Telkwa

VILLAGE OF TELKWA OFFICIAL COMMUNITY PLAN
BYLAW NO. 613, 2011
(Consolidated Version)

INDEX OF AMENDING BYLAWS

This document has been reproduced for convenience only and is a consolidation of the "Village of Telkwa Official Community Plan Bylaw No. 613, 2011" with the following amending bylaws:

Amendment Bylaw Number	Effective Date
No. 746, 2022	March 8, 2022
No. 736, 2021	April 13, 2021

*Individual copies of any of the above bylaws are available from the Administration Department of the Village of Telkwa. For legal purposes, copies of the original bylaw should be obtained.

CORPORATION OF THE VILLAGE OF TELKWA

OFFICIAL COMMUNITY PLAN
And
INTEGRATED COMMUNITY SUSTAINABILITY PLAN
BYLAW NO. 613, 2011

A bylaw to guide long-term vision and strategic land use decisions within the Village of Telkwa pursuant to Part 26 of the *Local Government Act*

The Village of Telkwa has undertaken the creation of a long term planning framework that has establish guidelines and principles related to economic, environmental, social and cultural sustainability. This framework is called an Integrated Community Sustainability Plan (ICSP).

The Village of Telkwa has structured the Official Community Plan (OCP) and Zoning Bylaw within the principles of the Telkwa ICSP. These key municipal planning documents have consistency that will guide current and future Councils and staff to progress in a way that accurately reflects the community wants and needs.

WHEREAS the Council of the Corporation of the Village of Telkwa wishes to adopt a new Integrated Community Sustainability Plan with the new Official Community Plan pursuant to section 876 of Part 26 of the Local Government Act.

NOW THEREFORE the Council of the Corporation of the Village of Telkwa in open meeting assembled enacts as follows:

1. This bylaw may be cited for all purposes as the Village of Telkwa "Official Community Plan Bylaw No. 613, 2011.

2. The Village of Telkwa "Integrated Sustainable Community Plan" Schedule "A" to and hereby forms part of this bylaw.

3. The Village of Telkwa "Official Community Plan" Schedule "B" attached to and hereby forms part of this bylaw.

4. Village of Telkwa Bylaw No. 513, 2002 cited as Village of Telkwa "Official Community Bylaw No. 513, 2002 and any amendments are hereby repealed.

READ A FIRST TIME this 11th day of July, 2011

READ A SECOND TIME this 11th day of July, 2011

PUBLIC HEARING HELD pursuant to section 890 of the Local Government Act this 19th day of July, 2011.

READ A THIRD TIME this 4th day of August, 2011.

ADOPTED THIS 7th day of Novemeber, 2011.

_____   _____

Carman Graf   Kim Martinsen

Mayor   Chief Administrative Officer

CERTIFIED A TRUE AND CORRECT COPY of "Village of Telkwa
Official Community Plan with Integrated Sustainable Community Plan
Bylaw No. 613, 2011."

_____

Kim Martinsen
Chief Administrative Officer

SCHEDULE A

Integrated Community Sustainability Plan

Village of Telkwa
Bylaw No. 613-2011

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1.0 PREFACE

1.1 Background

In 2010, Telkwa's Mayor and Council took a leadership role within the region by initiating the development of an Integrated Community Sustainability Plan (ICSP) combined with community's OCP and Zoning Bylaw update process. A coordinated approach towards long-term planning will provide on-the-ground actions that are strategic and in-sync with guiding policy objectives.

1.2 What is an ICSP?

An Integrated Community Sustainability Plan (ICSP) is an overarching framework used by ALL stakeholders involved in implementing Telkwa's Vision in a sustainable manner. It guides decision-making and planning processes over a long-term planning timeframe. Figure 1.1 shows how an ICSP relates to two subsequent planning documents that guide both land-use policy (OCP) and implementation (Zoning).

Figure 1.1 – ICSP Framework

WE ARE TELKWA, the slogan of the ICSP process, spoke to the ICSP as being the first time Telkwa purposely collaborated together, as a community, and formed a long-term perspective on the future in an interconnected manner. The **WE ARE TELKWA** process encourages residents, businesses and organizations to ask three questions:

1. What does it mean to be a part of Telkwa?
2. What does sustainability look like in Telkwa in 50-100 years?
3. How do I or the organization I work with fit into the implementation of the community's vision?

The main working principles of WE ARE TELKWA are:

1. **DESIGN A COMPASS:** Create a shared-vision & identify common principles;
2. **CONNECT THE DOTS:** Look at issues in an interrelated manner;
3. **BE A TEAM:** Share long-term strategies between organizations;
4. **OPEN DOORS:** Foster a network to encourage capacity building & knowledge sharing;
5. **SAVE MONEY:** Share resources (i.e. facilities, staff, services, data etc); and
6. **MEASURE-IT:** Identify indicators to measure progress & success.

1.3 Planning Process

The ICSP was completed in parallel with the Official Community Plan Review, and incorporated long-term sustainability content into the majority of the community engagement events and processes in order to form a continuum towards Telkwa's community planning. These engagement exercises centered on three outcomes: 1) Education and awareness towards sustainability planning; 2) Public input and collaboratively inventorying the current baseline and desired future; and 3) Validating information and developing suitable solutions.

The following sources of information were used to the guide development of the ICSP:

- ✓ Community Visioning Night
- ✓ Sustainability-based questions in the OCP Resident Community Survey
- ✓ Interviews with stakeholders
- ✓ Best management practices
- ✓ TESC (Telkwa Environmental Sustainability Committee)

The community members of Telkwa should view the current ICSP is a starting point for future leaders to engage with, and build on, the plan to create a continual practice of integrated sustainability planning.

1.4 Framework for Sustainability Planning

Sustainability is a broad and complex topic, and in order to create a level of structure to navigate goals, strategies, and actions effectively, a five-level framework was used to navigate the multi-dimensional content.

The five levels allow stakeholders to identify what level they are working at, and whether their initiative is comprehensive and aligned with the end-goal that was defined collectively. By using this structure, future decisions will automatically be congruent and work together as a whole, rather than sporadic implementation.

I. **CURRENT CONTEXT** = knowing where we are now

2. **SUCCESS** = vision of desired future

3. **STRATEGY** = criteria, collaborative

4. **ACTIONS** = measures towards success
(return on investment, in the right direction, flexible platform)

5. **TOOLS** = technology, organizational structures, communication

Figure 1.2 - Sustainability Framework

Figure 1.2 illustrates how each level speaks to a scope of the larger system being planned. It is possible for certain items to fall within more than one level. For instance, a software program used to monitor a set of indicators for the strategic action plan would be viewed as a TOOL that is continually updating the CURRENT CONTEXT and helping track the results at the ACTION level.

2.0 CURRENT CONTEXT

An effective way to lead social change towards sustainability is understanding where we are now and identifying the associated roles of stakeholders that are needed to support long-term sustainability.

2.1 Context of Telkwa in the Biosphere

Telkwa is a rural community found within the Bulkley River watershed located in BC, Canada. The village consisting of roughly 1400 people provides a mixture of residential typologies, sport & recreation opportunities, community services and small-scale commercial and industrial business to residents of Telkwa and the surrounding area (Round Lake, Quick). The largest urban area within the region, Smithers, is approximately 15km away. The largest river in the watershed, the Bulkley River, runs through Telkwa. Tyhee Lake Park one of the larger Provincial Parks, neighbors to the north, and two of the biggest transportation routes for the Peace Region, Highway 16 & the CN Rail Line, transect Telkwa's urban boundary.

All of these components that make up Telkwa or which operate within its boundary, also operate in the biosphere. The definition of the biosphere states, "The parts of the land, sea, and atmosphere in which organisms are able to live. The biosphere is an irregularly shaped, relatively thin zone in which life is concentrated on or near the Earth's surface and throughout its waters".

The ecological services and networks of organisms found within the earth's biosphere are also what supports all economies around the world, and therefore is as a key component to sustaining humans' fundamental needs for future generations. It is currently being demonstrated in communities across Canada and around the world that people are able to strategically design their places of work, home and play to operate in a manner that respects the natural laws found in the biosphere (law of conservation, law of thermodynamics, etc).

2.2 Current Reality

The current reality is a snapshot depicting how various Telkwa-based activities are increasingly moving the community towards a future of unsustainability. The baseline developed by the community provides
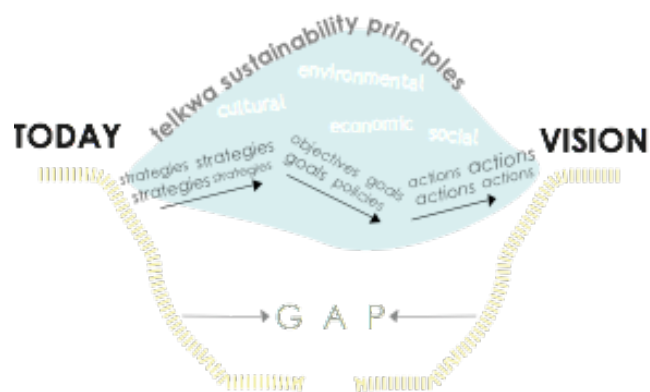
the first step required to define the gap within the long-term planning period (50+ years). By identifying the gap, a starting point for change is created to help highlight linkages and feedbacks.

