

**Town of Claresholm
Municipal Sustainability Plan**

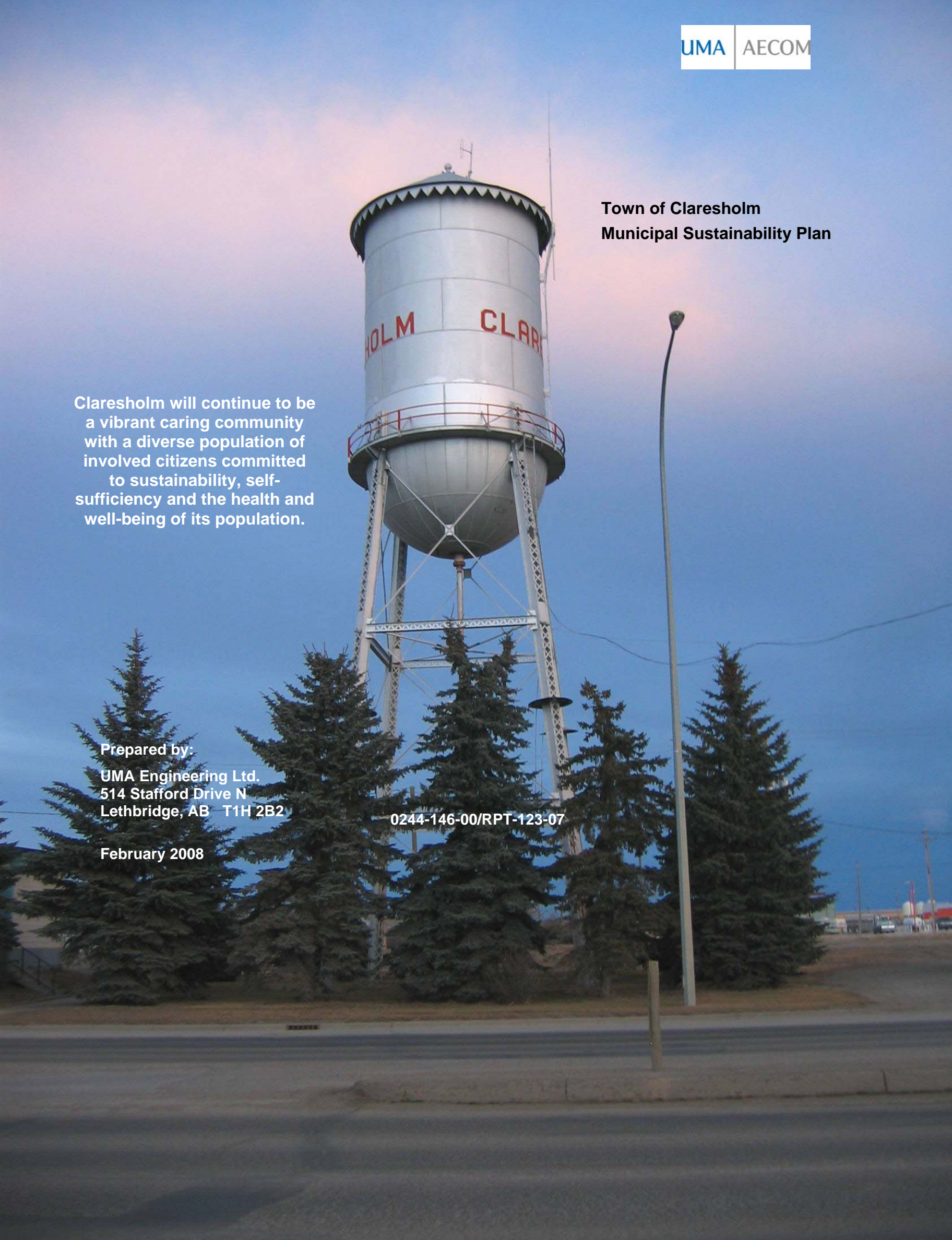
Claresholm will continue to be a vibrant caring community with a diverse population of involved citizens committed to sustainability, self-sufficiency and the health and well-being of its population.

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1.0 Introduction

Welcome to the Town of Claresholm's journey to municipal sustainability. The following document presents key material from a pilot project undertaken by Claresholm in cooperation with the Alberta Urban Municipalities Association (AUMA). This document is structured to take the reader through the background, preparation and approval process for Claresholm's Municipal Sustainability Plan (MSP). The key elements to note are:

- Claresholm's definition of sustainability
- The origins of municipal sustainability
- How Claresholm's process was shaped by The Natural Step framework for decision making
- How AUMA's concept of the Five Pillars of Sustainability has been utilized
- The AUMA process for creating a Municipal Sustainability Plan
- The Results!

The process began with the Town of Claresholm responding to AUMA's call for interested municipalities to participate in a municipal sustainability planning exercise. Upon being graded pilot community status, Claresholm organized a steering committee. Subsequently Council, Administration and the steering committee took training in The Natural Step. After training, the steering committee got down to business compiling current reality data, creating descriptions of success and action plans to achieve the goals set out in the descriptions of success.

Ultimately, this process was undertaken to meet the requirements set out in the revenue sharing agreements between the federal, provincial and municipal governments under the *New Deal for Cities and Communities*. The summation of the public consultation process as it relates to grant expenditures under the *New Deal for Cities and Communities* program can be found in Section 11, Project Summation.



Photo of the Airport Memorial in Centennial Park (Harvard Trainer)
Courtesy of the Chinook Camera Club's 50th Anniversary Photo Contest

1.1 What is Sustainability?

The concept of sustainability and sustainable development are undeniably part of the current discourse. However, few people agree upon a common definition of sustainability and it should be noted that sustainability can take on many definitions. However, for the purposes of this document, the term sustainability will be used in its most welcoming definition - one which encourages those dedicated to sustainability to pursue actions which strengthen the municipality.

For the purposes of this document, the term sustainability will be viewed as:

A systematic concept, inter-relating the environmental, economic, social, cultural and governmental aspects of local municipal development, affecting every level of organization from the local neighborhood to the entire planet.

And defined as a process which:

Meets the needs of the present generation without compromising the ability of future generations to meet their needs.

Principles include:

- Dealing cautiously with risk, uncertainty and irreversibility
- Ensuring appropriate valuation, appreciation and restoration of nature
- Integration of environmental, social and economic goals in policies and activities
- Equal opportunity and community participation
- Conservation of biodiversity and ecological integrity
- Ensuring inter-generational equity
- Recognizing the global dimension
- A commitment to best practice
- No net loss of human or natural capital
- The principle of continuous improvement
- The need for good governance
- Making decisions today in consideration of humanity seven generations from the present.



Courtesy of the Chinook Camera Club's 50th Anniversary Photo Contest

2.0 Municipal Sustainability

2.1 What is a Municipal Sustainability Plan?

According to the Alberta Urban Municipalities Association Guidebook to sustainability, on which this planning exercise is based, a Municipal Sustainability Plan is:

A high level overarching document that guides the community into the future. It can best be viewed as a strategic business plan for the community that identifies short, medium, and long term actions for implementation, tracks and monitors progress, and is reviewed and revised on an annual basis. An MSP, therefore, provides guidance for the development or alignment of all municipal plans and documents.

2.1.1 Municipal Sustainability Planning Origins

In May 2004, the former Prime Minister Paul Martin announced plans to give municipalities a portion of the federal gas (petroleum) tax. Considering environmental dimensions of municipal development important, Mr. Martin emphasized, in an address to the Federation of Canadian Municipalities (FCM), that “environmental sustainability” was one of the pillars of the gas tax sharing protocol. This protocol became known as the *New Deal for Cities and Communities*. Under this program, in order for Canadian municipalities to acquire maximum funding from the federal government, the federal-provincial agreement states that all municipalities will have to develop an ***Integrated Community Sustainability Plan***.

The purpose of the sustainability plan is to ensure revenues are invested to mitigate our reliance on fossil fuels based on a strong foundation of public engagement.

2.1.1.1 Projects Eligible for Funding

Projects eligible for funding under the New Deal for Cities and Communities are as follows:

Public Transit:

- Rapid Transit: includes light rail, heavy rail additions, subways, ferries, park and ride facilities
- Transit Buses: bus and/or bus stations
- Transportation signaling, passenger and traffic information and transit operations
- Capital investments, such as High Occupancy Vehicle (HOV) lanes.

Water

- Drinking water supply, drinking water purification and treatment systems, drinking water distribution systems, water metering systems.

Wastewater

- Wastewater systems, including sanitary and storm water systems.

Solid Waste

- Waste diversion, material recovery facilities, organics’ management, collection depots, waste disposal landfills, thermal treatment and landfill gas recuperation.

Community Energy Systems

- Cogeneration or combined heat and power projects (where heat and power are produced through a single process)
- District heating and cooling projects [where heat (or cooling) is distributed to more than one building].

Active Transportation Infrastructure (e.g., bike lanes)

- Local roads, bridges, tunnels and pedestrian systems that enhance sustainability outcomes.

Capacity Building

- Collaboration: building partnerships and strategic alliances, participation, and consultation and outreach
- Knowledge: use of new technology, research, and monitoring and evaluation
- Integration: planning, policy development and implementation (e.g., environmental management systems, life cycle assessment).

In addition to ensuring funding is dedicated to programs which better the environment, municipalities must also demonstrate the programs for investment have strong support from citizens. This is to ensure that investments selected have the best chance of success.

2.1.1.2 Alberta Urban Municipalities Association / Claresholm Pilot

Subsequent to the announcement of funding, the Federation of Canadian Municipalities (FCM) began looking for project partners to develop the objectives of the *New Deal for Cities and Communities*. Stemming from FCM's request for partners, the Alberta Urban Municipalities Association (AUMA) was approached to play a key role, as was the non-profit organization "The Natural Step". Understanding that the public engagement and planning process would be a crucial facet to success, the FCM began working with provincial governments and partner organizations leading the evolution of municipal sustainability planning.

