

Town of Jamestown

POLICY

Sustainability Short Term Plan November 5, 2019

Approved: Town Board of Jamestown

Resolution: 11-14, 2019 Dated November 4, 2019

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Kenneth Lenarcic, Mayor

Introduction:

The Town of Jamestown as a municipal government and as a community recognizes the need to play a part in the reduction of greenhouse gas emissions and participate in other recognized sustainability strategies.

As a small town, the solutions for many sustainability challenges are limited by available funding, limited staff and prioritization of municipal resources. The effects of the 2013 flood and recovery projects have left the community with additional administrative responsibilities that will impact the town operating budget through 2021.

The availability of County sustainability funding has made it possible for Jamestown to implement a few basic programs based on volunteer "in kind" match that have permitted our participation in the countywide sustainability effort. Additional support from the Boulder Resource Conservation Division is a bonus toward our efforts minimize the amount of waste going to landfill.

This short term plan seeks to address three important areas of sustainability. **Energy Efficiency and Renewable Energy, Waste Diversion, and Community Agriculture**. Each of these areas will be treated in a two-step process. First they will be reviewed as to past accomplishments and present conditions and secondly some potential additional strategies will be explored that could increase Jamestown's contribution to sustainability.

Why is this a Short Term Plan?

The flood of 2013 turned the Town's financial status upside down. Unplanned maintenance costs and audit expenses as well as uncertainty surrounding flood project reimbursements make it difficult for the town to provide a cash match for sustainability projects or to use the sustainability grants currently available for projects that must be contracted out.

For now, we are focusing on projects where we can use volunteer labor ("in kind") in lieu of a cash match and hope that we can follow up within a few years on projects that require use of Capital improvement funds.

Renewable Energy and Energy Efficiency

1. Where We Are Now:

a. Air Quality

Building Efficiency strategies directly affect air quality and greenhouse gas emissions. Considering residential, commercial and municipal buildings in the Town; we are first fortunate that very little energy is needed for cooling due to the altitude and the presence of air conditioning units are rare.

The need for heating has an opposite effect. Most municipal and commercial buildings are heated by propane, electricity or a combination of both. A large number of residences are heated using wood stoves or inserts or propane augmented by the burning of wood.

Propane contains more than twice the energy of natural gas (one cubic foot of propane = 2,516 BTUs, while one cubic foot of natural gas = 1,030 BTUs), it's much more efficient than natural gas (Petro Home Services). Both propane and natural gas are considered to be more efficient than heating oil.

Wood-burning appliances and fireplaces may emit large quantities of air pollutants. Wood smoke contains hundreds of chemical compounds including nitrogen oxides, carbon monoxide, organic gases, and particulate matter, many of which have adverse health effects. In many urban and rural areas, smoke from wood burning is a major contributor to air pollution (EPA).

From a cost perspective, heating with wood, and pine in particular, is desirable because it can often be had for nothing. Use of hardwoods or pellet stoves increase the cost. Woodstoves are considered to be about 40% efficient and newer EPA rated stoves can be up to 70% efficient if used properly.

Hardwoods, properly seasoned, burn with twice the efficiency of softwoods. Most trees available in mountainous areas like Colorado are softwoods.

b. Energy Efficient Building Standards

Many of the residences in Jamestown were constructed prior to the advent of modern insulating materials and standards. Newer construction has not been subject to requirements of programs like Boulder County's BuildSmart energy code. The Town made some funding available several years ago for residents who wanted to participate in the Home Energy Rating System (HERS) but it was not widely accepted.

The Town Has adopted the 2009 level of the International Building Codes and has an intergovernmental agreement with Boulder County for building construction services.

The newest municipal building, the 2015 Fire Station (Fire Hall) was built using efficient technology. Insulation is sandwiched between the concrete walls of the building and the roof is insulated to higher standards.

c. Solar Energy

Solar gardens were proposed in the Towns Elysian Park area not used for recreation by an external vendor in 2017. The proposal did not garner much support for two reasons, first; the area proposed was once part of mine tailings pond that have naturally healed over the past (almost) fifty years and second;

the area proposed was not part of the brownfields remediation and does not include an engineered soil cap.

Some individual homes include solar panels.

d. Transportation:

Some residents own hybrid or zero emission vehicles.