For the purposes of the ICSP, unsustainability has been divided into 4 realms:

1. Dependence on fossil fuels and virgin metals & minerals
2. Pollutants and toxicity
3. Fragmentation of ecological services
4. Undermining fundamental human needs

2.2.1 Activities that are Unsustainable in Telkwa

A – Dependence on fossil fuels and virgin metals & minerals
  ✓ Increasing rates of fossil fuel use
  ✓ Senior government's interest in continued development of fuels that produce CO_2
  ✓ Coal bed methane (potential exploration)
  ✓ Travel to Smithers for services/transportation
  ✓ Enbridge pipeline

B – Pollutants and toxicity
  ✓ Driving to Smithers
  ✓ Unregulated smoke and burning practices
  ✓ Landfill waste (leachate}
  ✓ Toxicants found in wastewater (pharmaceuticals, plastics)
  ✓ Bottled water
  ✓ Industry close to river (onsite stormwater, spills)
  ✓ Agricultural runoff (pesticides, herbicides, etc)

C – Fragmentation of ecological services
  ✓ Industrial development along the rivers
  ✓ Depletion of ground-water wells
  ✓ Increasing deforestation (related to climate change and pine beetle)
  ✓ Economic dependence on resource extraction
  ✓ Subdivision development destroying habitat
  ✓ Loss of agricultural land to development
  ✓ Low density residential development

D – Undermining fundamental human needs
Lack of:
  ✓ Infrastructure for youth
  ✓ Community support and involvement
  ✓ Diversity in housing alternatives
  ✓ Regional food security

- ✓ Public gathering places
- ✓ Progressive community leadership
- ✓ Business incentives to enable local businesses to stay and thrive
- ✓ Indoor recreation and arts and culture
- ✓ Resources and services creates unsustainable lifestyle
- ✓ Safety – RCMP live in Telkwa but we do not have a RCMP presence actively patrolling the community

2.3 Building an integrated stakeholders network

Engaging stakeholders is a critical component of the ICSP process. It serves as a link which ties the ICSP framework to on-the-ground actions. Discussions were conducted with both government-based stakeholders and non-government stakeholders in order to provide a better representation of the needs, issues, concerns, and vision of the community. It was also important to inventory which organizations were operating under a strategic plan, and whether it spoke to a 25 year planning timeframe and sustainability. Some of the organizations that were consulted during the ICSP process included:

- ✓ Northern Health
- ✓ Village of Telkwa
- ✓ Telkwa Environmental Sustainability Committee (TESC)
- ✓ School District No.54
- ✓ Valley Vision
- ✓ Telkwa Community Initiatives Society (TCIS)
- ✓ Smither's Transit
- ✓ Bulkley Valley Stewardship Coalition
- ✓ BC Ministries (MoE, MoT)

2.3.1   Highlights from ICSP discussions:

- ✓ Opportunities exist to pursue shared-spaces and capacity building resources with regional agencies (i.e. hub space, community sustainability outreach position, etc). Telkwa is a small community, which still demands many of the same services of any urban area and therefore unique characteristics for delivering community-based services (health clinic, education, retail/commerce, business support services) are required. It was recognized by several stakeholders that by creating a hub of services, where many activities could take place in one site, would lessen operational costs, transportation issues and allow for sharing facilities and staff.

- ✓ A gap exists in long-term planning in the area (most organizations are following 5 year strategic plans, but nothing long-term). Not all organizations have a strategic plan that guides the activities affecting Telkwa's community development and few work under the strategy of sustainability. No stakeholder groups consulted utilize anything longer than a 5 year plan.

✓ Overall, residents desire a future that includes life-long learning opportunities, local health services and an inter-modal transportation system. Telkwa is located close enough to Smithers to be able to attract sufficient services and professionals to be able to deliver a set of rural-based options to its residents and businesses. Residents identify Telkwa as a place to raise a family in and age-in-place, and therefore demand a full spectrum of services and amenities.

✓ Common perspectives exist regarding Telkwa's growth and economy being heavily influenced by a bedroom community-style relationship with Smithers. The majority of concern is directed towards the approach of the development community, as residents view growth as an opportunity to acquire suitable amenities and services to achieve sustainability.

2.3.2 Additional common threads resulting from ICSP stakeholder consultation:

✓ Sustainability Checklist for evaluating incoming development applications and policy development;
✓ Green necklace – connecting trails and greenspace around the village centre;
✓ Connecting pedestrian nodes (School/Norma's ark, Eddy Park, barbeque lands);
✓ Build on heritage & cultural themes;
✓ The downtown area creates a central space for surrounding neighbourhoods;
✓ Compliments Smithers (recreation, music, seniors, festivals, used to be restaurants);
✓ RV/parking/Pull-off; and
✓ Eddy Park (one of the most photographed areas in the Bulkley Valley).

2.4 Capacity Building towards Sustainability

The level of engagement achieved was seen as a starting point with the idea that eventually a more hands-on approach towards implementing a shared-vision would take place in Telkwa and the Bulkley Valley. For instance Telkwa's sustainability initiative could include an "Early Adopters" program recognizing local businesses and organizations which step forward to incorporate the values and the strategy of moving Telkwa, as a community, towards a more sustainable future into their own operations and endeavours. This leads to partnerships, innovation, new enterprises and better communication between industry and healthy competition. The network can continue to expand over time, some additional organizations that would offer positive feedback and knowledge to share include:

✓ Town of Smithers
✓ Smithers Community Services
✓ Smithers Transit
✓ Hudson Bay Mountain
✓ Regional District of Bulkley-Nechako

- ✓ Bulkley Valley Stewardship Coalition
- ✓ BC Ministries (MoE, MoT)
- ✓ Wet'suwet'en Nation
- ✓ Northern Health
- ✓ School District No.54
- ✓ Valley Vision

Strategies for building stronger networks include:

- ✓ Celebrate victories
- ✓ Create a level of self-organization (let the groups create their own approach towards the sustainability initiative)
- ✓ Annual or biannual check-in sessions for the ICSP implementation
- ✓ Leadership training;
- ✓ Create a solid contact database; and
- ✓ Integrate existing planning processes.

2.5 Integration

As mentioned earlier, there are additional planning exercises that are happening at various levels, based on scope, sector, or a specific desired result. It is important to understand what other plans are in operation in order to tie-in simultaneous strategies and actions related to the ICSP. The current ICSP has been developed in parallel with the Telkwa's Official Community Plan update and is intended to guide subsequent plans such as:

- ✓ Strategic Plans
- ✓ Corporate Plans
- ✓ Official Community Plan
- ✓ Affordable Housing Action Plan
- ✓ Utility Master Plan
- ✓ Recreation Master Plans
- ✓ Community Energy Plans
- ✓ Transportation Plan
- ✓ Economic Development Strategies

3.0 SUCCESS

Success can only be realized with a clear purpose and strategy, where both the individual/organization and the community are striving towards the shared vision of sustainability.

3.1 Vision

The shared-vision was created by the community of Telkwa during the "We Are Telkwa" process. A vision acts as concise statement describing the desired future. The following vision for Telkwa reads as if you were standing on the streets of Telkwa in 2036.

UNDER CONSTRUCTION: TELKWA'S VISION

Telkwa is a small, friendly community, located on the forks of two rivers, whose natural beauty, unique people, & progressive ideas make it an *diverse* attractive community in which to raise a family, *open a business,* *age in* *place*. Known for its sense of community & continual movement towards a sustainable economy, Telkwa is a place where *people* families are united by their heritage, *arts* , recreation,& collaborative spirit. Recognizing a co-dependence with nearby Smithers, Telkwa provides a distinctive local *business* commerce that supports residents & *^* , & attracts regional & abroad visitors with its Telkwa-based amenities & services.

COME SEE THE SURVEY RESULTS @ THE DEMOLITION DERBY (LABOUR DAY WEEKEND) For more information www.telkwa.com Telkwa

3.2 Definition of Sustainability

Having a reference point to measure and evaluate actions back to an end-goal, results in strong continual improvement. In order to move towards sustainability, a common definition needs to be in place to ensure accountability, progress and efficient communication. The community of Telkwa defined sustainability as:

- ✓ Living as though the earth matters;
- ✓ My dollars going to my neighbour and vice versa. Not having to spend outside of my community;
- ✓ Anything that is healthy and beneficial over a very long period of time (25 yrs);
- ✓ A future for my kids;
- ✓ Community that continues in a vibrant and healthy growth;
- ✓ Don't waste, re-use things as much as possible;
- ✓ Living without depleting;
- ✓ Educated citizens working towards sustainable environmental practices, economics, education and culture;
- ✓ It never runs out in my lifetime (fish, clean water);
- ✓ Having enough industry to sustain;
- ✓ Not demanding / consuming resources continually;
- ✓ Minimizing waste production;

- ✓ Long term lifestyle and way of living that supports and nurtures people, community, natural earth and the local economy;
- ✓ Input = output;
- ✓ Progressive thinking;
- ✓ Neighborhoods' supporting each other to work recreate, eat, etc. with minimum negative impacts;
- ✓ Utilizing local resources in a creative, sustainable way to foster the growth of local business and economic opportunity; and
- ✓ A prosperous, environmental, caring community that supports itself.

3.3. Definition of Success

The Village of Telkwa, its community members and regional stakeholders acknowledge its integrated relationship to the Bulkley Valley and the larger global biosphere and therefore are committed to the long-term goal of continually moving towards a future that strategically lessens:

1. Dependence on fossil fuels and virgin metals & minerals
2. Pollutants and toxicity
3. Fragmentation of ecological services
4. Undermining fundamental human needs

A sample of the answers collected at the visioning World Café event, where community members discussed the future look and feel of Telkwa (What Do you Want Telkwa to Look Like 25 Years From now?), are organized in a structure to relate to the baseline unsustainability exercise that was completed by the same participants.

The challenge for Telkwa is to achieve the desired vision in a sustainable manner. This is a primary purpose of the ICSP and the subsequent plans in which it infers.

Dependence on fossil fuels and virgin metals & minerals
- ✓ Commuting bike trails
- ✓ Bioenergy (waste-to-energy)
- ✓ Geothermal heating
- ✓ Park and ride
- ✓ Water & energy efficiency programs

Pollutants and toxicity
- ✓ Community gardens
- ✓ Recycling and composting

- ✓ Pesticide ban
- ✓ Wood-stove replacement
- ✓ Improved stormwater collection and treatment
- ✓ Hazardous waste disposal centre

Fragmentation of ecological services
- ✓ Protect rivers with fresh fish
- ✓ Monitor natural processes
- ✓ Value viewscapes
- ✓ Include green corridors
- ✓ Clean drinking water
- ✓ Non-timber resources and products

Undermining fundamental human needs
- ✓ Strong, vibrant business centre
- ✓ Multi-purpose communal community gathering area
- ✓ Focus on arts and cultural focus with strong community involvement and representation
- ✓ Rest stop with restrooms, green space, path to river that is near amenities, playground etc.
- ✓ Learning, literacy programs
- ✓ Appreciation and value to arts
- ✓ Affordable housing
- ✓ Medical center
- ✓ Sustainable housing utilities and management
- ✓ Ability to grow our own food (and sell and buy)

4.0 STRATEGY

A successful strategy should focus on what the best approach is to realize a different way of doing things. Business as usual is not sufficient, as moving towards sustainability demands a regimen of integration and communication unlike previous planning exercises. By ensuring all actions are collaborative, community-led & integrated with each other, a stronger initiative will be realized for the community of Telkwa.