As part of the AUMA's commitment to sustainability, they undertook the task of developing a guidebook and offered assistance for communities interested in creating municipal sustainability plans. Beginning in early 2007, AUMA began working closely with five urban municipalities to chart a course for achieving municipal sustainability. The municipalities were selected based on AUMA's request for proposals from potential pilot municipalities. The five communities which were selected are:

- Town of Claresholm
- Village of Chauvin
- The Town of Olds
- The Town of Pincher Creek
- The Village of Thorhild.

It is intended that the successes, challenges and lessons learned by these leaders in municipal sustainability will be shared, adding to the understanding of how successful sustainability planning can occur. Further, the AUMA played a major role in the program by organizing a series of workshops early in 2007 to train and encourage networking among municipalities. A key element of the sustainability pilot program presented in the next section was the completion of the course "Step by Natural Step". This "sustainability training" was developed by *The Natural Step Canada*, setting the framework for evaluation and execution of the projects.

2.2 Municipal Sustainability Plans and Other Municipal Planning Documents

The role of the Municipal Sustainability Plan is to set targets as a roadmap to where energy efficient technologies are the norm and resource conservation is wide ranging. The intent is for the MSP to be used in co-operation with other planning documents the municipality has at its disposal.

By carrying out public consultation as per the AUMA guidelines, the proposed actions have full community support. The intent is that when Council directs resources into actions discussed within the MSP, broad community support should be forth coming.

Capital Planning

Given the above, this plan would have the most influence on the yearly Capital Plan, where Council determines where to best invest resources. After all, since the purpose of the Municipal Sustainability Plan is to direct the spending of the gas tax allocation, it is key the items presented for action become part of future municipal works. The key to success of the Municipal Sustainability Plan is ensuring the activities proposed translate into concrete actions via monetary or social capital investments.

Municipal Development Plan

Claresholm Council has also committed, through the recent adoption of the Municipal Development Plan (MDP), to support and promote initiatives which are ecologically and environmentally friendly. An MDP addresses such items as the direction and timing of new development and conditions regarding how growth and development occurs. As such, the MSP can be considered the municipal document which sets out citizen-derived development intentions and the MDP organizes the implementation of these intentions.

Land Use Bylaw

The Land Use Bylaw (LUB) is more prescriptive than the MDP by controlling the technical use and development within a municipality. This is achieved by regulating specific uses, setbacks and development standards. The LUB also enshrines the development approval process, guiding proposals for growth through the municipal approvals system from concept to construction. This MSP should have significant impact on future LUBs by compelling Claresholm developers and citizens to construct buildings and neighbourhoods in a fashion which supports the pillars of sustainability presented herein.

Area Structure Plans and Area Redevelopment Plans

An Area Structure Plan (ASP) sets the development pattern for previously undeveloped land while an Area Redevelopment Plan (ARP) sets development patterns for land transitioning from one (or a variety) use to another. Essentially ASPs and ARPs describe the phasing, proposed land uses, population densities and sequence of development. They indicate transportation routes, utility corridors, open space and built-up areas within Alberta's municipalities. Future ASPs and ARPs will be required to have a section within the plan indicating how the future development will meet the principles of the five pillars of sustainability. As these plans are often completed by developers, Claresholm Council and Administration will have to relay the importance to incorporating sustainable initiatives and low impact development techniques to local industry players.

3.0 What is The Natural Step?

Given the potential vastness of sustainability as alluded to in section one, academics and sustainability practitioners needed to create a system where discussion could be undertaken under a common set of assumptions.

The Natural Step (TNS) was created to achieve this framework for discussion of sustainable concepts. TNS was developed by Dr. Karl-Henrik Robert as he synthesized many concepts within sustainability. Dr. Robert's intent was to produce an organization and framework for creating sustainable futures. The Natural Step process has been used by hundreds of organizations. These organizations have successfully set a course from a fossil fuel dependant and waste disposal position to a position where renewable energy and closed-looped waste streams exist.

TNS was selected by the AUMA to be utilized as the framework for facilitating the municipal sustainability plans. The TNS process provides a science-based definition of what sustainability is and it provides concrete principles to guide decisions.

Within The Natural Step decision making system are three components that those utilizing the system must accept as a basis for action planning:

1. Resource allocation on the planet (**The Funnel**), is becoming more competitive as countries develop and demand a share of the earth's finite resources. The walls of the funnel represent the narrowing margin for action through time and are discussed in more detail in Section 3.1.
2. How resources are utilized in a sustainable society is important to have the ability to measure based on a set of standards. The **Four System Conditions** of a sustainable society are intended to provide TNS practitioners with method of weighing development proposals against four base principles of sustainability. These four principles are presented in greater detail in Section 3.2
3. The last component provides practitioners with a **Decision Making Framework** for moving from the current reality to future goals. This method compels TNS users to focus on their current reality before determine where they want to go, and use the variation between the two for the purpose of creating action plans. Section 3.3 discussed this framework in greater detail.

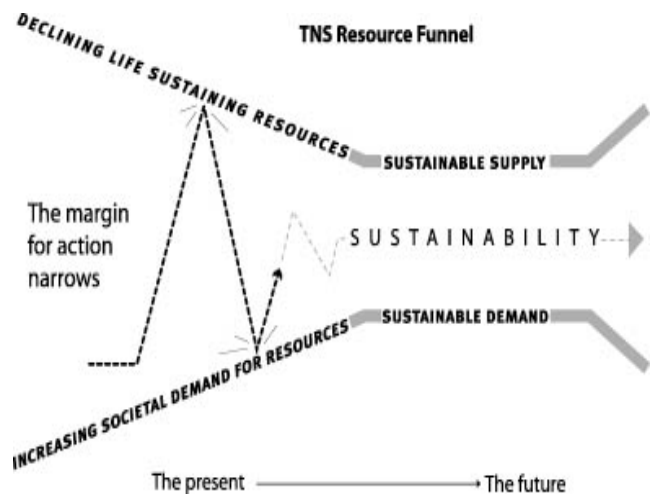


Figure 1. The Natural Step Funnel

3.1 The Funnel

The Natural Step's Resource Funnel is a metaphor that illustrates the global trends of resource availability and the earth's ability to provide us with our material desires. Imagine the walls of a giant funnel, viewed from the side, as illustrated by Figure 1¹. The upper wall is resource availability and the ability of the ecosystem to continue to provide resources for our use.

The mechanisms that provide essential, life-supporting goods and services for society's use, such as food and fibre, clean air and water, productive topsoil and climate control, are all in decline.

At the same time, the global populations demand for these resources and services is increasing. As the world economy's demand increases and the capacity to meet this demand declines, society moves into a narrower portion of the funnel. As the funnel narrows there is less room to maneuver and there are fewer options available.

3.2 The Four System Conditions

In the sustainable society, nature is not subject to systematically increasing:

- 1) Concentrations of substances extracted from the earth's crust
- 2) Concentrations of substances produced by society
- 3) Degradation by physical means and, in that society
- 4) People are not subject to conditions that systematically undermine their capacity to meet their needs.

As part of future decision making by the Town of Claresholm, the four system conditions will be fundamental in determining whether municipal projects have merit and these principles are represented by Figure 2².

3.3 The Natural Step Framework for Decision-Making and Action

The Natural Step uses a process called backcasting to raise awareness (A), create baseline information (B), develop descriptions of success (C), and subsequent action plans (D). This concept is graphically represented above as Figure 3³. These action plans are developed via the creative tension experienced when the definition of the status-quo does not match with the desired outcome.

In Claresholm, the Municipal Sustainability Plan Steering Committee (MSP SC) led the creation of the descriptions of success, subsequent to establishing the community vision. By having the ability to relate back to the vision, the descriptions of success were kept within the community's scope. The baseline data was compiled as supporting context ensuring relevancy of the description for success.

