularly participate in community governance and decision-making</p> <p>Some – community members would agree that decision-making system is successful in difficult</p>	<p>There is not a system for any adult member of the community to have input in decision making process</p> <p>There is not a system for children of the community to have input in the decision making process</p> <p>Information/training is not available in decision-making and mutual empowerment skills for adult community members</p> <p>Information/training is not available indecision-making and mutual empowerment skills for children community members</p> <p>Community members do not have easy access to conflict resolution system that is agreed upon, supportive, not punitive</p> <p>Information/training is not available in non-violent conflict resolution skills for adult community members</p>

	<p>decisions/situations</p> <p>Sometimes – social difficulties and disputes are successfully managed by an agreed upon system that is supportive, not punitive</p> <p>Information/training is available in non-violent conflict resolution skills for children in the community.</p> <p>Some – community members would agree that their conflict resolution system safeguards human rights</p> <p>Some – community members would agree that their conflict resolution system promotes equality and social justice</p>	<p>Few/none – community members would agree that their conflict resolution system is successful in dealing with difficult people/situations</p>
Assessment Subtest	Strengths	Needs
<p><u>Education</u></p> <p>50+ Excellent Progress toward Sustainability</p> <p>25-49 Good Start toward Sustainability</p> <p>0-24 Actions are needed to undertake Sustainability</p> <p>Total: 46</p>	<p>Mentoring, internships and/or apprenticeship is offered by those with special skills/expertise</p> <p>Community gatherings for information exchange and group learning are provided</p> <p>Parent involvement in their children’s educational process is evident</p> <p>Extra Points – distance learning, access to 4 year college education (Chadron State, UNL)</p> <p>Educational opportunities available and accessible within the community – early education, basic education, vocational/livelihood skills training, formal/higher education, special interest workshops/seminars/group programs, wholesome programs/activities for youth, outside of school, <i>extra point</i> – Adopt-A-School, symposiums, civic programs</p> <p>Education opportunities are available to all age groups in the community and bioregion</p> <p>Somewhat – educational systems and teaching methods honor and support individual differences of learners (talents, aptitudes, interests & limits, etc.)</p>	<p>In small part – education promotes individual self-realization</p> <p>In small part – education promotes cooperative interdependence and community building skills</p> <p>No- demonstration of community gatherings to discuss and learn from issues and mistakes and make changes to improve what is not working well</p> <p>No – the input and contributions of community elders are sought and respected</p> <p>No – including children in work and community activities of all kinds</p> <p>No – learners determining the focus and content of their educational programs</p> <p>Drop out rate is low but graduation rate is higher</p>

Assessment Subtest	Strengths	Needs
<p><u>Health Care</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total: 52</p>	<p>Basic health care is available locally, easily accessible, affordable</p> <p>Health care options include basic health care, pre-natal care, pediatric care, emergency care, care & support for the handicapped/disabled, maternity care, elderly care, traditional remedies (herbal, nutritional, etc.), care & support for the dying, preventive care/teaching (diet, exercise), homeopathy, alternative practices (meditation, yoga, etc.), alternative/eclectic therapies (body work, hypnosis, biofeedback, energy methods, etc.), Other – magnetic practices</p> <p>Health needs are met within or near the community – physical well, mental-well well, emotional well, spiritual well</p> <p>Occasional – deaths from preventable causes in the community</p> <p>Occasional, deaths from suicide/homicide/drug abuse in the community</p> <p>Occasional – incidence of serious communicable diseases in the community</p> <p>Somewhat – a general commitment to healthy living in the community</p>	<p>Dental care – conventional medical services not available in community</p> <p>Traditional services – shamanic ceremonies, counseling, etc not available</p>
<p><u>Sustainable Economics – healthy local economy</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p>	<p>There is explicit encouragement for community members creating businesses that enhance the local economy.</p> <p>There is a system for dealing with economic inequalities among community members.</p> <p>Economic systems active in the community include ecologically friendly cottage industry, sustainable small businesses, education/programs, telecommunications or other work at home, volunteerism- work contribution, local market days, fund raising for community operations, leaving the community for paid work, other – chamber, PRC&D, PADD, TCD, etc.</p>	<p>There is not explicit encouragement for community members creating businesses to not generate pollution, exploit human resources, or exploit natural resources.</p> <p>Local banks do not lend in support of sustainability projects.</p> <p>The majority of the youth leave the community for a livelihood.</p> <p>Occasionally, community members experience unemployment or lack of work.</p> <p>Some – have difficulty providing for their basic needs</p>

<p>Total: 27</p>	<p>Community members actively engage in economic cooperation in their bioregion, country/state, other parts of the world.</p> <p>Some – community members would say they experience non-monetary abundance /prosperity in their life.</p>	<p>(food, shelter, clothing, etc.)</p> <p>Economic systems not active in the community – self-sufficiency for basic needs, barter and exchange systems, fund raising for modeling sustainable practices, voluntary levies within the community for sustainability project development, exchange with other eco-villages and sustainable communities</p> <p>Some – community members would describe their work as meaningful and fulfilling</p>
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Assessment Subtest	Strengths	Needs
<p>Spiritual Checklist:</p> <p><u>Cultural Sustainability</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total: 77</p>	<p>The common cultural/ethnic heritage of the community is celebrated and preserved through oral transmission or storytelling, written records and archives, persons serving as historian, ceremonies and celebrations, art (photographs, murals, songs, etc.)</p> <p>Though community members do not share a common heritage, they do join in celebrating the heritages of fellow community members, value and act to preserve the current community’s culture/history by one or more of the methods above.</p> <p>Cultural programs, festivals and celebrations, open to anyone are offered within the community, within bioregion.</p> <p>Usually – cycles/transitions of life are acknowledged and shared in celebrations, ceremonies and rites of passage</p>	<p>The common cultural/ethnic heritage of the community is not celebrated and preserved through training/apprenticeship in expertise specific to the community (artisanry, indigenous language, folk products, etc.), there is not a shared vision/method for ensuring continuity of the culture in the future</p> <p>Few – know the history of the community</p>
<p><u>Arts & Leisure</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total: 37</p>	<p>Sometimes – opportunities are available for community members to develop artistic talents (classes, apprenticeships, and support for individual artistic pursuits)</p> <p>These opportunities include painting, theater/acting, music, dancing, photography, and textiles.</p> <p>Somewhat – the extent to which the community values and encourages the development of local entertainers and entertainment</p>	<p>Opportunities do not exist for folk crafts, creative writing, and pottery/sculpture</p> <p>Artistic events/celebrations in the community are not held daily or weekly</p> <p>In a small part – the design and appearance of the community demonstrates that the community values art, beauty and aesthetic quality</p>