4.1 Collaborative learning

It is recommended the ICSP activities build on the existing strong volunteer-base as well as encourage organizations and institutions to incorporate a stronger co-learning environment for projects being undertaken at the local level. Working in multi-disciplined groups provides a greater level of information sharing, opportunity recognition and identifying challenges and successes together.

All ICSP action teams are encouraged to:

4.1.1   Consist of multi-disciplinary professionals and multi-generational members;
4.1.2   Consist of representatives of both governmental and private sectors;
4.1.3   Engage local groups in completing actions on the ground;
4.1.4   Share results with the community; and
4.1.5   Identify gaps in skill-set areas which Telkwa community residents could fulfill.

4.2 Community-led

Creating community-led success can be achieved by using existing resources and assets found within the Village of Telkwa. Mechanisms that can help ensure that long-term planning and implementation occurs at the local level include:

4.2.1   Establish a local community economic development/investment criteria;
4.2.2   Host a Telkwa leadership training program;
4.2.3   Celebration of results achieved and an awards and recognition program;
4.2.4   Develop a sustainability checklist, to monitor the level of continual improvement;
4.2.5   Encourage individuals/organizations in the Region to sign the ICSP Declaration Letter (see Appendix 'A');
4.2.6   Local branding & communication of ICSP process (i.e. We Are Telkwa); and
4.2.7   Create local action teams to complete actions and build capacity.

4.3 Integrated approach

Working in an integrated manner differs from a traditional silo approach, and therefore demands new perspectives at looking at interconnected issues.

4.3.1 Identify feedbacks (both positive and negative) within the current reality. (i.e. an increase in new residential developments = increase in automobile traffic = increase in idling vehicles crossing the bridge = increase air pollution = increased health issues);

4.3.2 Look for patterns and trends in order to influence the strategy and prioritize actions (i.e. trends in communication technology, migration patterns, etc.); and

4.3.3 Leverage actions within the current context. Some actions will be able to create greater impact due to their interconnectivity, shared level of knowledge & awareness and behavioral change.

5.0 ACTIONS & TOOLS

A prioritized action plan is the main tool for implementing a series of sustainability actions. The action plan will help recognize early signs of success and will be able to be measured and realized by the community.

5.1 Individual to Community

It is important to remember that achieving sustainability is not a government-borne responsibility, nor service; it is a community-wide initiative and therefore enables residents to take action in order to achieve a systematic level of results.

The community residents involved in the visioning session were asked to share "what actions they could take as individuals towards the shared vision". A sample of the answers is shown below as well as the cloudtag in figure 5.1.

- ✓ Steps I can take to achieve this vision include…

- ✓ Shopping locally as the opportunity arises
- ✓ Not saying no to all new industry
- ✓ Helping protect natural areas
- ✓ Encouraging others with good ideas
- ✓ Continue to be involved in municipal action
- ✓ Encourage community spirit
- ✓ Raise my family here, don't leave
- ✓ Start a sustainable "green" business
- ✓ Know your neighbours
- ✓ Be involved in the community
- ✓ Volunteer

Figure 5.1: Sustainable Actions Cloudtag from ICSP Visioning Session

- ✓ Decrease garbage and increase recycling
- ✓ Use outdoors for entertainment
- ✓ Carpool – self and family
- ✓ Create space for gathering
- ✓ Choose small projects with big heart
- ✓ Create goals 5 year plan that include knowledge of other existing organizations
- ✓ Recycle
- ✓ Educational opportunities
- ✓ Live in an efficient small house

- ✓ Bicycle, walk and garden
- ✓ Grow own food
- ✓ Eco-reno home

5.2 Brainstorming Sustainability Actions

Within the public engagement processes, many ideas were brought forth to answer the gaps and help the community move towards sustainability (refer to Appendix 'C' for full data set). All of these actions could help achieve the outstanding gap, although this can lead to unnecessary improvements, errors, as well as the failure of not using resources effectively and efficiently. Therefore three filters, summarized below, are used to ensure that the actions are achieving the intent of the ICSP.

Is the proposed Sustainability Action a....

1. **Step in the Right Direction?**
Is it connected to one of the sustainability goals, and how is it helping advance the community towards the stated vision?

2. Flexible Platform?
Is the proposed action setting the next player up for success towards the ultimate goal? Some goals will take multiple generations to achieve the desired objective; therefore steps that constrain future sustainability steps are undesirable.

3. Return on Investment?
Is the sustainability action financially feasible and will it cause a deficit in the organization or community? If the action prohibits the organization to be able to operate in the marketplace, then the community is losing capacity on the ground.

5.3 Prioritization

A strategic approach is applied to the ICSP, meaning all proposed actions are to be evaluated and prioritized based on the following parameters:

- ✓ Connecting the proposed measure to one of the sustainability goals, describing what it is helping to achieve (i.e. local food system, transportation, young families, seniors);
- ✓ Related policy and/or legislative ability;
- ✓ Listing sub-activities required to achieve the proposed measure;
- ✓ Duration period of initiative (Short-term: 1-5 yrs.; Medium-term: 5-10 yrs.; and Long-term);
- ✓ Stakeholders involved (roles and responsibilities, and holders of knowledge);
- ✓ Amount of resources/funding required; and
- ✓ Indicators (monitoring & measurement).

5.4 Indicators

Indicators should illustrate and quantify performance in each of the theme areas (ENERGY & WASTE, TRANSPORTATION, WATER, ECOLOGICAL, an CAPACITY BUILDING & GOVERANCE) and are expected to be revisited regularly and used to identify successes, additional gaps and key findings. Items to consider when selecting indicators:

- ✓ Within the influence/control of Village
- ✓ Data sets are (or could be) available
- ✓ Stable and reliably measured
- ✓ Understood by a broad range of audiences
- ✓ Comparable to indicators used in other jurisdictions
- ✓ Meaningfully speaks to items (goals, and actions)

5.5 Implementation Tools

There is no "one best way" to implement an ICSP. Tools that exist today may soon be out-dated and newer ones may appear over time. It is important to keep the process current and allow new forms of communication and expression to emerge related to the community initiative. Some anchor tools required to ensure accountability and continual progress include:

- ✓ Sustainability Checklist for staff and local decision-makers (refer to Appendix "B");
- ✓ Telkwa Sustainability Joint Declaration to be used to garner partnerships and growing network around implementing sustainability measures for Telkwa and the region;
- ✓ Database management system to track completed actions and monitor indicators;
- ✓ Communication strategy, brand and related public relations; and
- ✓ 101 primer to educate individuals and organizations on the process and the purpose of the ICSP.

6.0 STRATEGIC SUSTAINABILITY ACTION PLAN

The Strategic Action Plan is a working document that will evolve as more engagement with the community emerges. The initial action items were developed by the Telkwa Environmental Sustainability Committee (TESC). The Action Plan is a tool designed to create a strategic approach to implementing community sustainability. A description of each of the columns (prioritization parameters) in the subsequent table are follows:

ACTION: the action statement created by the stakeholder groups to achieve the definition of success (sustainability).

ACTIVITIES: specific tasks required to complete the action item.

STAKEHOLDERS: a list of all potential stakeholders involved with implementing the action item.

BUDGET: a rough estimate of the cost for each action item. The budget legend is as follows:

$ ($0-$15,000)
$$ ($15,000-$50,000)
$$$ ($50,000 - $150,000)
$$$$ ($150,000+)

TIMELINE: estimated timeframe for the completion of the action. The timeline legend is as follows:

I - Immediate / < 5 years
ST- Short-term Actions / 5-10 years
M- Medium Actions / 10-25 years
LT- Long-term Actions / +25 years

INDICATORS: the measurement tool that can used to gauge the level of completion or continual improvement.

1. ENERGY AND WASTE

			TELKWA ICSP STRATEGIC ACTION PLAN				
MEASURE	ACTION	Stakeholders	Activities	Time	Resources	Budget	Indicator
Local Food System	To provide capacity and organization for local food initiatives, including community-gardens, food-safe kitchens for small-scale food manufacturing and production.	VoT Business Community Regional District	Establish a food-safe kitchen Designate community garden plots in each neighbourhood Encourage solutions to composting household and commercial food waste Promote local food products	ST	$$ Kitchen equipment Land, right-of-way	M	operational kitchen active community garden organics from compost material Telkwa-made food products
WHY: Achieving a local food system creates a multi-faceted shift towards a future that is aligned with Telkwa's Sustainability Principles. By growing, eating and manufacturing local food: a reduction in fossil-fuels will be achieved; lessening habitat degradation to foreign agricultural zones (rainforest degradation, growing food in deserts, etc); and providing a healthy affordable food supply in order to allow residents to meet their human need of subsistence.							

TELKWA ICSP STRATEGIC ACTION PLAN							
MEASURE	ACTION	Stakeholders	Activities	Time	Resources	Budget	Indicator
Renewable Energy Development & Energy Efficiency Green Home Design Seminar	To use local resources to innovate renewable energy supplies for a community energy network, including demand-side management activities to achieve high-levels of energy efficiency. To achieve Telkwa's GHG Emission Reduction target (full details, see Telkwa Official Community Plan)	VoT BC Hydro Regional Economic Partnerships	Prepare community energy feasibility study Use available biomass for energy-based uses Set reduction target % for demand-side management Encourage passive housing, net-zero homes, solar hot water systems, & geothermal opportunities	MT	Incentives for energy efficiency reductions Community energy audit Mapping resources Academic partnerships	SSSS	Local renewable fuel source for transportation Net zero housing/smart meter efficiency targets District energy system # of Geothermal hook-ups
WHY: Energy efficiency is the first step required for a household or a community, with regards to moving towards a stronger economic return and gradual decrease in GHG emissions. Investigating local renewable energy supplies will allow Telkwa to provide a resiliency for residents and businesses, as well as open investment and other economic opportunities.							