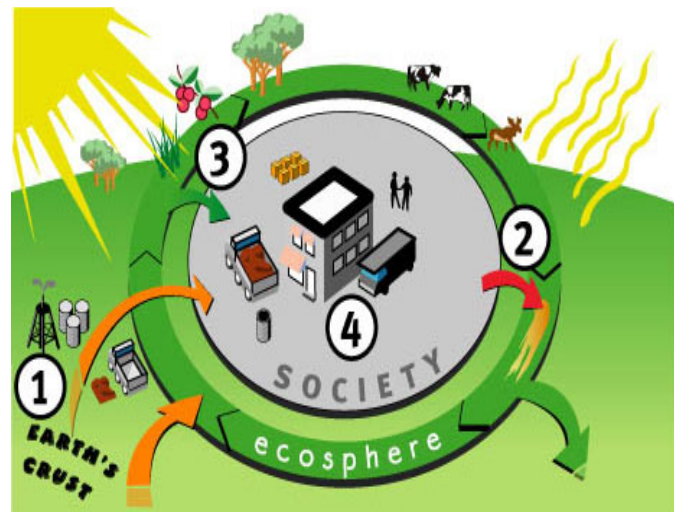


Figure 2. Representation of the Four System Conditions

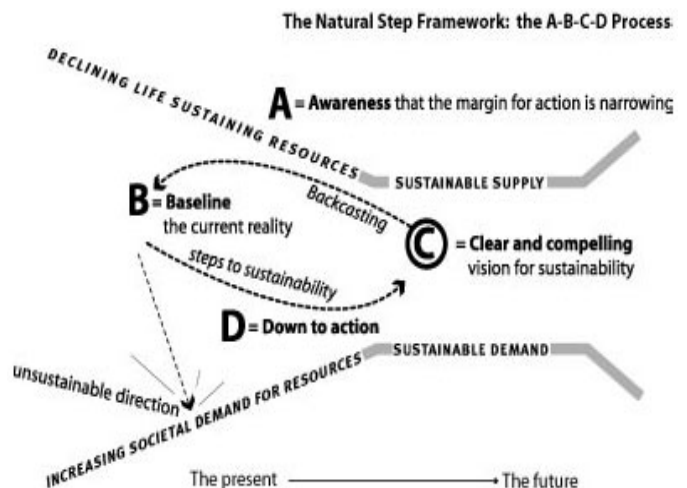


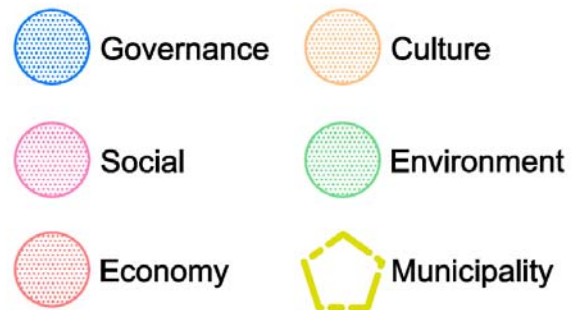
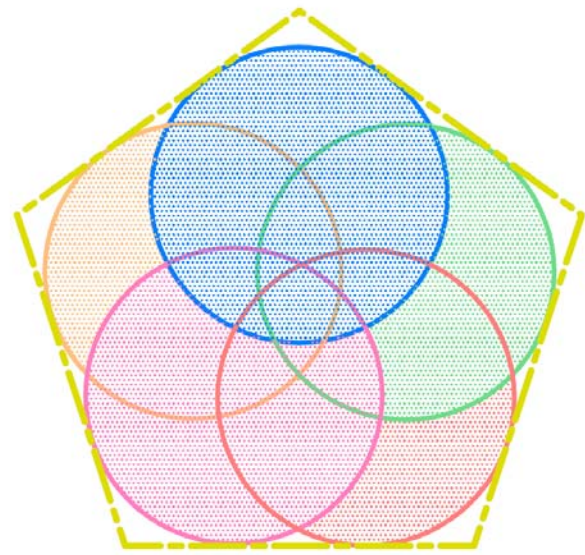
Figure 3. The Natural Step Framework

4.0 The Five Pillars

The Alberta Union of Municipalities chose five areas of human interaction and development to approach the matter of sustainability. By viewing sustainability from these five perspectives, connections between desired actions and the required placement of resources can be identified and translated into investments.

The pillars of sustainability become valuable when categorizing municipal issues as well as when analyzing items brought forth from the public participation process. By categorizing an issue within one of the pillars of sustainability, the other pillars can then be used to examine the potential relationships and conflicts forecasting how they may interact when action planning.

By using the backcasting process for each pillar of sustainability, Claresholm identified many ways their municipality could invest effort and resources to enhancing the quality of life of local residents. Each description of success was facilitated from the community during the public engagement process, and reflects the ideal direction for investment, based on the Claresholm context.



The Overarching Goal for Each Pillar of Sustainability is as follows:

Pillar	Goal
--------	------

- | | |
|-----------------------|--|
| 1. Environment | Enact measures to ensure a quality natural and built environment |
| 2. Economy | Create a flourishing and diverse local economy |
| 3. Social | Work with stakeholders to ensure harmonious and inclusive communities |
| 4. Culture | Promote local strengths for the purpose of creating a vibrant and festive community |
| 5. Governance | Pursue democratic systems which allow for effective and inclusive participation, representation and leadership |

5.0 Public Engagement and Project Development

5.1 Committing to do a Municipal Sustainability Plan

Under the terms of the *Guide Book to Sustainability* created by the AUMA, there are five distinct phases to developing an MSP. Each is listed below (in black) and includes a short description (in blue) of the steps taken by Claresholm to meet the required objectives.

5.2 Phase 1

Structuring the Planning Process

- Council commits to develop the plan
- Council is advised to form a Citizen Advisory Group / Steering Committee, or consult with community members in another way.



On April 23, 2007, Claresholm Council decided to engage in a participative planning process, passing a bylaw directing Administration to develop a Steering Committee of key local leaders, representing the many interests within the community. The intent of the MSP SC is to be a resource throughout the process, and play key roles during three parts of the planning process:

1. *Synthesizing community input on a vision using the five dimensions / pillars of sustainability, and adopting principles of sustainability*
2. *Identifying issue areas that need to be addressed in order to achieve the vision*
3. *Identifying and developing recommended strategies around issue areas.*

The Town of Claresholm Administration attracted members from the following organizations with the intent to bring in perspectives from each pillar of sustainability. The local organizations included:

- *Claresholm & District Chamber of Commerce*
- *Claresholm Public Library*
- *Claresholm & District FCSS*
- *Claresholm Museum Board*
- *Claresholm Mental Health Clinic*
- *Claresholm Curling Club*
- *CIR Realtors Claresholm; Economic Development Committee*
- *Claresholm Garden Club*
- *Claresholm Minor Hockey*
- *Town of Claresholm*
- *Claresholm Child Care Society*

5.3 Phase 2

Creating a Shared Understanding of Sustainable Community Success

- Council and community adopt sustainability principles and engage citizens to develop a shared understanding of success through a dialogue about the community’s vision, core values, and goals it has for the community’s social, cultural, environmental, economic and governance pillars.

March 2007: Each member of the community advisory group and Council took ‘The Natural Step’ training to become conversant in the concepts and principles of sustainable municipal planning.

April to June 2007: members of the MSP SC and Council attended sustainability workshops, sponsored by AUMA, where discussions of community sustainability were presented.

June 19, 2007: By setting the framework for sustainable discourse and action planning, a community vision was created and presented during the Municipal Development Plan Open House. (Vision indicated on Cover)



Cover Image from Claresholm MDP adopted September 10, 2007

June-July 2007: Through backcasting the Municipal Sustainability Plan Steering Committee created draft descriptions of success through a series of meetings.

September 2007: Three weeks leading up to the community meeting, articles relating to aspects of what sustainability could mean to Claresholm were run in the local paper to educate, engage and generate interest in the process and outcome.

September 2007: The Municipal Development Plan was adopted, setting the stage for an environmentally friendly and sustainable Claresholm.

5.4 Phase 3

Determining and Analyzing Strategy Areas for Community Success

- Community identifies a number of strategy areas that need to be addressed to achieve the vision
- Describe what strategy areas would look like in the community if the vision was achieved
- Describe the community’s “current reality” in that strategy area.

September 29, 2007: A community-wide facilitation session was held in the Community Centre where the descriptions of success were refined through the backcasting exercise. Each pillar of sustainability was analyzed with respect to the specific descriptions of success.



Image from the Sustainability Open House - September 27, 2007

The open house was lead by five UMA Planners in a focus group format and action planning was achieved by encouraging strategy discussions.



The current reality for each description of success was discussed and actions ranked determining the preferred initiatives for the Town of Claresholm. Five focus groups rotated between each pillar of sustainability ensuring everyone had the opportunity to discuss each pillar and to ensure all attendees engaged in each pillar of sustainability.

Image from the Sustainability Open House - September 27, 2007

5.5 Phase 4

Identify Initiatives to Move from the Current Reality toward the Descriptions of Success

- Brainstorm initiatives and investments in the strategy areas
- Scrutinize the actions to ensure that they:
 1. Move the community towards its vision considering all five dimensions / pillars of sustainability
 2. Move the community towards the sustainability principles
 3. Provide flexibility for future community leaders to take action
 4. Generate sufficient economic and political return, with a foundation in good governance to seed future investments.

October – December 2007: the material from the charts describing each pillar area was reviewed and weighed for merit by the MSP SC, and Claresholm Administration. Analyses were performed on the information, based on the four scrutinizing facets indicated above.

January – February 2008: Claresholm Council was engaged to provide a final review of the Planning document and the descriptions of success and action plans stemming from the MSP process.

5.6 Phase 5

Ongoing Monitoring and Implementation

- The municipality monitors the progress of the plan and implements the actions laid out in the plan.

By committing to sustainable community development, Claresholm will be open to all sustainable development initiatives which the Town has the capacity to invest in. Further, the Town Administration Building will be a resource for sustainable municipal planning by providing information concerning each pillar of sustainability. At the Annual General Meeting, the action plans contained within the MSP will be discussed for the purpose of bench-marking how far the community has progressed in the last year.

6.0 Environmental

The citizens of the Town of Claresholm have expressed interest in many forms of environmental actions in order to ensure a high quality built environment, while respecting nature. These actions relate to energy efficiency, waste management and water conservation. For the purpose of adding context to the associated chart, the descriptions below detail benefits and starting points for moving from the current reality to the descriptions of success.

Low-Flow Fixtures:

Low-flow plumbing fixtures, including toilets, faucet aerators and showerheads⁴, have been developed that save substantial amounts of water, compared to conventional fixtures, while providing the same utility.

Low-flow toilets use a maximum of 1.6 gallons of water per flush compared with about 3.5 gallons of water used by a standard toilet. Low-flow shower heads use about 2.5 gallons of water per minute compared to between 4 and 5 gallons per minute used by conventional heads. Low-flow faucet aerators can cut the water usage of faucets by as much as 40% from 4 gallons per minute to 2.5.

