

SUSTAINABILITY

Overall Principles of Sustainability

For Hot Springs, the following principles of sustainability will be used:

- Meet the basic needs of citizens and the needs of the community,
- Reduce dependence upon fossil fuels,
- Reduce dependence upon chemicals and synthetic compounds, and
- Minimize development impacts on our natural resources

Throughout this Comprehensive Plan, Hot Springs is seeking to respect and address these principles. Doing so is not just a locally altruistic gesture towards a global concern, but rather commonly involves an action that is of local benefit as well as making some contribution at a larger scale. A team dedicated to these principles derived the bulk of the ideas and goals for the Sustainability Chapter.

The Comprehensive Plan recommends fostering forward thinking pro-active measures that assure a thriving future for Hot Springs residents, organizations & businesses. By viewing all City resources from a permaculture perspective (see definition) we can better leverage our limited resources for multiple uses, reducing waste and protecting/preserving our human, animal & natural resources.

"Permaculture is a philosophy of working with, rather than against nature; of protracted and thoughtful observation rather than protracted and thoughtless labor; and of looking at plants and animals in all their functions, rather than treating any area as a single product system."

LOCAL FOOD

Having the option to purchase locally grown food has many benefits:

- Locally grown food is full of flavor. When grown locally, the crops are picked at their peak of ripeness. Often produce at local markets has been picked within 24 hours of your purchase.
- Eating local food is eating seasonally.
- Local food has more nutrients. Local food has a shorter time between harvest and your table, and it is less likely that the nutrient value has decreased.
- Local food supports the local economy.
- Local food benefits the environment. By purchasing locally grown foods you help maintain farmland and green and/or open space in your community.
- Local foods promote a safer food supply. The more steps there are between you and your food's source the more chances there are for contamination.
- Local growers can tell you how the food was grown.

Goals relating to local food production and consumption include:

1. Promote local food production
2. Promote and grow the Hot Springs Farmers Market and work towards providing a venue for year-round markets.
3. Many new entrepreneurs are interested in greenhouses to provide year-round local food. We need to work to create a co-op for these businesses to find markets where they can provide their produce and not compete with each other.
4. Explore, support and promote various ways of growing food: hydroponics, aquaponics, and passive solar heating, bio-char heating or steam heating for greenhouse production.
5. Reduce barriers for individuals & small businesses to produce food and value added products that can be sold locally.
6. Create opportunities for individuals & small businesses to share resources i.e. Commercial kitchen from School or VA when not in use to be used by others to create local food.
7. Encourage and support the development of community gardens in different areas of the city and accessible to our population i.e. a garden that is suitable for seniors to participate in, a garden for children, etc.
8. Create a local Resource Exchange for information, tools, and skills to promote self-reliance.
9. Utilize VA Greenhouse for organic food production by veterans for veterans
10. Support initiatives such as "Food to Table" and "Farm to Schools"
11. Create urban forests/edible forests throughout the city

ALTERNATIVE ENERGY

As with any economic engine it is a good thing to diversify. By reducing our dependency on fossil fuels we become more resilient as a community and more likely to weather energy fluctuations. To meet the over-riding goal of resiliency in our energy options the following goals are proposed:

1. Encourage co-generation- use of heat energy to generate electricity (ie. Burn wood chip waste similar to the system at the State Veterans Home);
2. Increase the use of solar energy for residential and commercial use;
 - a. Create neighborhood cooperatives,
 - b. Work with Black Hills Power and use grants if possible
 - c. We could become the "Solar Town of the Black Hills" another way to market our town. Invite Dakota Rural Action to have a meeting for our town sharing the Solarize SD plans and opportunities.¹
3. Encourage the use of geothermal heating & cooling- Already in use at Mueller Center;
4. Encourage natural gas distribution into our region.