TELKWA ICSP STRATEGIC ACTION PLAN							
MEASURE	ACTION	Stakeholders	Activities	Time	Resources	Budget	Indicator
Resource Management & Waste Management	Strengthening the supply chain of resources and waste recovery.	VoT Private Sector	Reuse/ Recycling of construction waste. Identify opportunities for timber and non-timber waste flows	ST	Site allocation for construc-tion reuse it store/ Recycling centre Community compost operation Audit of resource flows	$$	New start-up businesses Reduce tonnage to landfill Local soil

WHY: The stocks and flow of materials are now valued in today's economy. Economic resiliency depends on using local resources at every stage of its life-cycle. Turning towards waste recovery, eco-industrial parks, and local micro-manufacturing and processing will help provide innovation and entrepreneurship, as well as step in the right direction for lowering greenhouse gas emissions.

2. TRANSPORTATION

TELKWA ICSP STRATEGIC ACTION PLAN							
MEASURE	ACTION	Stakeholders	Activities	Time	Resources	Budget	Indicator
Enhanced Transit & Trip Planning services	Create a local strategy to enhance transit service and other transportation demand side mechanisms	All stakeholders	Determine main A-B trips, times, schedules Equip buses to carry bicycles Provide dedicated shuttles for events and celebrations Provide family passes	I	Meetings, communica-tion, advertising	$$	Additional planned trip routes Increased ridership Assess daily/weekly trips
WHY: Transportation is a sustainability issue which needs a series of solutions to help shift today's society from an automobile centric lifestyle. Examining the A to B destination trips and finding patterns and/or opportunities for clustering uses, sharing vehicles, bringing the service or product closer to you, etc. Due to the close proximity to Smithers, Telkwa is advantageous to continue building a strong transit service.							

TELKWA ICSP STRATEGIC ACTION PLAN							
MEASURE	ACTION	Stakeholders	Activities	Time	Resources	Budget	Indicator
Active Transportation	Promote cycling, walking, x-country skiing and other modes of active transportation	VoT	Paint lines on the highway Provide safety barriers to separate pedestrians from traffic Provide multi-use paths Host a bike festival	I	Construction of trails and crossings, paving, painting Install bike lock up areas	$	Bike count Health of residents
WHY: Active transportation brings many benefits to a community: increased physical health, decrease in GHG emissions and pollutants, encourages more pedestrian based uses (commercial, recreational, etc). For more ideas check out the Fraser Basin Council's Transportation Demand Management solutions for small to medium sized communities.							

3. WATER

TELKWA ICSP STRATEGIC ACTION PLAN							
MEASURE	ACTION	Stakeholders	Activities	Time	Resources	Budget	Indicator
Conservation of water	Increase the use of water demand side management practices	VoT Private sector Prov	Education and learning towards rainwater harvesting Low flow toilets and shower heads Water barrel programs & rain capture Implement universal metering system	ST	Incentives Water audits Partnership with local hardware store to stock items Advertising and communication	$$	Reduced flow rates Decrease in treatment Households saving money
WHY: Many communities in Canada take for granted the access to fresh drinking water, due to the abundance around them. Water conservation is a step towards cost savings, and valuing a resource that is valued much higher globally. Many of these actions depend on behaviour change, however with a myriad of achievable activities, change can take place over time.							

		TELKWA ICSP STRATEGIC ACTION PLAN					
MEASURE	ACTION	Stakeholders	Activities	Time	Resources	Budget	Indicator
Protect water quality	Create a community strategy for monitoring and managing local water sources.	VoT Northern Health Stewards	Stewardship ethics Disposal of pharmaceuticals Maintain vegetated buffers around riparian areas	I	Monitoring equipment Communication Stewardship club	$	Quarterly reports Low ppm

WHY: The quality of Telkwa's water source comes from a mountain range providing a great fresh water source, however the lands surrounding the river do have some hazardous practices that should be monitored and given a strategy to avoid any contamination. Hazards include, CN rail line, bridges with vehicles, intensive farming, storm water drains and treated sewer water (pharmaceuticals, caffeine, etc).

4. ECOLOGICAL

TELKWA ICSP STRATEGIC ACTION PLAN							
MEASURE	ACTION	Stakeholders	Activities	Time	Resources	Budget	Indicator
BearSmart Program	Develop a human-bear management plan	VoT Province	Identify habitat area and animal corridors	ST	Biologist Meetings Research	$	Management plan in place with recommendations for various
WHY: Wildlife protection brings many intrinsic benefits to community sustainability. By maintaining a rich biodiversity, wildlife habitat and ecological processes, the community can depend on natural processes, such as salmon spawning, nutrient transfer, wild foods, etc.							

Air Quality	Prepare a air quality strategy in order maintain a level of clean air.	VoT Northern Health MoE		ST	Incentives Communication and education material Paving	$	Decrease in asthma Increased air quality
WHY: Air quality issues in rural communities is a common problem due to wood stoves, old vehicles, unpaved roads, etc. Many of these sources of air pollution can be dealt with overtime, however there needs to be common understanding of what the health issues are related to poor air quality in order to gain community-wide buy-in.							

Village of Telkwa Integrated Community Sustainability Plan

5. CAPACITY BUILDING AND GOVERNANCE

			TELKWA ICSP STRATEGIC ACTION PLAN				
MEASURE	ACTION	Stakeholders	Activities	Time	Resources	Budget	Indicator
Sustainability Youth Leadership Program	Promote youth involvement in the community	VoT School District	Support existing activities (volunteers) Develop new activities (i.e. BMX park, Community youth Ski Trip); Arts (youth events, collaborate with school)	I	Engagement of kids Volunteers, parents, teachers Land Community Hall Media, (messaging, signage) Schools (newsletter, newspaper)	$	Involvement and feedback from youth Demand
WHY: Engaging youth and having them lead on-the-ground projects is a great way to provide multi-generational involvement. Sustainability is about long-term planning and therefore this time period resonates with youth, even if they might not live in Telkwa for their entire lives.							

TELKWA ICSP STRATEGIC ACTION PLAN							
MEASURE	ACTION	Stakeholders	Activities	Time	Resources	Budget	Indicator
Procurement Policy	To purchase materials, products and services which are not helping you move towards sustainability	VoT Private sector	Bulk purchasing with surrounding jurisdictions Adopt a set of criteria	I	Communication and coordination Purchasing networks/ databases Crii	$	Annual audit of purchases and % of "sustainable products" purchased
WHY: Taking a triple-bottom approach when making capital purchases or even hiring services is a great opportunity to show the marketplace that sustainability-minded items are valued more than products that do not help you move your organization towards its vision.							

7.0 RESOURCES:

The Gas Tax Agreement:
http://www.cserv.gov.bc.ca/lgd/intergov_relations/gastax_agreement.html
Ministry of Community Services Integrated Community Sustainability Planning (ICSP) Initiative April 16, 2007

UBCM Website - GTA Program Information and Guide:
www.civicnet.bc.ca /siteengine/ActivePage.asp?PageID=294

Real Estate Foundation's Community in Transition Program:
http://www.communitytransition.org/

Green City Awards
http://www.greencityawards.gov.bc.ca/

Sustainability Websites:

Natural Step Canada - http://www.naturalstep.ca/
Smart Growth BC - http://www.smartgrowth.bc.ca/
Smart Growth on the Ground - http://www.sgog.bc.ca/
ICLEI (International Clearinghouse on Sustainable Development) - http://www.iclei.org/
SFU CSCD (Centre of Sustainable Community Development) - http://www.sfu.ca/cscd/
UBC Design Centre for Sustainability - http://www.dcs.sala.ubc.ca/
ICSC (International Centre for Sustainable Cities) - http://www.icsc.ca/
Pembina Institute – www.pembina.org/sustainability-measurement/index.php
West Coast Environmental Law - http://www.wcel.org/
FCM Centre for Sustainable Community Development - http://kn.fcm.ca/
The Centre for Whole Communities - http://www.wholecommunities.org/
The UN international Awards for Sustainability - http://www.livcomawards.com/
Fraser Basin Council - http://www.fraserbasin.bc.ca/

Appendix **"A"**

Telkwa Sustainability Joint Declaration

SUSTAINABILITY JOINT DECLARATION

To move towards a long-term sustainability vision and strategic plan, there needs to be a long-term commitment by the leaders and decision-makers that play a role in the implementation and monitoring stages of this collaborative initiative. Therefore the Telkwa Environmental Sustainability Committee (TESC) recommends the Village of Telkwa adopts the below sustainability declaration as a guiding statement for the ICSP process and to invite the regional stakeholders in the area to support Telkwa in implementing its long-term community vision.

Telkwa Sustainability Declaration (adapted from Natural Step System Conditions)

The Village of Telkwa, its community members and regional stakeholders acknowledge its integrated relationship to the Bulkley Valley and the larger global biosphere and therefore are committed to the long-term goal of continually moving towards a future that strategically lessens:

a. Dependence on fossil fuels and virgin metals & minerals
b. Pollutants and toxicity
c. Fragmentation of ecological services
d. Undermining fundamental human needs

One of the roles of the Integrated Community Sustainability Plan is to act as a community guide to measure changing behaviors towards a more sustainable lifestyle. If people are to achieve new ways of creating livable communities, leadership, local learning opportunities and applicable alternatives must be continually offered. Some of the other roles of the ICSP include:

ａ）Guides decision-making processes;
ｂ）Used to gauge evaluation and monitoring efforts;
ｃ）Guide the development of further studies and/or secondary plans; and
ｄ）Provides capacity building towards sustainability and community development planning.

The structure of the ICSP will be arranged to encourage a strategic approach to this interdisciplinary exercise. An outline to guide the continual development of a strategic action plan is displayed below. Each listed sustainability action can be prioritized based on a series of variables involved to achieve the measure, including: the goal trying to be achieved; the collaborative stakeholders required to make it happen; the preceding activities required to implement the measure; the level of time and resources required to complete the tasks; and the indicator that will measure the action's success. These variables ensure the action is strategically leading TESC and the Village of Telkwa in the right direction, giving a return on investment, and creating a flexible platform for the subsequent sustainability actions. Large complex problems, such as community

development and planning, are chaotic and difficult to find entry points for intervention; however the ICSP and strategic action plan will provide direction and momentum for TESC, Village of Telkwa staff and council and the community.