Low flow fixtures save water that would otherwise be wasted, which not only reduces the homeowner's utility bill, but also the amount of available fresh water used. It is estimated that low-flow toilets alone could save up to 22,000 gallons of water per year for a family of four.⁵



Rainwater Harvesting:

Rainwater harvesting techniques can provide a free, higher-quality source once the initial investment in collection and storage systems is recouped. By collecting and reusing rainwater, less water is used from the municipal system and this system allows people to extend their use of rainwater that is typically absorbed into the ground. Claresholm Administration has information and resources regarding rain harvesting, including sources for quality rain water harvesting barrels^{6, 7}.



Xeriscaping:

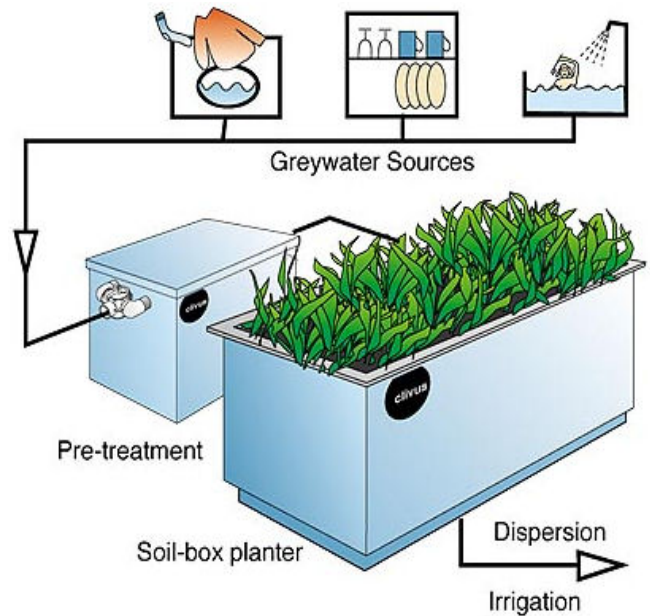
If landscapes are designed using plants with water requirements corresponding to typical local rainfall patterns, significantly less water will be needed for irrigation. This is the simple concept behind Xeriscaping. With water use issues identified as a plan for action in Claresholm, xeriscapes offer a viable alternative for attractive landscaping without consuming dwindling water resources and creating excessive cuttings or plant waste.

Xeriscaping can be used by builders and developers in conjunction with other low impact development (LID) techniques to minimize irrigation and landscape-maintenance costs in new subdivisions.⁸



Greywater:

Greywater is wastewater from bathtubs, shower drains, sinks and washing machines. Greywater⁹ accounts for 60% of the outflow produced in homes. It contains little or no pathogens and 90% less nitrogen than black water (toilet water). Because of this, it does not require the same treatment process. By designing plumbing systems to separate it from blackwater, greywater can be recycled for irrigation, toilets, and exterior washing, resulting in water conservation. When planned into new residential construction, wastewater treatment can be significantly reduced, resulting in cost and space savings.



Because conventional wastewater plumbing lines combine black and greywater, separating the two generally involves a parallel wastewater system. Space must be available for larger components such as a holding tank or some filters, which can be located in a basement, shed, or possibly outside.

Local regulations, sanitary engineers, inspectors, and boards of health might not be familiar with or permit these methods. Therefore the Town of Claresholm has committed to raising awareness of these low Impact Development techniques and will support neighbourhoods designed utilizing these systems.¹⁰

Wind Power:

Small wind turbines, mounted on towers between 80 and 120 feet tall, can generate electricity from the wind for home use. With on-site installations documented throughout Canada, wind is a recognized renewable energy source for distributed generation of power on residential home sites. A wind-powered generator, or turbine¹¹, situated at the top of a high tower has blades which spin to generate electricity. The electricity can either be used locally or sold to the utility company if excess is generated.



In a typical residential application, the power from the wind turbine is connected to the main electric service wire to the home. Special interconnection equipment will allow powering the home, or sending the excess power generated by the turbine back to the utility grid. Otherwise, a distributed wind turbine can be designed as an “off-grid” type using batteries for storage of excess electricity. Utility Companies may credit the homeowner’s account for power produced by wind turbines that is fed back to the grid and require that special safety features be installed to assure the safety of line workers during power outages.¹²

In addition to small scale residential turbines, partnerships are available through various electrical generation corporations. To “Go Green” Claresholm’s plan to become energy independent can be successful by partnering with either:

1. Energy Solutions Alberta
2. Pembina Institute
3. EnVest® Energy

The ultimate goal is for Claresholm to enter the energy marketplace in a similar way to Medicine Hat, Alberta. Within The City of Medicine Hat's corporate structure is an upstream oil and gas company. By facilitating the development of Claresholm as an energy provider, green energy would be available to all residents, as well as providing an additional revenue stream for the community to augment current funding regimes. Included as Appendix 12.1 is an international example of small community success in energy independence. The Danish island of Samsø recently went through an energy transformation similar to Claresholm's aspirations, thus it may prove beneficial to mimic this European community's success.

Solar Energy

Solar power is used in a number of different ways. There are two very basic kinds of solar energy:

1) Solar Thermal

Solar thermal (ST) is one of the most cost-effective renewable energy systems. Solar thermal water heating systems collect the sun's energy in the form of thermal or heat energy. The system can save a major portion of the utility bill as it won't need as much gas or electricity to heat water for homes because the sun will do most of the work.

2) Solar Photovoltaic Systems

Solar photovoltaic (SP) systems refers to a wide variety of solar electricity systems. Solar photovoltaic systems use solar panels made of silicon to convert sunlight into electricity. Solar photovoltaics¹³ are used in a number of ways, primarily to power homes that are inter-tied or interconnected with the grid.



Here are the five most practical and popular ways that solar energy is used:

1. *Small Independent Solar Photovoltaic Systems* - Portable units can be used for things like recreational vehicle appliances, while single panel systems are used for traffic signs and remote monitoring stations.
2. *Solar Pool Heating* - Running water in *direct circulation systems* through a solar collector is a very practical way to heat water for your pool or hot tub.
3. *Solar Thermal Energy using Glycol to Heat Water* - In this method (*indirect circulation*), glycol is heated by the sun's rays and the heat is then transferred to water in a hot water tank. It can pay for itself in three years or less.
4. Integrating Solar Photovoltaic Energy into your Home or Business Power - In many parts of the world, solar photovoltaics are an economically feasible way to supplement the power use by your home.
5. Large Independent Photovoltaic Systems. If you have enough sun power at your site, you may be able to eliminate your dependency on major power suppliers. You may also integrate or hybridize your solar energy system with wind power or other forms of renewable energy to stay 'off the grid.'¹⁴

Blue Box Recycling Program

Currently, the Town of Claresholm has a recycling program. The success of the program and quantity of material recycled is dependant on the willingness of the citizens to bring their recyclables to a waste transfer station. Alternatively, the Community Employment Services branch of the Claresholm Care Centre will pick-up recyclables from businesses and private residents for a modest fee. Residents would like to see the garbage collection program expanded to also include the collection of recyclable materials.

Support for a blue box program was indicated though the MSP public engagement process and would make significant strides towards reducing the amount of household waste being sent to land fills and

decrease the tax burden on citizens to pay for land fill services. It is intended that a program would enable residents of single family, duplex and some smaller multi-family dwellings to recycle materials such as newsprint, paper, cardboard, as well as metal, glass and plastic containers.

Composting

Claresholm has an active composting facility in the north east area of town, where residents can take their yard wastes and drop them off. The material then decomposes and transforms organic material into a soil-like product called humus. The resulting topsoil is then available for Claresholm residents to use as soil.



As it is estimated that about 50 percent of the total waste stream could be composted if this program was expanded along with the recycling program, and made a part of Claresholm waste management services.¹⁵

As backyard¹⁶ and centralized composting systems are being supported by the municipality, it is hoped that though municipal infrastructure funding, either the town's composting location can be upgraded, or backyard composting can be more effectively supported.

Energy Audits

Another key element to moving forward with sustainability is seeing where the municipality can save energy and where appropriate areas for retrofitting buildings may be. As part of the MSP exercise, it was proposed that all municipal buildings in Claresholm become as energy efficient as possible, either through retrofitting or reconstruction.

Audits - The Starting Point

Often the impediment to energy efficiency is not knowing where to start. A comprehensive audit of community facilities is an excellent way to get an action plan for saving energy.

In addition, the Canadian Government has incentive programs to help pay the cost of energy audits, feasibility studies, energy management plans and other project development measures. Once the key energy problems of a building have been identified through the energy audit, the next step is to select the most cost-effective measures or combination of measures to correct the problem areas. Many municipalities that do audits will recover the entire cost if some of the recommendations are implemented.