2. Potential Short Term Strategies- to increase energy efficiency

- Encourage the use of propane over wood
- Encourage the use of EPA efficient wood stoves
- Educate residents about heating most efficiently with wood
- Adopt 2018 International Building Codes
- Encourage residential solar panel use
- Install solar panels on some government buildings
- Encourage the use of zero emission and hybrid vehicles by residents
- Install charging Station(s)

Waste Diversion and Zero Waste

1. Where We Are Now:

a. Recycling

Thanks to the grant support of Boulder County sustainability programs, the Town has contracted for monthly single stream recycle Saturdaysand has included single stream recycling in our annual clean up event. These events are popular and successful with the community. Previously EcoCycle conducted a similar program that was eliminated in 2012 due to cost. The renewed (2016) single stream program is dependent on contracted support and volunteer labor.

b. Zero Waste Events

The County grant is also funding our annual Independence Day Fire Department fundraiser as a Zero Waste event

The Town encourages use of a Zero Waste contractor at external events by private parties utilizing municipal facilities.

c. Composting

For the past two years, the Annual Clean Up event has included a 30 cubic foot roll of for yard waste that is composted. The Jamestown Community Gardens also composts its garden waste.

A few residents transport some food waste to Western Disposal for composting. The Town does not have a program for composting food waste due to the many bears and other wildlife that is native to the Jamestown area.

d. Annual Cleanup Day Event

The Town hosts a joint county grant and town funded annual cleanup day that includes acceptance of trash, yard waste, paint and hazardous materials, hard to recycle materials, scrap metal, single stream recycles and recently tires and mattresses. There is also a reuse area where residents can exchange items of use and value.

Each year the James Creek Watershed Initiative organizes a stream cleanup day for the purpose of removing trash and other materials from James creek and Little James Creek. Some of these materials are diverted at the Town clean up event.

e. Residential Trash

Most residents purchase prepaid trash bags from Western Disposal. The steadily rising cost of the bags encourages recycling and composting over disposal a "pay as you throw" program that has been part of the community culture for almost thirty years.



Recycle Saturday- Single Stream Collection



Annual Cleanup and Recycle Day

2. Potential Short Term Strategies to Improve Waste Diversion and Zero Waste

- Educational programs to increase participation in Recycle Saturdays.
- Add the annual Java Jam fundraiser to the list of events that are contracted Zero Waste
- Modify Municipal facilities rental agreements to include Zero Waste requirement for larger gatherings. Encourage composting for small gatherings.
- Investigate sharing a food composting program with other mountain communities that would include bear/animal resistant collection points
- Reduce the amount of materials going into landfill by donating items of value to Goodwill or other charitable organizations.
- Continue to increase the kind of materials to be recycled rather than landfilled.

Community Agriculture

1. Where we are now.

a. Community Gardens

As a result of the 2013 flood and the Federal property Buyout programs the Town has purchased 10 properties that must be maintained and have restricted use. Two of these properties on Main Street are currently being used as Community Gardens with a portion are under expansion this summer.

A third adjacent lot may be used for future gardens beyond 2020.

The gardens are focused on the production of food and maximum community engagement including Jamestown School and children. Part of the 2019 expansion will be for a children's garden and pumpkin patch.

The gardens do their own composting of garden waste.

b. Greenhouse

There is community interest in growing food year round and encouraging plantings of vegetable crops that have a longer growing season. This might be an offshoot of the community gardens or a separate project. Generally, the construction of any walled building is prohibited on FEMA buyout properties and the location of a future greenhouse may be away from the community gardens.

c. Community Ditch

The Jamestown Community Ditch was important to the early development of Jamestown in the late 19th century. Water is diverted from James Creek near the Town limits on Ward Street and flowed above the southern portion of the Town south of (west) Mesa Street and (east) Spruce Street and back into James Creek near 12th and Main Streets. Originally used both agriculturally and domestically, the access to fresh water allowed the area to grow during a time period that preceded the advent of a municipal water system in the 1950's.

The system was still in use in the 21st Century and the ditch is a legal diversion and part of the Town's water decree.

The headgate for the ditch was destroyed during the 2013 flood and was replaced in 2018 but needs some adjustments to be operative this year. As the ditch itself has not been used, it is in need of maintenance and the plan is to get it flowing again in 2020.

2. Potential Short Term Strategies to Improve Agriculture

- Continued expansion of the present garden at the Main Street location.
- Continue to explore the construction of a greenhouse
- Reinstate baked goods and garden crop exchange on Sunday mornings
- Develop a plan to repair and maintain the community ditch.



Jamestown Community Gardens



Jamestown Community Gardens