Appendix "B"

Sustainability Checklist

Village of Telkwa
Sustainability Checklist

PURPOSE
The Sustainability Checklist is intended to provide the Village staff with an opportunity to assess a project's contribution to the sustainability of Telkwa based on the four pillars of sustainability development using the social, cultural, environmental and economic indicators. The checklist measures all applications by the same criteria ensuring consistency between projects during the review process. The checklist promotes the Village of Telkwa's sustainability objectives and will guide development towards Telkwa's vision of a sustainable community.

This checklist will be used to review the following types of development applications:

- ✓ Development Permits
- ✓ Development Variance Permits
- ✓ Amendments to the Zoning Bylaw
- ✓ Amendments to the OCP
- ✓ Subdivision

All of these applications will require a completed Sustainability Checklist to be included with their application package submission. The Village of Telkwa will be able to track the implementation of the sustainability goals within the community.

The checklist is broken down into four sections covering the four pillars of sustainability; social, cultural, the environment and the economy. Not only is the applicant requested to submit a written description of their project proposal detailing how they address the four indicators of Telkwa's vision of sustainability but they are requested to complete the following checklist. The project will be awarded 1 point for each 'yes' answer and 0 points for each 'no answer. If any answers are not applicable to the proposal check the n/a box and explain why the item does not apply. Points will be tallied to track the sustainability features of the project and Telkwa's efforts towards reaching its sustainable vision.

Section 1 – ENVIRONMENTAL INDICATORS

ENVIRONMENTAL INDICATORS				
Please describe if the proposed development/project protects, restores or enhances the surrounding natural environment through the following:	**Yes**	**No**	**n/a**	**Answer details**
a) Positively affecting or impact ALR lands				
b) Protects the Riparian Areas or other environmentally sensitive areas				
c) Protects hazardous slope areas				
d) Restores or rehabilitates a contaminated site				
e) Adds no additional or minimal extensions to municipal infrastructure				
f) Infill development				
g) Uses environmentally sensitive or recycled materials				
h) Uses onsite renewable energy systems				
i) Includes onsite stormwater Management systems				
j) Aims for LEED certification or another accepted Green Building best practice				
k) Incorporates indigenous or low water requiring landscaping				
l) Promotes and supports natural forest setting				
m) Promotes and encourages good air quality				
n) Promotes and encourages the natural health of the river				

Section 2 – ECONOMIC INDICATORS

ECONOMIC INDICATORS				
Does the proposed development/project supports and/or contributes to the positive economic system of Telkwa in terms of the following::	**Yes**	**No**	**n/a**	**Answer details**
a) Support local businesses				
b) Promote or create local employment opportunities				
c) Provide a positive impact on tax base				
d) Promote existing infrastructure efficiency for water, sewer and roads				
e) Promote or encourage energy and/ or water savings				
f) Promote or encourage economic diversification including value added opportunities				
g) Encourage the migration of new residents to Telkwa				
h) Promote and support health of river and it's ecosystem				

Section 3 – SOCIAL INDICATORS

SOCIAL INDICATORS				
Does the proposed development/project contribute to the health and well-being of the community in terms of the following:	**Yes**	**No**	**n/a**	**Answer details**
a) Encroaches community engagement in project consultation and where appropriate the incorporation of changes and suggestions				
b) Supports the Regional Growth Strategy				
c) Is consistent with the OCP				
d) Offers a mix of compatible land uses				
e) Supports affordable, seniors or other special needs housing				
f) Promotes and supports a safe pedestrian friendly community				
g) Supports and promotes access to parks, recreation and trails				
h) Promotes and supports community spaces for social interaction				
i) Promotes and supports a variety of community services and programs (e.g. daycare, seniors hall, community gardens etc.)				
j) Promotes local food production and distribution				
k) Promotes and encourages easy access to stores, schools, employment and social services centres				
l) Promotes and supports a variety of transportation options including public transit				
m) Promotes and supports recycling activities				
n) Promotes and supports safe communities programs and services				

Section 4 – CULTURAL INDICATORS

CULTURAL INDICATORS				
Does the proposed development/project supports and contributes to the cultural system of the community in terms of the following:	**Yes**	**No**	**n/a**	**Answer details**
a) Encourages and supports education and training opportunities				
b) Supports and encourages obvious displays of community pride through aesthetically pleasing designs and construction including public art				
c) Preserves or restores community heritage building and features				
d) Preserves or include green spaces or open spaces				
e) Keeps the small town feel				
f) Encourages and supports community social, cultural and recreation events and activities				
g) Supports and benefits recreation facilities for all age groups				
h) Promotes and maintains public access to the river				

Appendix "C"

Community Vision Session Consolidated Results, April 28th, 2010

Village of Telkwa Integrated Community Sustainability Plan

WE ARE TELKWA
COMMUNITY VISION SESSION
CONSOLIDATED RESULTS

Telkwa

OFFICIAL COMMUNITY PLAN & ZONING BYLAW REVIEW

April 28th, 2010
Riverside Room
6:00 pm – 9:00 pm

Introduction: By undertaking a comprehensive Integrated Community sustainability Planning (ICSP), process that encourages integration, collaboration and inclusive public engagement, the Village of Telkwa will be able to move forward with a shared vision and common understanding in the creation of an updated Official Community Plan (OCP).

When aligned with ICSP concepts, the newly updated and refined OCP will provide an effective technique of incorporating and integrating holistic sustainability goals and action items into policy. An updated OCP, created within ICSP parameters, will provide the village of Telkwa with the necessary tools and fundamental framework to address and manage both current and anticipated future pressures while providing strategies for a resilient community

The "We Are Telkwa" Event :

The We Are Telkwa visioning session was offered as an opportunity for Telkwa residents to share their aspirations and goals for the Village of Telkwa. The Focus team facilitated an interactive session that allowed for a wide range of citizens to step forward through various mediums, and contribute to the shared vision. Residents helped build a collective vision and identify individual sustainability objectives to achieve their personal vision.

The following is a summary of the data collected.

The Results:

Phase 1 – Defining Our Community

Words to describe Telkwa
- Small **XXXXXXXX**
- Friendly **XXXXXX**
- Beautiful **XXXX**
- Safe **XX**
- Vibrant **X**
- Diverse **X**
- Historic **X**
- Young **X**
- Home
- Heaven
- Peaceful
- Confluence
- Crossroads
- Opportunity
- Love
- Relaxing
- Natural
- Potential
- Families
- Quaint
- Caring
- Active
- Currently a Smithers satellite
- Cool
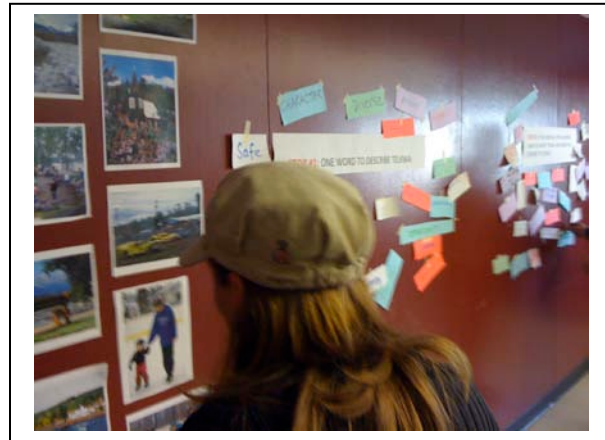- Creative
- Nice
- Noisy
- Unique
- Welcoming
- Old

Telkwa is known for its _____

- Fishing **XX**
- Rivers **X**
- Nature **X**
- Beauty **X**
- Young families **X**
- Heritage
- Cheap house prices
- Character
- Rednecks

Telkwa is known for its unique _____

- People **XX**
- Rivers
- Population
- Yummy ice cream
- Geography
- Heritage homes
- Area
- Character
- Name
- Environment
- Landscape
- Charm
- Views
- Alignment

Telkwa is known for its strong _____

- Sense of community **XXXX**
- Minded people
- ATV ing community
- Fish
- Heritage
- Support of families
- Friendships
- Pub
- Feelings of dog ownership (?)

Telkwa is a community that encourages _____

- Individualism **X**
- Physical activity (lots of trails)
- Creativity

- Involvement
- Car ownership
- Gatherings
- People
- Friendly and safe neighbourhood
- Growth
- Neighbours to gather
- Families
- Involvement
- Dialogue
- Demolition derbies

Telkwa is a community that believes in _____
- Community **X**
- Sustainability **X**
- Family **X**
- The future
- Progressive ideas
- Working together
- Letting people do their thing

Telkwa is a great place to _____
- Live **XXXXXXXXX**
- Raise a family **XXXXX**
- Play **XXX**
- Recreate **XX**
- Grow old **X**
- Walk **X**
- Development
- Working together
- Unity
- Clean neighbourhoods
- Involvement
- Make music **X**
- Raise a dog
- Garden
- Be on the river
- Work
- Give
- Relax

I live in Telkwa because…

- I love the rivers
- Quality, affordability, one of the best places to raise a family
- House plus taxes were at one time way under costs in Smithers and I love the community (neighbourhoods)
- I love it a great place to call home
- I live in a rural neighbourhood with enough space and great people to share my street
- Its relaxed lifestyle and friendly people
- Property on the river
- Close to work affordable
- Born and raised, love the quiet
- Sunshine and small community
- I like the scenery, larger lots
- Forests all around
- Fishing in the river
- It was a peaceful place to be and have a family
- Great weather
- Great people
- Mountains, river and ice cream shop in the summer
- We have property on the river.
- Grew up here and came back to be close to family and live in the small community
- Affordable
- Great neighbours
- Love the river and beautiful character
- House was affordable to purchase
- Green space and transit system to Smithers exists
- It is the place where my husband and I decided to start our lives together
- Affordable and close to recreation trails
- Beautiful and quiet
- Good for raising kids
- Outdoor recreation
- Affordable living with the opportunity for small business development
- We enjoy small communities to live in and it is our home and community