Table 1 – Backcasting Results – Environmental Pillar

Environmental Pillar of a Sustainable Community	Theme Area	Description of Success	Current Reality	Actions		
				0 - 5 years	5-15 years	15+ years
1	Water	Claresholm will make a commitment to take all possible actions to conserve the use of treated water	<ol style="list-style-type: none"> 1. Treated water is used for everything, i.e. toilet flushing, lawn watering/gardening 2. There is no current incentive to save and reuse rain/snow 3. There is no incentive to conserve water using low flow fixtures 4. Water meters have been installed to monitor water usage 	<ol style="list-style-type: none"> 1. Promoting the use of low flow fixtures and providing incentives for installation 2. Commit to education and action regarding the efficient use of water, including reusing rainwater and xeriscaping 	<ol style="list-style-type: none"> 1. Local / federal funding for greywater infrastructure development 	
2	Energy	Claresholm is using its most abundant resource - wind, for 50% of its power supply in 15 years	<ol style="list-style-type: none"> 1. No current utilization of wind energy 	<ol style="list-style-type: none"> 1. Council will support wind energy conversion system initiatives 2. Town to work with a large energy provider to secure a source of community wide green energy 	<ol style="list-style-type: none"> 1. Individual wind power facilities will be acceptable to residents and council 	<ol style="list-style-type: none"> 1. Develop a municipal wind farm
3	Energy	Solar energy is a common choice for energy needs amongst residents and Administration	<ol style="list-style-type: none"> 1. No current utilization of solar energy 	<ol style="list-style-type: none"> 1. Solar energy to be utilized in new municipal buildings 2. Education about solar technology 3. Enable the public to have more access to solar energy technology 		
4	Materials and Solid Waste	Recycling and composting is the norm for 100% of population	<ol style="list-style-type: none"> 1. The full potential of recycling and composting has not yet been realized 2. Education about recycling and composting is not readily available 3. Some residents put grass clippings in the garbage 4. Some stores and restaurants are not seen to be recycling and composting 	<ol style="list-style-type: none"> 1. Education about recycling and composting to be made readily available 2. Establish a limit of one garbage can per pick-up 	<ol style="list-style-type: none"> 1. Blue box program to be expanded to all residents 	
5	Energy	An energy analysis on all municipal buildings is performed to determine base line data and identify areas for immediate efficiency upgrades and long-term retrofitting	<ol style="list-style-type: none"> 1. The community centre is being retrofitted to more efficient fixtures 	<ol style="list-style-type: none"> 1. Energy audits for all municipal buildings 2. All new municipal buildings will be constructed to the highest LEED standard economically possible 		
6	Water	Storm water infrastructure is enhanced to maximize its potential as an amenity feature and functional infrastructure component	<ol style="list-style-type: none"> 1. Storm water runs to Frog Creek / golf course and is used for irrigation. 	<ol style="list-style-type: none"> 1. Increase the storm water storage capacity and efficiency of the conveyance system 		

7.0 Economic

The economic pillar is intended to create a flourishing and diverse local economy. As there are current strengths within Claresholm's economy which can be built upon, the steering committee and public placed more emphasis on further developing the existing economic strengths rather than pursuing new initiatives. The discussion below relates to how a flourishing economy would look to Claresholm.

Health Care Synergies

Due to Claresholm's inclusion in the Calgary Health Region, many quality local and regional health facilities exist within the community. Key health institutions contributing to the success of Claresholm are:

- Claresholm Mental Health and Addictions Centre
- Public Health Unit
- Claresholm General Hospital
- David Landers Treatment Centre
- Willow Creek Continuing Care Centre



Claresholm Mental Health and Addictions Centre

These established economic elements of the local medical field create a community with a strong interest in health and wellness. Examples of this are:

- Cooperation between the Town of Claresholm, the Town of Stavely, the District of Willow Creek and the Calgary Health Region on the Physician Recruitment and Retention Committee. By partnering in a program where physicians have been assisted with the transition to rural life, the municipalities and the Health Region have demonstrated their capacity to work together.

With the established healthcare synergies in the community, Claresholm is cooperating with community and regional leaders to forward the concept of creating an institution for advanced training for health professionals. This educational institution could fill a need in the province providing medical professional training in a rural setting. A parallel process under consideration by the town, is to begin promoting a program where accepted students, and those seeking healthcare experience, be given the opportunity to acquire work experience in one of the local health institutions.

Agriculture and Equestrian Success

The Agriplex has been quite successful in developing synergies between the equestrian-oriented facets of the community and growth in this area will be encouraged. The Agriplex plays host to many horse and rider, roping and cutting oriented competitions throughout the year which bring in cowboys and cowgirls from all over North America. The Town recognizes the year round impact

Agriplex users have on the local economy and are anticipating facilitating plans to maximize the economic impact.



Claresholm Agriplex

Selected action items for coordination are:

- Redesign the area around the Agriplex, Community Centre, and adjacent commercial area to optimize the services this region of the community provides to Agriplex users.
- Relocate the Appaloosa Horse Museum to a more prominent location in the community where other institutional uses are established.

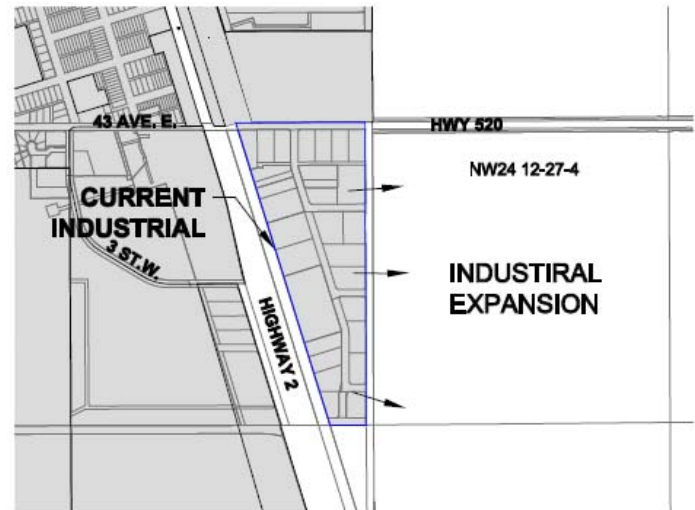
Industrial Expansion

Feedback provided during public sessions is that more diversity in the local tax base is required. Forms of ecologically-friendly industrial growth are supported by Council and the community as presented in the Economic Pillar table following this section.

Map 1, to the right shows, the most logical direction to expand the existing industrial area of the community.

Challenges to this growth are:

- Annexation of land
- Expense of servicing the parcel
- Coordination with Alberta Infrastructure and Transportation
- Encouraging “Green” industrial development.



Map 1. Direction of potential industrial expansion

In addition to this established industrial area, the Claresholm Airport also serves as an industrial base which the Town has an interest in through the delivery of municipal services. Given the existence of municipal services at the airport, developments which are environmentally friendly and broaden the tax base, are likely best located at the airport until additional serviced industrial land is available.

Table 2 – Backcasting Results – Economic Pillar

Economy Pillar of a Sustainable Community	Theme Area	Description of Success	Current Reality	Actions		
				0 - 5 years	5-15 years	15+ years
1	Economy	A plan is developed to attract Green industry and balance the industrial/residential tax base	<ol style="list-style-type: none"> 1. Little economic growth to keep young people in the community 2. Residential taxes are high 3. High residential taxes to support community, but most of population is senior with a fixed income 4. Residential tax base is high, industrial tax base is low 	<ol style="list-style-type: none"> 1. Acquire more industrial lands for development 2. Encourage clean-up of unsightly industrial premises 	<ol style="list-style-type: none"> 1. Raise taxes on unsightly premises, provide tax incentives for premises that meet the standards for attractive developments 	
2	Economy	A program for the promotion and advocacy of a Claresholm as a regional centre between Lethbridge and Calgary is underway and successful	<ol style="list-style-type: none"> 1. Claresholm currently has many amenities which lend themselves to the development of Claresholm as a regional centre: <ul style="list-style-type: none"> • Agriplex • Long-term care facility • Hospital • Library • Member-of-Parliament office • Golf course • Pool 2. Initial cost of developing a residential dwelling is inexpensive compared to major urban centres in Alberta 	<ol style="list-style-type: none"> 1. Continue marketing Claresholm as a great place to reside 2. Coordinate with stakeholders from influential local agencies to forward community goals 	<ol style="list-style-type: none"> 1. Pursue training and education programs in cooperation with the health faculties and equestrian facilities existing in the community for the purpose of expanding the economic base. 	
3	Economy	Building on the success of the Agriplex and Appaloosa Museum, actions are being taken to make Claresholm a centre for equine expertise	<ol style="list-style-type: none"> 1. Agriplex is self sufficient and well suited to keeping this going on their own 2. Agriplex events are often not advertised within the community and there is little community involvement 3. Agriplex is a great community asset 4. Appaloosa Museum is in a bad location 	<ol style="list-style-type: none"> 1. Improve the partnership between the Agriplex, Chamber of Commerce, and community 2. Develop "Claresholm bucks" to be distributed to Agriplex users 3. Link the Town of Claresholm website with the Agriplex website 	<ol style="list-style-type: none"> 1. Move the Appaloosa Horse Museum out of industrial area 2. Encourage synergies between Appaloosa Horse Museum and current museum 3. Help with signage on highway promoting equestrian events in Claresholm 	
4	Economy	Innovative health care partnerships are developed between the Town, health and welfare institutions and provincial authorities, for the purposes of providing <ul style="list-style-type: none"> o Leadership and mentorship and to o Train and retain 	<ol style="list-style-type: none"> 1. All health facilities are critical to Claresholm's future 2. No incentive to provide training in Claresholm 3. No specializing in facilities 4. Claresholm is a provincial leader in mental health care 5. Auxiliary hospital is well known to provide excellent care 6. The Claresholm Centre of Mental Health and Addictions should become more prominent in the community given the economic benefits this institution provides 	<ol style="list-style-type: none"> 1. Develop recruitment incentives for all health care professionals 2. Pursue the Calgary Health Region to have Claresholm as a rural training community for new doctors and nurses 3. Encourage the province to promote Claresholm as a training centre 	<ol style="list-style-type: none"> 1. Develop Claresholm as a centre for excellence in rural health care 2. Develop high school programs for students interested in the medical field 3. Develop the care centre as a facility to train psychiatric nurses 	

8.0 Social

The goal of the Social Pillar is to create harmonious and inclusive communities. The perspective taken by Claresholm stakeholders was oriented on how to encourage further development of both individual well-being and community well-being.

Claresholm will ensure individual well-being is enhanced by making decisions that:

- Provide opportunities to develop and upgrade skills and local employment opportunities
- Support and develop opportunities to present creativity and artistic expression
- Provide affordable recreation and leisure programs
- Provide a range of opportunities for individuals to contribute to the health and well-being of the community through life-long learning and engagement.