	<p>Somewhat – the extent to which community members have time for recreational and leisure activities (sports, hobbies, relaxation, etc.)</p> <p>Group space is available for art activities and events indoors and outdoors.</p> <p>Artistic events/celebrations in the community are held monthly, seasonally, annually</p>	<p>A small part – the extent to which expression and experience of beauty (art, ceremonies, poetry, gardens, architecture, etc) is a natural part of the community’s way of life.</p>
Assessment Subtest	Strengths	Needs
<p><u><i>Spiritual Sustainability – rituals & celebrations; support for inner development & spiritual practices</i></u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total: 46</p>	<p>Community members are free to worship the creator/creation, and celebrate their connection with the divine, through devotional practices of their choice</p> <p>Opportunities for contemplation and development of the inner self are available in the community through individual pursuit and through group programs and activities</p> <p>The topic and experiences of spirituality within the community are comfortable, harmonious, contributing to the overall well-being of community</p> <p>Group spiritual practices conducted within the community include meditation, sacred dancing, talking stick sessions/sharing circles, meal blessings, shared silence, prayer, chanting/devotional singing, invocation of God/Spirit at community activities and events</p> <p>Regularly - Community members come together for spiritual practices that connect them to a deeper level of consciousness within themselves and/or the earth</p> <p>Somewhat – community members wishing to devote themselves to a life of spiritual mastery and selfless service, are encouraged/supported by the community</p> <p>There are indoor spaces dedicated for spiritual gatherings and practices</p> <p>Some – appreciate that spirituality manifests in many ways and respect the ways of others</p>	<p>Group spiritual practices conducted within the community do not include attunement/group centering practices</p> <p>In small part – wisdom and spiritual expertise of older community members is seen as a community resource and used as a guide in community matters</p> <p>There are no outdoor spaces dedicated for spiritual gatherings and practices</p>

Assessment Subtest	Strengths	Needs
<p><u>Community Glue</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total: 31</p>	<p>Good – quality of life in the community</p> <p>Sometimes – sharing about beliefs, values and experiences</p> <p>Somewhat – moral principles (respect for oneself and others, responsibility for personal mastery and personal integrity, etc.) are part of community’s philosophy and activities</p> <p>Somewhat – common vision or purpose aligns and unites the community</p> <p>Occasionally – community laughs, plays, relaxes and generally enjoys life together</p> <p>Good – level of harmony, caring and support between women in community</p> <p>Adequate-level of harmony, caring and support between men in community</p> <p>Adequate – level of harmony... between men and women</p> <p>Good – level of harmony... between children</p> <p>Good- level of harmony... between various age groups</p>	<p>Rarely – community review and renewal of shared vision and purpose</p> <p>A source of social difficulties and unrest or problems within the community – sexual relationships within the community</p> <p>Rarely – community endeavors to strengthen its internal (community glue) bonds</p>
<p><u>Community Resilience</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total:27</p>	<p>Sometimes – community can discern when external expertise is needed to help members in crisis</p> <p>Mostly – community can respond supportively to marginalized community members (poor, ill, dying, troubled, disabled, elderly, etc.)</p> <p>Occasionally – community endeavors to strengthen its ability to successfully handle challenges/crises</p>	<p>Somewhat – community is able to respond beneficially to community members in crisis</p> <p>Rarely – can community help members facing personal or existential problems, transform the crisis into an opportunity for inner growth and self-realization</p>
Assessment Subtest	Strengths	Needs
<p><u>A New Holographic, Circulatory World</u></p>	<p>Some – community values conscious living (personal responsibility, personal growth and caring interaction with others)</p>	<p>A little – human diversity is valued and encouraged as important to the overall health and success of the community</p> <p>A little – shared sense of the community’s place in and</p>

<p><u>View</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total: 30</p>		<p>contribution to the world</p> <p>A little – Concept of sustainability is gaining acceptance and use in the community</p> <p>A little – shared commitment within the community to a greater purpose – we are doing this for something greater than us – for the greater good</p>
<p><u>Peace & Global Consciousness</u></p> <p>50+ Excellent Progress toward Sustainability 25-49 Good Start toward Sustainability 0-24 Actions are needed to undertake Sustainability</p> <p>Total: 27</p>	<p>Sometimes – community members offer selfless service in the community</p>	<p>A little – harmony within the diversity, that is, the dynamic tension of people’s differences is put to creative uses that benefit the community</p> <p>Rarely – community engages in activities that open the hearts and minds of community members to an experience of being part of a greater whole</p> <p>Rarely – important community decisions, the community engages in activities that open the heart to deeper truths and balance mind, body and spirit</p> <p>A little – community members are aware of and take responsibility for the effects of projecting their emotional and /or mental energy into collective energy-field of the community</p> <p>Rarely – community members offer selfless service outside the community</p> <p>Little value the community places on cultivating inner peace</p>