Where do you go to socialize?
- Smithers **XXXXX**
- Neighbours **X**
- Riverside skating rink
- Jams
- My house
- Playdates

- Tyhee Lake
- Church events

Telkwa Network
- TESC
- Seniors
- Youth leaders and groups
- Recreational groups
- Young moms
- Museum volunteers
- TCIS (Telkwa Community Initiatives Society)
- Woodland park families
- Transit riders union
- Telkwa jamfest crew
- Hockey night in Telkwa
- Children helping children
- Kinsmen
- Volunteer fire Department
- Wine appreciation club of Telkwa (WACT)

On a trip, how would you describe Telkwa?
- Small beautiful town where people let others live their lives
- A small cool town near Smithers that has a lot of artisans, musicians, and progressive thinkers. A diverse mix of young people, families, old timers, motorheads and rednecks that coexist happily and contently
- Friendly place to live and raise a family
- Picturesque hidden jewel
- Great lifestyle choice
- A town near Smithers
- Sssshhh it's a secret
- The place without the Walmart
- Slow paced, friendly, kid oriented community
- Wonderful scenery, people, and atmosphere, but you need a vehicle to live here. Lack of services / entertainment means trips to Smithers key
- Little villages with a lot of families
- A small village on 2 rivers with beautiful mountains
- Where the Bulkley and Telkwa meet
- Great access to outdoor recreation
- A little village (the 1st in the area) on the Telkwa and Bulkley Rivers. Great trails, great fishing, the Tyhee Lake
- Cute little village on the river too close to Smithers
- A unique place with character that doesn't exist in many places

- Home
- Smithers suburb
- Lovely place to raise a family
- Cute
- Amazing combination of lifestyle, opportunities, affordable living and creative culture in a spectacular natural setting
- A small town next to a world class fishing river
- Bedroom community
- It is just outside of Smithers on the Bulkley and Telkwa Rivers
- In summer – world class salmon and steelhead fishing, beautiful scenery, wild food abounds, wildlife viewing, not many services but a wonderful place to visit, close to the Telkwa range and hiking and quading
- Awesome
- White

How could Telkwa become a place that you do not want to live in?
- No green spaces or walking trails
- If Louis and Lynnel moved
- Boring segregated and unfriendly
- Can't walk or bike around the village safely
- Lose its character
- No potential for growth
- Unsafe
- No jobs for me
- Lacking vision
- If the highway widened/got busier and noisier
- Pollution
- Racist
- If the bus stopped running
- Compromised green space
- River flooding riverside
- If rivers get messed up by industry (eg – Coal bed methane)
- Stagnant economically and culturally without a unique identity
- No business
- If a Walmart didn't come to town
- If there was no transit to Smithers
- People keep burning their garbage in their backyards
- Roads get worse
- Air quality due to dust gets worse
- No seniors housing
- No growth
- Close the school

Where are you most likely to run into your friends and neighbours?

- Coordinated music jams and events
- Smithers X
- At the rink
- On walking trails
- At the ice cream hut
- Post office
- On a walk
- On the bus
- Front yard
- Out walking or at local places eg. Post office, businesses
- On the streets, trails while out for a walk
- In the yard, on the street
- Trails near Tyhee Lake
- At community events (eg. Demo derby, pancake breakfast, Halloween, garage sale)
- On the street / in peoples yards
- Playground
- Driving around looking at Christmas lights

Where do you go for physical activity?

- BV pool
- Trails – walking
- Telkwa Hi Road – biking
- Smithers
- In our yard
- In our cul de sac
- Local trails
- Smithers – pool and squash
- Tennis courts (in desperate need of repair)
- Dockerill Rink
- The backyard garden
- Ride bike around lake
- Ride bike around lake
- Walking the trails and cross country skiing
- Tobogganing on Barbeque Hill
- Trails
- Run trails
- Trails around village and Tyhee Lake

My favorite place in Telkwa is
- On the river **XXXX**
- Tyhee Lake **XXX**
- Eddy Park **XX**
- The trails **XX**
- My house
- The end of my road. Elm St.
- Bulkley River and Normas Ark
- Aldermere Trails and surrounding forest
- All over
- River pool
- Riverside rink
- My home
- Our garden
- Sitting on the bench in Aldermere

Where do you go to relax in the area?
- Walk along the river
- My backyard
- The river
- The lake (Tyhee)
- My yard
- Telkwa Pass
- Aldermere and associated trails
- Hazelton
- Tyhee Lake
- My sundeck
- The river
- Aldermere
- Trails
- The Eddy

Phase 2 – Education – List the Activities that are Unsustainable in Telkwa
Using the Natural Step Framework as working example for exercise

A – Concentrations extracted from the earths crust
- Deforestation
- Use of fossil fuels
- Government attitude and interest in continued development of fuels that produce CO2
- Coal bed methane
- Travel to Smithers for services/transportation

- More extraction
- Enbridge pipeline

B – Pollutants produced by society
- Lack of infrastructure to support local farmers / producers / products
- Driving to Smithers
- Reliance on single occupant vehicles
- Unregulated smoke and burning practices
- More waste
- Lack of recycling options
- Sewage
- No access to transportation
- Commute to Smithers for food, medical care, recreation, cultural events, school, socializing, secondary education
- Current transportation methods
- Bottled water

C – Damaging forests and lakes
- Industrial development along the rivers
- Increasing use of water
- Increasing deforestation (related to climate change and pine beetle)
- Economic dependence on resource extraction
- Environmental policies on landscaping
- Need more walking trails
- Need more parks in neighbourhoods
- Industry close to river
- Monitoring water use
- Subdivision development destroying habitat
- Agricultural runoff
- Loss of agricultural land to development
- Low density residential development
- No support for small local mills
- No support for independent contractors
- 2 licenses hold all TSL's in area
- No wood supply for local business / entrepreneurs
- No incentives for locals to remove Mountain Pine Beetle fuel

D – Limit to meet human needs
- No infrastructure for youth
- Lack of community support and involvement
- No incentives for local value added product
- Lack of diversity in housing alternatives

- Lack of regional food security
- Lack of sustainable exports and business opportunity
- Lack of public gathering places
- Lack of progressive community leadership
- Lack of business incentives to enable local businesses to stay and thrive
- Lack of indoor recreation and arts and culture
- Lack of resources and services creates unsustainable lifestyle
- Safety – RCMP live in Telkwa but we do not have a RCMP presence actively patrolling the community
- Designate an officer for our community (or part time)
- Need more affordable housing apartments
- A lack of communication regarding community resources
- Current recreational infrastructure cannot be sustained by current tax base
- Current economic mix (lack of diversity)
- Density development
- Water storage
- Seniors and low cost housing

Phase 3 – THE VISION World Café – community based discussion on the future look and feel of Telkwa.
What Do you Want Telkwa to Look Like 25 Years From now?

- To have a strong , vibrant business center (restaurants, shops, bakery, butcher, coffee shop etc) that is unique
- Have green neighbourhoods
- Green energy
- Community gardens
- Natural processes intact
- Well developed recycling facilities
- A multi-purpose communal community gathering area
- Focus on arts and cultural focus with strong community involvement and representation
- Continued clean water and world class fishing
- Continued ecological use on the river (no jet boats etc)
- More presence local, non timber resources and products
- A well developed rest area for tourists that is centrally located
- Rest stop with restrooms, green space, path to river that is near amenities, playground etc.
- Enviro-friendly guiding on rivers
- Medical center
- Vibrant community ownership (in education/neighbourhoods/all age groups)
- Commuting bike trails

- Sustainable housing utilities and management
- Ability to grow our own food (and sell and buy)
- Adequate public transportation and ride share program for workers and youth
- Green housing development
- Supported youth, families and children
- Small shops, niche businesses
- There are no empty lots
- Economic diversity
- Cohesive sense of community and identity
- Higher education center of excellence
- Clean fish filled rivers
- Positive cash flow
- Woodstove free
- Technology permits and affordable
- Enlarged farmers market
- Telkwa feeds it own
- Local bylaws to encourage building techniques
- Use alternative building techniques
- Alternative education
- Lit trails
- Cross country loop
- Incentives for home business
- Wheelchair accessible trails
- A haunted house
- To be able to grow old here and not have to move to Smithers
- To be able to have teenagers and not move to Smithers
- Green spaces
- A park and intersection
- A grocery store selling local produce
- Community garden
- A unique planning aesthetic for Telkwa
- Thriving economy (bank, shops, restaurants, co-op, drug store, natural foods)
- Local jobs (not Smithers)
- Value added manufacturing (wood products)
- Eco tourism
- Downtown hub / core with retail / coffee shops
- Recreation
- Protect natural food sources (berries, mushrooms)
- Local farmers market
- Grocery store
- Aesthetically pleasing
- Lots of green space

- Recreation coordinator (child youth adult)
- A population size capable of sustaining business
- Animal rescue center
- Great coffee shop
- Thriving arts and culture
- Inclusive social events igniting local pride
- Bike trails connecting Smithers to Telkwa
- Seniors housing beside community garden
- Local currency system
- Strong Telkwa identity
- Beautiful efficient homes built by locals using local materials
- Increased transit options
- A larger town (5,000 – 10,000 with all the services Smithers has now, with a strong local identity
- Healthy community, as it is now but with sustainable green industry employing local people
- Still small in comparison to Smithers but attractive naturally and because of the people this community attracts
- Still a great place. Small and everyone knows your name
- Independent, increased employment opportunities and recreation for all
- Economic growth that supports environmental vision
- Clean, green, more business
- Vital, compassionate, neighbourly, and viable
- Cohesive community that is driven to support healthy children and families
- More green space (not industrial looking), safe, friendly, wholesome, self-sustaining community
- Small population (2500 or so) lots of forest, small business center, seniors housing, and reasonable taxes
- That it will be a vibrant community where people will want to come to
- Community that is more than just a drive through
- Vibrant, eclectic, active, family and multi age friendly, easy to be active and social
- Beautiful, thriving, supportive, creative community showcasing eco-living
- Think Edgemont village
- Living in a community that I am proud of and involved in
- A new tag line instead of where the rivers meet, we feed our people
- A beautiful, clean, vital community with a progressive and creative outlook and cultural makeup
- A clean (green), caring, enriched cultural community