Claresholm will ensure community social sustainability is enhanced by:

- Encouraging economic development and supporting community organizations and networks
- Creating the opportunity for Claresholm to have a strong sense of place
- Creating opportunities for citizens to be involved in public processes
- Creating and supporting spaces for social interaction
- Providing resources for cultural and community activities

Diversification of Existing Strengths

As indicated previously, the imbalance between the retired population and employed population creates many challenges for Claresholm. This ultimately translates into a situation where high demands are placed on the health services aspect of the community, with limited professionals to service these requirements. By pursuing actions which strengthen Claresholm's role as a regional health care provider, community social sustainability is enhanced. Further, the potential for individual well-being increases as access to medical professionals improves.

Centralization of Community Services with a Focus on Families

The lack of existing space for family resources and services was also identified as a challenge within Claresholm. A potential mitigating activity would be to create a new space for community and family services where childcare, day camps, recreational opportunities for families, and support and educational services could be offered. By transitioning and retrofitting the use of an existing building, this action could be achieved as long as the required governmental and agency support was provided.

Home Support Services for the Elderly

Recognizing the town has an aging population, a plan to deliver in-home support services to citizens has also been identified as an opportunity to solve a common problem in a sustainable way. This *aging in place* concept has been successfully practiced in other centres as an effective and efficient health care model for a senior population. By more effectively delivering services to individuals with mobility challenges, less demand for the additional development of low cost, assisted living housing will be experienced.

Access to Transportation

The local Transportation Society was also identified as a key element of social sustainability in Claresholm. By continuing to provide residents with options regarding mobility and enhancing these options, individual well-being and community well-being will continue to improve.

Table 3 – Backcasting Results – Social Pillar

Social Pillar of a Sustainable Community	Theme Area	Description of Success	Current Reality	Actions		
				0 - 5 years	5-15 years	15+ years
1	Social	The population is balanced with regard to age groups (i.e. - young families and seniors)	<ol style="list-style-type: none"> 1. Increasing number of seniors working in the community within either voluntary or compensated positions 2. Increase in number of retirees in the community 3. Security and safety for both age groups is satisfactory 4. Sufficient jobs available for young families 	<ol style="list-style-type: none"> 1. Tap into seniors' abilities with regards to volunteer groups 2. Offer opportunities for seniors to get involved in social and cultural activities 	<ol style="list-style-type: none"> 1. Demonstrate and increase awareness of all social programs to community 	
2	Social	Claresholm has a multi-faceted health care model, serving all ages, focused on the population within the local health region.	<ol style="list-style-type: none"> 1. Claresholm's health care services are currently strong and diverse 	<ol style="list-style-type: none"> 1. Ensure existing services remain and retain present staff 2. Attract new staff to area 3. Demonstrate need for services to stop cut-backs 	<ol style="list-style-type: none"> 1. Create on-going awareness in the region as a center for health services 	
3	Social	Innovative strategies to facilitate the construction of affordable housing are in place.	<ol style="list-style-type: none"> 1. Coordination between the local Housing Authority and Claresholm Council could be stronger 2. Claresholm has experienced a loss in affordable housing due to condominium development 3. Strong need for affordable housing 	<ol style="list-style-type: none"> 1. An inventory of all affordable/attainable housing is required 2. Education and awareness that low cost housing does not hold negative community consequences 3. Encourage innovative private-public cooperation to create and maintain affordable housing 	<ol style="list-style-type: none"> 1. New businesses will be encouraged to work in partnership with public agencies creating housing for new workers 	
4	Social	A family centre exists where family resources, child care and recreational elements are centralized to meet the needs of the community.	<ol style="list-style-type: none"> 1. Fragmented family resources and childcare programs/facilities 2. Lack of professional childcare to meet demand 3. Childcare facilities are not in ideal locations or venues 	<ol style="list-style-type: none"> 1. Explore the opportunity of retrofitting the elementary school to a LEED standard providing a location for family resources 2. A community needs assessment is conducted to formalize a statement of need and which includes an annual review process 3. Bring stakeholders together to coordinate family services 	<ol style="list-style-type: none"> 1. Create programs and services focused on meeting the needs of young families 	
5	Social	Claresholm has a quality seniors' in-home support program focused on the aging in place requirements of elderly residents.	<ol style="list-style-type: none"> 1. Other items for future consideration not existing now but desired are: <ul style="list-style-type: none"> • call in and deliver service from local stores • in home repair (handyman) services 	<ol style="list-style-type: none"> 1. Develop a Seniors' coordinator of services position 2. Acquire information to maximize grant funding 		
6	Social	Coordinated, affordable and environmentally conscious transportation options exist for residents.	<ol style="list-style-type: none"> 1. Biggest issue is transportation for seniors 2. The perception is that there is a lack of information on the Handi-bus 3. The Handi-bus provides trips in and out of town for medical appointments 4. Subsidized taxi program for those who need it 	<ol style="list-style-type: none"> 1. Make Handi-bus available at all times in town 2. Schedule Handi-bus service to local facilities 	<ol style="list-style-type: none"> 1. Create pedestrian corridor plans to maximize the local walking and cycling potential 	

9.0 Cultural

Vibrant and festive communities are those where citizens are engaged in the development of their community and support events which are unique to the locale. Cultural elements which have defined Claresholm throughout the years are:

- **Agricultural Development** - The plains to the east and Porcupine Hills to the west make Claresholm an ideal location to summer cattle in the hills, while harvesting feed off the surrounding fields to sustain them all winter.
- **Railroad Development** - The landscape around Claresholm lent itself to sustaining a community as steam locomotives could stop and refill their water boilers.



An Image of Downtown Claresholm from 1907

- **Air Training Base** - The open country surrounding Claresholm providing opportunities for emergency landings, the ideal weather conditions for flying and the use of the Porcupine Hills for low level flight training, made the region attractive as an air training base. During World War II, Claresholm was the location of an Allied air training school and subsequently as a NATO air training school.
- **A Rest Stop along a Key Transportation Corridor** - Being halfway between Lethbridge and Calgary, Claresholm provides services to motorists along Highway # 2.

The above four items have created a town where a rich sense of place exists. In order to continue this tradition, Claresholm residents are concerned with retaining cultural elements which contribute to Claresholm’s vibrancy.

Street Tree Planting

While the layout and location of Claresholm does not lend itself to incorporating a community wide trail system along a linear environmental entity such as a river or lake, the high water table in Claresholm has made growing a wide variety of attractive street trees possible. Along the roadways in Claresholm are a variety of deciduous and coniferous trees, which are a significant element to the community’s charm and appeal. However, given the age of many of these trees, their natural life cycles are ending. As a result of this, the town will be planting a tree for each tree removed in partnership with the Trees Canada Foundation. In addition, developers will be compelled to be as equally aware of the ecological benefits of street trees and incorporate both coniferous and deciduous trees as design features in new neighbourhoods.



Town Office in spring showcasing established street trees found throughout Claresholm.

Theatre Space Development

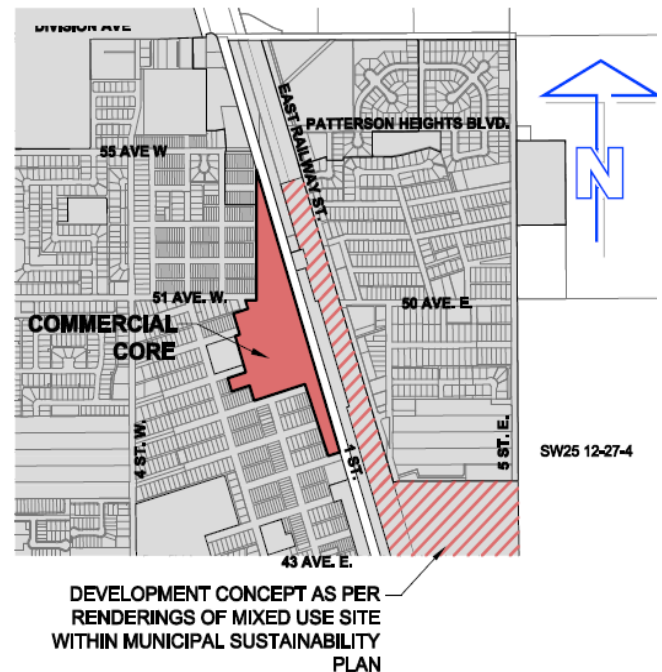
The community has a number of attractive outdoor murals and a keen interest in the Arts. There are numerous groups that add cultural aspects within the community. In order to further augment the potential for creative arts and to add a venue for performances, the community has identified the desire for a local performance space to be constructed. It has been requested, via this process, that a performance stage be constructed in one of the parks augmenting what Claresholm has to offer with regard to cultural activities during the summer months. An alternate and complementary plan would be that, when finances and resources allow, a theater is constructed in the mixed-use area, close to the downtown.

Downtown Revitalization

The developments Claresholm will be supporting within the commercial core are those that are attractive and support the service requirements of the community. Currently, these commercial endeavours are focused on providing community needs and services to motorists along Highway #2. Alberta Transportation and Infrastructure has recently announced plans to relocate Highway #2 to the east of Claresholm as shown within Claresholm’s MDP No.1490 Figure 5.

The Claresholm bypass will result in a significant corridor of land and economic activity requiring transitioning. To be proactive, the community created plans for what the current Highway #2 corridor could look like, incorporating ecological design and architectural controls. An adjacent corridor, formally zoned industrial, but designated as mixed-use in the MDP, is the former Canadian Pacific Rail line. This area has been designated with the intent of developing a higher density, inner core, complementing the down-town subsequent to highway relocation. Appendix item 12.3 represents an urban renewal program demonstrating how asphalt dominated corridors can transition to pedestrian friendly areas by well planned piecemeal investments.