ALTERNATIVE TRANSPORTATION

With the 2020 SR 385 reconstruction project being a complete street type design to encourage the use of bicycles as a mode of transportation through town, the time is ripe to really start promoting Hot Springs as a place that encourages and welcomes alternate forms of transportation. To do this we

recommend the following goals:

1. Establish a Ride Share Program especially for people who work and commute to Rapid or Custer.
2. Install a charging station to promote electric/hybrid cars for residents and also attract visitors that require a charging station for their vehicle. Custer has installed a charging station and has developed a Tesla rally around it. Grants are available from the big energy producers to install similarly styled stations.
3. Improve Public Transportation.
 - a. Provide a City shuttle that hits the main areas of town, ie. Evans Plunge, City Hall, grocery stores, Shopko, Hospital/ Clinics on a regular daily schedule. Start this concept during the highway reconstruction project as a necessity to support our businesses that will be affected by the construction.
 - b. Work with the VA and Rural Transit to develop a route to and from Rapid City for residents to attend appointments (more than the only one day a month current option), Could include stops in Buffalo Gap, Fairburn, Hermosa, etc.
 - c. Is there a possibility to re-establishing rail transport?
4. Develop a Bike Share Program. Provide bikes that residents or tourists coin pay to use. Create several stations around town. Provide more bike racks throughout the city shopping districts. This becomes even more important as we connect a trail system to the Mickelson Trail.

WATER QUALITY, MANAGEMENT & PRESERVATION

Water is what created Hot Springs: our beautiful, health-filled, warm mineral spring water. We need to recommit to ensuring that our water is protected, available and preserved to ensure the stability of our economic engine for our community – and our identity. Following are goals and actions that should be taken to guarantee fresh, wholesome spring water for all our future generations:

1. Review our current Water Pollution Prevention Plan and make sure it addresses:
 - a. Preserving water quantity by limiting people or corporations draws on the water supply,
 - b. Protections from polluters with repercussions,
 - c. Create a management plan for the protection of our aquifers
2. Provide education to citizens;
 - a. Public forums & workshops with experts that offer info & alternatives to chemicals to home owners.
 - b. Provide tips for more efficient watering/ xeriscaping (landscaping using water wise techniques.)
 - c. Install “No Dumping – Drains to the River” signs on storm drains
3. Take the collected data on our water quality and make it readily available to the public;
4. Use either biological control or organic methods rather than chemicals to control pests and weeds on our public lands: start with schools then parks. Have the City lead the way and provide a good example for the citizens to follow.
5. Utilize gray water to water parks/golf course;
6. Look at examples of other city's green infrastructure & implement as possible
7. Review local and regional impact from Uranium mining and fracking & how to protect our water

supply. Implement measures as needed.

8. Create a revegetation plan for the city to:
 - a. Create biofilters for stormwater;
 - b. Provide vegetative buffers near waterways to help reduce erosion and improve water filtration;
 - c. Incorporate more shade trees in downtown to help create shade and help reduce the heat buildup during the summer and lessen the temperatures of the stormwater as it enters the river;
 - d. Create a healthy diversity of understory, middle-story and upper-story vegetation to improve habitat function, soil health, and an environment more stable and resistant to changes in climate or diseases.³

WASTE UTILIZATION

Reduce. Reuse. Recycle. The triad of waste utilization is important to know and use. It takes energy and time to constantly throw away waste and create more 'things'. As part of the Comprehensive Plan we recommend the following goals:

1. Expand current recycling program to include businesses, multi-family units and downtown area & parks
2. Create a city-wide compost facility to handle restaurant, school & house hold organic waste. Then sell the municipal compost to regional residents for their gardens. This could create jobs & income for Hot Springs.²

EDUCATION ABOUT SUSTAINABILITY

Create a page on the City website & possibly with the Chamber of Commerce called "Living Sustainably in Hot Springs". Provide links to stores offering healthy choices in food or those who practice sustainability in their business that people may want to support. Highlight people who are local food producers and provide information regarding various projects & organizations that support Sustainability Goals such as Keep Hot Springs Beautiful, Ditch the Disposables; recycling events & gardening options.

RESOURCES

¹ <http://www.dakotarural.org/energy/solarize-sd/>

² <http://shakopeedakota.org/economy/enterprise-detail?Organics-Recycling-Facility-14>

³ http://www.onestrawrevolution.net/One_Straw_Revolution/One-Straw_Revolution.html

OTHER GENERAL RESOURCES

<http://www.transitionus.org/transition-towns>

<http://www.yesmagazine.org/>