My definition of sustainability is:
- Living as though the earth matters
- My dollars going to my neighbour and vice versa. Not having to spend outside of my community
- Anything that is healthy and beneficial over a very long period of time (25 years)
- A future for my kids
- Community that continues in a vibrant and healthy growth
- Don't waste, re-use things as much as possible
- Living without depleting
- Educated citizens working towards sustainable environmental practices, economics, education and culture
- Self-reliant and able to survive as an individual unique community
- It never runs out in my lifetime (fish, clean water)
- Having enough industry to sustain
- Not demanding / consuming resources continually.
- Minimizing waste production
- Long term lifestyle and way of living that supports and nurtures people, community, natural earth and the local economy
- Input = output
- Progressive thinking
- Neighbourhoods supporting each other to work recreate, eat etc with minimum negative impacts
- Utilizing local resources in a creative, sustainable way to foster the growth of local business and economic opportunity.
- A prosperous, environmental, caring community that supports itself

Steps I can take to achieve this vision include…
- Shopping locally as the opportunity arises
- Helping council direct growth
- Not saying no to all new industry
- Helping protect natural areas
- Encouraging others with good ideas
- Continue to be involved in municipal action
- Encourage community spirit
- Buy local, encourage buying local
- Raise my family here, don't leave
- Start a sustainable "green" business
- Know your neighbours
- Be involved in the community
- Volunteer
- Respect the leadership
- Decrease garbage and increase recycling

- Use outdoors for entertainment
- Shop locally and play
- Carpool – self and family
- Contribute as a community member
- Work with the community to find out needs
- Create space for gathering
- Choose small projects with big heart
- Create goals 5 year plan that include knowledge of other existing organizations
- Recycle
- Support local business
- Conserve energy
- Volunteer in community
- Promote Telkwa to others
- Know my neighbours
- Live more closely with the land
- Educational opportunities
- Community and family center
- Keep going to work
- Continue involvement with community organizations
- Garden/landscape my personal property
- Ensure a open, friendly disposition with community members
- Volunteer with community projects
- Create a business
- Help formulate the plan
- Provide input (outside the box)
- Listen to others
- Provide "me" energy
- More industry and commercial
- A community needs to put its people to work
- Manufacture industry for export
- I would welcome a Walmart
- More jobs for our young people
- Supporting Telkwa businesses
- Volunteer and participate
- Live in an efficient small house
- Bicycle, walk and garden
- Grow own food
- Eco-reno our home
- Help our neighbours
- Encourage local creative gathering jams
- Support local businesses
- Support local business

- Encourage local business
- Improve front lawn
- Drink lots of coffee (Delaneys)
- Support the reading center
- Contribute to building a strong business center
- Staying positive and contributing progressive ideas
- Become involved in community engagement
- Share ideas with friends and promote community involvement
- Become part of town council in the future
- Put plastic on our greenhouse
- Put up signs selling our eggs/meat
- Volunteer here more
- Plant those tomatoes
- Foster the growth of our own and other small business
- Develop ideas to promote growth in the community
- Contribute creatively and culturally
- Participate in community activities
- Reflect a positive outlook for the future
- Encouraging those taking the right steps
- Being environmentally friendly day to day
- Supporting our small business
- Supporting initiatives I believe in
- Volunteering for our village

What are the questions?
- Do you ride transit? If not why?
- Bring in a café to Telkwa
- When is water storage going to be addressed?
- How will natural food sources be protected?
- When will the trail system be properly maintained
- How will future development proceed? Ie: the 20 year vision
- Lot and acreage for hotel
- Can you ask those that border Village of Telkwa too?
- Balancing public good with private rights/needs/wants ie noise control vs dirtbikes, loud trucks, density development versus everyone's 5 acres
- How many people would carpool to work? What kind of business should we attract?
- What can be done to get the Telkwa – Smithers bike route built?
- What about dogs?
- What can Telkwa offer to the families, kids, teens and adults who dirtbike?
- What would it take to get you out of your vehicle?
- How can we make Telkwa less ugly?

- If Telkwa were to develop and foster an identity as perceived by the rest of the world what would it be?
- Business development
- Apartments to attract those who don't want a large yard to care for. What about density planning?
- What supports do you need so that you will carpool to work?
- How can we bring new business to Telkwa?
- How can we increase use of the existing Smithers / Telkwa bus?
- Commercial enterprise
- How can we attract amenities to Telkwa?
- How can we support business to thrive in Telkwa?
- Taxes? Can we honor the First Nations history here?

Appendix "D":

Photo inventory of steps in the right direction

Telkwa's Steps in the Right Direction Include:

- ✓ Bear Smart (installation of bear proof containers)
- ✓ Canada Day Parade (kids zone, pancake breakfast)
- ✓ Repaving Coalmine Rd
- ✓ Private re-development & construction
- ✓ Installation of new playground equipment
- ✓ New cemetery fencing
- ✓ Recognizing volunteer effort
- ✓ Groundbreaking of senior's housing
- ✓ Opening of Cointe and Café
- ✓ Boarding transit bus
- ✓ Tyhee Lake (potluck brunch)
- ✓ Music in the Park
- ✓ Telkwa BBQ Days
- ✓ Installation of new traffic flow controls
- ✓ New entrance signs

Village of Telkwa

Official Community Plan

Bylaw No. 613, 2011

CORPORATION OF THE VILLAGE OF TELKWA

OFFICIAL COMMUNITY PLAN
And
INTEGRATED COMMUNITY SUSTAINABILITY PLAN
BYLAW NO. 613, 2011

A bylaw to guide long-term vision and strategic land use decisions within the Village of Telkwa
pursuant to Part 26 of the *Local Government Act*

The Village of Telkwa has undertaken the creation of a long term planning framework that has
establish guidelines and principles related to economic, environmental, social and cultural
sustainability. This framework is called an Integrated Community Sustainability Plan (ICSP).

The Village of Telkwa has structured the Official Community Plan (OCP) and Zoning Bylaw within
the principles of the Telkwa ICSP. These key municipal planning documents have consistency that
will guide current and future Councils and staff to progress in a way that accurately reflects the
community wants and needs.

WHEREAS the Council of the Corporation of the Village of Telkwa wishes to adopt a new Integrated
Community Sustainability Plan with the new Official Community Plan pursuant to section 876 of Part 26 of
the Local Government Act.

NOW THEREFORE the Council of the Corporation of the Village of Telkwa in open meeting assembled enacts
as follows:

1. This bylaw may be cited for all purposes as the Village of Telkwa "Official Community Plan Bylaw No.
   613, 2011.

2. The Village of Telkwa "Integrated Sustainable Community Plan" Schedule "A" to and hereby forms
   part of this bylaw.

3. The Village of Telkwa "Official Community Plan" Schedule "B" attached to and hereby forms part of
   this bylaw.

4. Village of Telkwa Bylaw No. 513, 2002 cited as Village of Telkwa "Official Community Bylaw No. 513,
   2002 and any amendments are hereby repealed.

READ A FIRST TIME this 11th day of July, 2011

READ A SECOND TIME this 11th day of July, 2011

PUBLIC HEARING HELD pursuant to section 890 of the Local Government Act this 19th day of July, 2011.

READ A THIRD TIME this 4th day of August, 2011.

ADOPTED THIS 7th day of November, 2011.

_____   _____
Carman Graf   Kim Martinsen
Mayor   Chief Administrative Officer

CERTIFIED A TRUE AND CORRECT COPY of "Village of Telkwa
Official Community Plan with Integrated Sustainable Community Plan
Bylaw No. 613, 2011."

_____
Kim Martinsen
Chief Administrative Officer

SCHEDULE B

Official Community Plan

Village of Telkwa
Bylaw No. 613-2011

Telkwa

Village of Telkwa
1415 Hankin Avenue, Box 220
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TABLE OF CONTENTS

1.0 PREFACE

WHAT IS THE OFFICIAL COMMUNITY PLAN?

To help guide the future of municipalities in British Columbia, the Provincial Government authorizes municipalities to adopt Official Community Plans (OCP).

An Official Community Plan is a statement of objectives and policies to guide decisions on planning and land-use management, within the area covered by the plan, respecting the purposes of local government." (Local Government Act S.875.1).

In summary, an OCP provides a framework to guide many parts of a larger whole, the community. The components involved in a community plan include:

- ✓ Character of existing and proposed land use and the servicing requirements for the area;
- ✓ Guidance for economic, environmental, physical design and development and social considerations;
- ✓ Direction for quality of life, health and well-being;
- ✓ Future growth and housing needs;
- ✓ Community energy auditing and management;
- ✓ Transportation network and strategy;
- ✓ Community development; and
- ✓ Provision of amenities and services.

An effective OCP results in:

- ✓ A level of certainty to residents and landowners regarding the location and nature of change in the community;
- ✓ Council, staff and citizens use the OCP to help make strategic decisions towards a long-term goal; and
- ✓ A road-map to guide zoning and subsequent implementation practices.

The current OCP has been in place since 2002. Community plans are typically reviewed at least once every 5 years to assess whether the goals and objectives and subsequent policy directions remain valid. An OCP is not intended to be a static document; it is intended to be flexible in order to meet the changing needs of the community. The OCP is a living document and should recognize patterns and foresee new trends within society and respond to changing circumstances within the planning area boundaries. As such, following careful consideration by Council, policies and land use designations in an OCP may be revised through adoption of an amending bylaw following the provisions outlined within the Local Government Act.

Once an OCP is adopted as a bylaw, the Community Plan becomes "official", and all future land use decisions made by Council must be consistent with the objectives and policies outlined in the Plan.

CREATING THE TELKWA OFFICIAL COMMUNITY PLAN

The Village of Telkwa retained the services of Focus Planning to assist in reviewing and updating the Official Community Plan. Early in the planning process a community-based team was selected to represent different demographics of the Telkwa community and act as the experts with regards to holding events, engaging various groups and helping identify key assets and challenges within the community.

With the assistance of Team Telkwa, the planning project team provided the capacity and knowledge required in order to facilitate the public/process and to provide local context to the issues at hand.