It has also been proposed that a farmers market be established close to the commercial core in the mixed use area. Farmers Markets have proven to be a very effective means of downtown revitalization due to their informal nature and ability to draw many people to the community core. Drawing on the agricultural capacity of the region, the Claresholm farmers market could become a centre for local organically grow food.



Map 2. Downtown Commercial Core and MDP Designated Mixed Use Area

The concept plans for the Mixed-use area within Claresholm include sustainable neighbourhood design techniques such as:

- Green roofs
- Pedestrian corridors
- Rooftop solar power cells
- Medium and higher density buildings
- Vertically integrated and horizontally separated mixed-use developments
- Varied “levels” of streetscaping, making the pedestrian experience rewarding.



Presented at the right is a potential development concept for the Highway #2 and former CPR Railroad corridors.



Table 4 – Backcasting Results – Cultural Pillar

Culture Pillar of a Sustainable Community	Theme Area	Description of Success	Current Reality	Actions		
				0 - 5 years	5-15 years	15+ years
1	Cultural	New developments will incorporate ecologically conscious design and be streetscaped with the appropriate amount of street trees.	<ol style="list-style-type: none"> 1. No consistent set of landscaping/streetscaping standards 2. Ensure storm retention in all new developments and use as an amenity where possible 3. Street trees being removed due to maturity 	<ol style="list-style-type: none"> 1. Acquire water line from Pine Coulee to ensure a sustained community water supply 2. Create a tree policy where if a tree in town is removed another is planted 	<ol style="list-style-type: none"> 1. Compel all new developments to have the same number of trees as are planted in existing areas 2. Develop the commercial core and highway corridor to an attractive pedestrian friendly space. 	<ol style="list-style-type: none"> 1. New developments will incorporate low impact development techniques including: <ul style="list-style-type: none"> • Two pipe water systems • Bioswales • Permeable pavement
2	Cultural	The theatre and performance space in town is a thriving cultural centre for the community and the band shelter is utilized regularly during the summer months.	<ol style="list-style-type: none"> 1. Currently there isn't a band shelter 2. Highboy trailers are used for outdoor stages 3. Only large performance venue is the community centre. 		<ol style="list-style-type: none"> 1. Construct a band shelter in an appropriate location 2. Encourage the development of a drama space in the new high school 	<ol style="list-style-type: none"> 1. Couple the new town office with a theatre space
3	Cultural	Claresholm will retain its friendly small town community spirit while embracing new technologies that enable it to be independent.	<ol style="list-style-type: none"> 1. Museum is inviting 2. Currently improving website 3. The Local Press is utilized for notices and community marketing 4. The Welcome Wagon is available for all new residents 5. The library currently provides: <ul style="list-style-type: none"> • Lifelong learning • Internet access • Literary requirements of all ages • Meets community needs for meeting spaces 	<ol style="list-style-type: none"> 1. Develop a Welcome Wagon process connected to the town website so that new residents can register online 2. Create a community notice board in a prominent location 	<ol style="list-style-type: none"> 1. Community cable TV channel 2. Library facilities will respond appropriately to community growth and continue to provide access to current technology 	
4	Cultural	Develop "Made in Claresholm" design standards for the downtown core and neighborhoods.	<ol style="list-style-type: none"> 1. No architectural standards currently exist within the community 2. The commercial core would benefit from a redevelopment program 3. Council has adopted a Communities in Bloom program 	<ol style="list-style-type: none"> 1. Develop design standards for the downtown 2. Develop an identity for Claresholm and market the town as such 3. Establish a Farmers Market in the downtown core to anchor redevelopment 	<ol style="list-style-type: none"> 1. Encourage the downtown and mixed-use area to adopt a neo-traditional design scheme providing a diverse and lively pedestrian experience 2. Expand the murals and create more outdoor art 3. Update camping facilities at the Agri-plex 	<ol style="list-style-type: none"> 1. Restoration of buildings downtown

10.0 Governance

The Council and Administration recognize the impact local governments can have on sustainability, as well the role in providing leadership through effective and inclusive participation and representation. Currently, the Town of Claresholm is taking steps towards sustainability by supporting programs regarding waste reduction, recycling and composting. In addition, water metres have been installed in all the residences in Claresholm to account for domestic use of water. With the upcoming construction of a water pipeline from the Pine Coulee Reservoir, Claresholm will have the capacity to measure water-use with the intent of making incremental decreases throughout the system, based on best management practices.

Low Impact Development

In addition to the steps being taken above, Claresholm Council sees a benefit to further reducing the use of resources by the citizens where low impact development¹⁷ techniques are possible. In doing so, the ultimate benefit is to the tax payer by the decrease in construction and maintenance of municipal infrastructure. As part of future development approval processes, Council and Administration will be encouraging the incorporation of environmentally conscious design and construction. For a list of these policies, see the Growth and Development section of the Municipal Development Plan. To facilitate success, Claresholm will cooperate through the Alberta Low Impact Development Partnership, sharing resources and experiences between municipalities. As well, Developers should expect to be compelled to include in future Area Structure Plans a section which discusses how their development meets the



Low Impact Development Techniques

Town's sustainability aspirations. Further information on Alberta's Low Impact Development Partnership can be found at www.alidp.org. In addition, Appendix item 12.2 provides an example of a sustainability checklist from Port Coquitlam, BC which Claresholm is considering making part of their development approval process as well.

Natural Step Training

Given the strong educational component of the MSP pilot project, Council has also agreed that Council members will have the opportunity to take The Natural Step's *Sustainability Step by Natural Step* training course. This course (or an equivalent) will become part of the introduction component to sitting on Town Council. In addition, AUMA is beginning a program where elected municipal officials can take courses with respect to governance duties. Included in AUMA's course material is municipal sustainability. As a commitment to sustainability, Claresholm will always have an individual of Council trained in sustainability, as this is a key to making the sustainable transition successful.

Community Recreation and Sustainability Coordinator

Due to the nature of demographics in Claresholm, there are many members of the population available to take part in volunteer organizations and community service agencies. The challenge is reaching out to these people to fill the necessary roles within the community.

This is similar to how the community views the development of municipal sustainability. There is significant will to move forward with these principles from a public perspective, but there is no one within Administration to fully champion the required initiatives. It is anticipated that by having a role for a Community Recreation and Sustainability Coordinator, a single employee would be responsible for providing venues for events and service agency meetings, as well as facilitating the sharing of resources within the community. Partnering agencies would be the Museum Board, the Library Board, FCSS, local service organizations, the Claresholm Chamber of Commerce, recreation organizations and institutional agencies.

Commitment to Communication

It was indicated via the process that communication between Council and the citizens of Claresholm is often challenging to achieve in a timely fashion. It was suggested at the outset of the process that an electronic billboard for posting community events should be erected to advertise important local activities. Claresholm Council responded to this suggestion and has since coordinated the establishment of an electronic billboard near the lights on Highway #2. Further, there is a desire for communication from Council via the World Wide Web, as well as the suggestion to move to paperless Council meetings. This would both conserve paper and ensure electronic files are available to post on the internet quickly after a meeting.

Table 5 – Backcasting Results – Governance Pillar

Governance Pillar of a Sustainable Community	Theme Area	Description of Success	Current Reality	Actions		
				0 - 5 years	5-15 years	15+ years
1	Governance	Continued access to education for the purpose of facilitating innovation and ever improving delivery of council services.	<ol style="list-style-type: none"> 1. User friendly website, though not updated enough 2. Good reports in local paper regarding council meetings 3. Council members and staff are approachable 4. Several courses regarding education are held out of town 5. Communication between administration, Council and citizens has evolved into a situation where approachability is the dominant philosophy 	<ol style="list-style-type: none"> 1. Place a higher priority on development of the website 2. Monthly newsletter from Council/Administration 3. Use current mediums more effectively 4. Utilize the local Shaw Cable station 	<ol style="list-style-type: none"> 1. Encourage a local radio station 2. Educate all new Council members on The Natural Step 	
2	Governance	Council will foster leadership that embraces differences and innovation while projecting itself as a cohesive unit	<ol style="list-style-type: none"> 1. Council is approachable 2. Council is well educated 3. Challenge is to balance and prioritize needs 4. Leadership is going through growth 	<ol style="list-style-type: none"> 1. Develop a schedule for regular intermunicipal meetings to discuss regional opportunities, challenges,(i.e. how to recruit health care professionals to the local area 2. Advertise community committee positions via the web and newspaper explaining their function. 	<ol style="list-style-type: none"> 1. Potential for centre of excellence for seniors 	
3	Governance	Bylaws will be created and adopted which require new homes to be energy and water efficient, balancing existing technologies and developer expense	<ol style="list-style-type: none"> 1. Bylaw Officer/Peace Officer is in place 2. No low flow toilet or shower head rules 3. Residential water meter installation is almost complete 4. Water line from Pine Coulee is almost approved 5. No incentives exist for energy efficiency in new construction 6. Leaking water lines may exist 7. No incentive to build using solar or wind energy 8. No grey water incentives 	<ol style="list-style-type: none"> 1. Develop a template to rate development permits regarding sustainability 2. Compel developers to incorporate water and energy efficiencies in new neighborhoods 	<ol style="list-style-type: none"> 1. Introduce all local developers to The Natural Step philosophy 2. Calculate the net water loss within the community. 3. Become part of partnerships to establish solar/wind energy systems 	
4	Governance	A role for a Community Recreation and Sustainability Coordinator for comprehensive planning of community activities will be created	<ol style="list-style-type: none"> 1. Past attempts to hire a recreational coordinator have been unsuccessful 2. No recreation board exists within the community 3. Independent organizations compete for resources 4. Same local people on many volunteer boards and service groups 5. Recreational facilities are not centralized in the community 	<ol style="list-style-type: none"> 1. In cooperation with local service clubs, create a job position within administration for a Community Sustainability and Recreation Director 	<ol style="list-style-type: none"> 2. Pursue the development of a Parks and Recreational Facility Master Plan with the ultimate goal of creating a community multi-plex 	

11.0 Project Summation

The purpose of this planning exercise has been to ensure strong community engagement when initiating the transition to sustainable municipal development. By progressing through the phases of the AUMA process, genuine support amongst community leaders was created with regard to sustainable endeavours.

Responsibility for meeting the targets of each description of success will fall to the municipal committee with the appropriate mandate. This committee will then made decisions and pursue courses of action which hold true to the description of success. In addition, the committee will be responsible for reporting back to council regarding yearly achievements prior to Claresholm's annual general meeting.

Underling each description of success will be the intent of the Town of Claresholm to meet the four conditions of a sustainably society as developed by The Natural Step. All future council and administrative decisions will attempt to stay true to the following:

1. Claresholm will endeavour to minimize the use of materials unsustainably extracted from the earth's surface
2. Claresholm will endeavour to lessen their use of materials which accumulate in nature at a rate faster than nature can decompose it
3. Claresholm will pursue development which minimizes its physical footprint on natural ecosystems
4. Claresholm will work with stakeholder groups to pursue courses of action that do not break the preceding 3 principles and continue to provide citizens with a high quality of life

The summary tables on the following pages summarize the New Deal for Cities and Communities funding category as well as the Municipal Committee responsible for meeting the targets regarding each description of success. The intent is to embed sustainability within a variety of committees as well as provide authority to the committee to direct funding streams to appropriate initiatives. By giving responsibility for both planning and capital expenditures to the appropriate decision-making body, the intent is for the concepts presented within this document to reach many areas of local decision making.

Table 6 - Implementation Framework

Environmental Pillar	Description of Success	New Deal for Cities and Communities Funding Avenue	Group Responsible for Implementation
1	Claresholm will make a commitment to take all possible actions to conserve the use of treated water.	Water	Utility Planning Committee Municipal Planning Commission & Subdivision Authority
2	Claresholm is using its most abundant resource - wind, for 50% of its power supply in 15 years.	Community Energy Systems	Utility Planning Committee
3	Solar energy is a common choice for energy needs amongst residents and Administration.	Community Energy Systems	Utility Planning Committee
4	Recycling and composting is the norm for 100% of population.	Solid Waste	Regional Landfill Committee Community Standards Committee
5	An energy analysis on all municipal buildings is performed to determine base line data and identify areas for immediate efficiency upgrades and long-term retrofitting.	Capacity Building	Administration
6	Stormwater infrastructure is enhanced to maximize its potential as an amenity feature and functional infrastructure component .	Wastewater	Utility Planning Committee
Economy Pillar	Description of Success	New Deal for Cities and Communities Funding Avenue	Group Responsible for Implementation
1	A plan is developed to attract Green industry and balance the industrial/residential tax base.	Water Wastewater Active Transportation Infrastructure	Economic Development Commission Municipal Planning Commission & Subdivision Authority
2	A program for the promotion and advocacy of a Claresholm as a regional centre between Lethbridge and Calgary is underway and successful.	Capacity Building	Economic Development Commission
3	Building on the success of the Agriplex and Appaloosa Museum, actions are being taken to make Claresholm a centre for equine expertise.	Capacity Building	Agriplex Board Economic Development Commission
4	Innovative health care partnerships are developed between the Town, health and welfare institutions and provincial authorities, for the purposes of providing leadership and mentorship and train and retain.	Capacity Building	Physician Recruitment and Retention Committee Economic Development Commission

Table 6 - Implementation Framework

Social Pillar	Description of Success	New Deal for Cities and Communities Funding Avenue	Group Responsible for Implementation
1	The population is balanced with regard to age groups (i.e. - young families and seniors).	Economic Development	Economic Development Committee
2	Claresholm has a multi-faceted health care model, serving all ages, focused on the population within the local health region.	Capacity Building	Physician Recruitment and Retention Committee
3	Innovative strategies to facilitate the construction of affordable housing are in place.	Community Energy Systems Capacity Building	Family and Community Support Services Board Affordable Housing Group
4	A family centre exists where family resources, child care and recreational elements are centralized for the purposes of ensuring adequate and affordable child care programs.	Capacity Building	Family and Community Support Services Board Administration
5	Claresholm has a quality seniors' in-home support program focused on the aging in place requirements of elderly residents.	Capacity Building/ Partnerships	Family and Community Support Services Board Physician Recruitment and Retention Committee
6	Coordinated, affordable and environmentally conscious transportation options exist for residents.	Active Transportation Infrastructure	Administration

Table 6 - Implementation Framework

Cultural Pillar	Description of Success	New Deal for Cities and Communities Funding Avenue	Group Responsible for Implementation
1	New developments will incorporate ecologically conscious design and be streetscaped with the appropriate amount of street trees.	Active Transportation Infrastructure	Municipal Planning Commission & Subdivision Authority Subdivision & Development Appeal Board
2	The theatre and performance space in town is a thriving cultural centre for the community and the band shelter is utilized regularly during the summer months.	Capacity Building	Community Hall Board Administration
3	Claresholm will retain its friendly small town community spirit while embracing new technologies that enable it to be independent.	Community Energy Systems Capacity Building	Economic Development Commission
4	Develop "Made in Claresholm" design standards for the downtown core and neighborhoods.	Active Transportation Infrastructure Water Wastewater Solid waste	Municipal Planning Commission and Subdivision Authority
Governance Pillar	Description of Success	New Deal for Cities and Communities Funding Avenue	Group Responsible for Implementation
1	Continued access to education for the purpose of facilitating innovation and ever improving delivery of council services.	Capacity Building	Claresholm Town Council Administration
2	Council will foster leadership that embraces differences and innovation while projecting itself as a cohesive unit.	Capacity Building	Claresholm Town Council
3	Bylaws will be created and adopted which require new homes to be energy and water efficient, balancing existing technologies and developer expense.	Water Wastewater Solid Waste	Municipal Planning Commission and Subdivision Authority
4	A role for a Community Recreation and Sustainability Coordinator for comprehensive planning of community activities will be created .	Capacity Building	Claresholm Town Council Administration

12.0 Appendix

12.1 Samsø: Denmark's Renewable Energy Island

Samsø is a 112 square kilometer island off the east coast of Denmark's Jutland peninsula. Home to 4,300 residents, the island is unique in the annals of renewable energy because it was the first to declare its intent to rely on renewable energy for 100% of the island's needs. Ten years later this goal was achieved. Similar to the goal of Claresholm, this community should be researched to bring this success to Canada.

<http://www.wind-works.org/articles/SamsøeRenewableEnergyIsland.html>

12.2 Port Coquitlam Sustainability Checklist

The City of Port Coquitlam, B.C. has developed and implemented a sustainability checklist via the adoption of their Official Community Plan. As this type of development approval process acquired much interest through the phases of MSP development, a bylaw should be considered to entrench a similar review for all future Claresholm developments

http://www.portcoquitlam.ca/__shared/assets/Sustainability_Checklist2040.pdf?method=1

12.3 Investments in Urban Renewal

Below are some images complements of the former Mayor of Honolulu - Jeremy Harris. The streetscape is very similar to that of down town Claresholm where the Highway 2 corridor bisects the community. The investment scheme reflects a potential beautification program.

Current Streetscape





Streetscaping investments of new sidewalks, lamp posts, and greenery to buffer pedestrians from vehicle traffic.



Alteration of development standards to allow zero setback lines, mixed use medium density developments and infill development.



By planting street trees down the centre of the carriage way, the roadway becomes an attractive boulevard where traffic is calmed and pedestrian friendly areas are created.



If desired the traffic can be separated into local shopping traffic and through traffic by further developing the transportation corridor.

13.0 Endnotes

¹ Figure courtesy of the Natural Step Canada at <http://www.naturalstep.ca/>

² Ibid.

³ Ibid.

⁴ Showerhead image courtesy of <http://mygreenhomeblog.com/wp-content/uploads/2007/10/showerhead.jpg>

⁵ Source information retrieved from ToolBase Services developed by the NAHB Research Center, Inc., Maryland, USA.

⁶ Rain Barrel image courtesy of <http://cleancalgary.org/images/uploads/RainBarrel.jpg>

⁷ Source information retrieved from ToolBase Services developed by the NAHB Research Center, Inc., Maryland, USA.

⁸ Ibid

⁹ Greywater image courtesy of <http://www.lifegoggles.com/wordpress/wp-content/uploads/greywater.jpg>

¹⁰ Source information retrieved from ToolBase Services developed by the NAHB Research Center, Inc., Maryland, USA.

¹¹ Turbine image courtesy of <http://greenlivingideas.com/images/stories/windturbinesmall2.png>

¹² Source information retrieved from ToolBase Services developed by the NAHB Research Center, Inc., Maryland, USA.

¹³ Photovoltaic image courtesy of <http://www.segen.co.uk/images/PV8.jpg>

¹⁴ Source information retrieved the Solar Guide publication by Moxy Media, Ontario, Canada

¹⁵ Source information provided by the Composting Council of Canada

¹⁶ Backyard composting image courtesy of http://www.tinkersgardens.com/newweb/site_images/Compost%20Bin.jpg

¹⁷ Low Impact Development image courtesy of http://www.fcwc.org/WEArchive/010203/low_impact.jpg

Guiding Document: Municipal Sustainability Plan Guidebook developed by the Alberta Urban Municipalities Association