All relevant documents and information were reviewed to develop a solid understanding of the current development, infrastructure and land use patterns within the Village of Telkwa. Background documents and relevant data were analyzed including, growth information (population, demographics, school enrolments, building permits, etc.), physical information (developable land and undeveloped land available), and infrastructure information (traffic volumes and capacity for water and sewer).

Key documents reviewed included:

- ✓ Telkwa Strategic Plan
- ✓ Village of Telkwa Official Community Plan, 2002
- ✓ Village of Telkwa Municipal Energy Audit, August 2005
- ✓ Village of Telkwa Community Business Development Plan, 2000
- ✓ Regional District of Bulkley-Nechako Planning Policies
- ✓ Regional District of Bulkley-Nechako Floodplain Management Bylaw No. 1300, 2004

Elements of these documents were brought forward for consideration in the planning process and were integrated to create OCP policies. These studies, as well as, updated information from additional sources have been incorporated into the OCP for the Village of Telkwa.

Comprehensive community involvement was a key component of the Telkwa OCP review process. A number of public engagements events took place over the spring and summer of 2010 to garner as much public input as possible. Hundreds of Telkwa residents took part in the process and offered input and voice into the process. Input opportunities consisted of the following:

> Community Resident Survey
> Community Visioning Session

Music in the Park

Map-chat

Info-posters around the community

Demolition Derby and Barbeque - Validation and Sharing Results

Canada Day Booth

Community Group Meetings with the following:

    I.   Senior's Society
    II.   Business and Land-owners Pancake Breakfast
    III.   Emergency Services
    IV.   Youth Expression Session
    V.   Woodland Neighbourhood
    VI.   Young Families
    VII.   Arts and Culture Focus Group
    VIII.   Heritage & Museum
    IX.   Kinsmen

Stakeholder Group Discussions with the following:

    I.   Ministry of Transportation
    II.   Ministry of Environment
    III.   Smithers Transit
    IV.   School District

2.0 THE VISION AND GUIDING PRINCIPLES

THE VISION

The material used to develop the vision statement was co-created during the visioning session held at the Riverside Room with members of the Telkwa community. Individuals were asked to look forward 25 years and describe what the look and feel of the Telkwa would be in the future and what they expected to be present for them and/or future generations.

able active aesthetic age alternative area attracts beautiful bike building business center children clean coffee cohesive community continued creative cultural developed economic education etc families fish focus food friendly garden green grocery grow healthy home housing identity increased industry involved local lots market natural neighbourhoods people population products recreation rest restaurants rivers sell seniors shops smithers social space store strong support sustainable techniques telkwa thriving trails unique vibrant vital youth

The tag cloud shown above visually illustrates the key words that were associated with these exercises. Building on this, the planning team along with stakeholder groups worked on building a concise vision statement as shown below.

"Telkwa is a small, friendly community located on the forks of two rivers, whose natural beauty, unique people and progressive ideas make it a diverse community in which to raise a family, open a business and age in place. Known for its sense of community and continual movement towards a sustainable economy, Telkwa is a place where people are united by their heritage, arts, recreation and collective spirit. Recognizing a co-dependence with nearby Smithers, Telkwa provides a distinctive local commerce that supports residents and businesses and attracts regional and abroad visitors with its Telkwa-based amenities and services. "

GUIDING SUSTAINABILITY DEFINITION AND GOALS

The development of the Telkwa Official Community Plan is guided by Telkwa's Integrated Community Sustainability Plan (ICSP). The ICSP was developed in response to the Village of Telkwa's desire to taking a long-term approach towards sustainability. Sustainability defined as: meeting the present needs without compromising the ability to meet the needs of future generations. It is acknowledged that this can only be completed in an integrated and collaborative manner. The OCP directly speaks to the land-use component and requires support and implementation from a variety of stakeholders in the community.

"Long term lifestyle and way of living that supports and nurtures people, community, natural earth and the local economy"

– Resident definition of sustainability provided at visioning session

Definition of success towards sustainability

Telkwa Sustainability Declaration (adapted from Natural Step System Conditions).

The Village of Telkwa, its community members and regional stakeholders acknowledge its integrated relationship to the Bulkley Valley and the larger global biosphere and therefore are committed to the long-term goal of continually moving towards a future that strategically lessens:

> "Utilizing local resources in a creative, sustainable way to foster the growth of local business and economic opportunity."
>
> *- Resident definition of sustainability provided at visioning session*

✓ Dependence on fossil fuels and virgin metals and minerals;
✓ Pollutants and toxicity;
✓ Fragmentation of ecological services; and
✓ Undermining fundamental human needs.

One of the roles of the Integrated Community Sustainability Plan is to act as a community guide to measure changing behaviours towards a more sustainable lifestyle. If people are to achieve new ways of creating liveable communities, leadership, local learning opportunities and applicable alternatives must be continually offered. Some of the other roles of the ICSP include:

✓ Guide decision-making processes;
✓ Used to gauge evaluation and monitoring efforts;
✓ Guide the development of further studies and/or secondary plans; and
✓ Provides capacity building towards sustainability and community development planning.

Sustainability Working Principles

The main working principles for Telkwa's ICSP are:

✓ DESIGN A COMPASS: Create a shared-vision and identify common principles;
✓ CONNECT THE DOTS: Look at issues in an interrelated manner;
✓ BE A TEAM: Share long-term strategies between organizations;
✓ OPEN DOORS: Foster a network to encourage capacity building and knowledge sharing;
✓ SAVE MONEY: Share resources (i.e. facilities, staff, services, data, etc.); and
✓ MEASURE-IT: Identify indicators to measure progress and success.

3.0 PLANNING CONTEXT
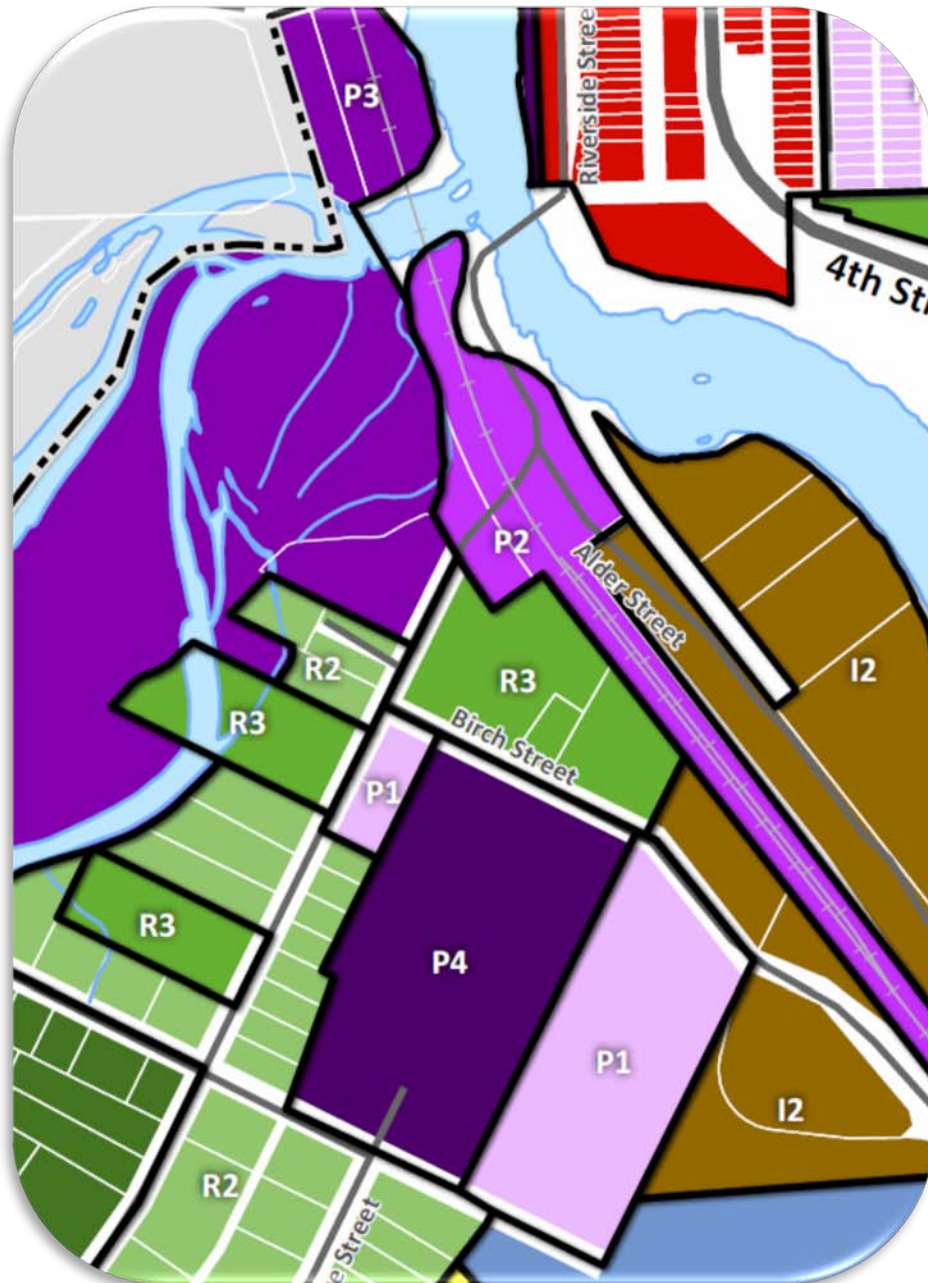
LOCATION

The Village of Telkwa is located in the Bulkley Valley at the intersection of the Telkwa and Bulkley Rivers. Telkwa is located within the traditional Wet'suwet'en First Nation's territory and is located in the Bulkley-Nechako Regional District. Incorporated in 1952, the Village has a total area of 656 ha (1,621 acres) and resides along Yellowhead Highway 16 approximately 15 kilometre south-east of Smithers, and 35 kilometres west of Houston. The population of Telkwa is approximately 1,295 (2006 Census) and the community is considered an attractive, rural alternative to living in Smithers and Houston. Telkwa consists of 4 main development concentrated areas: the downtown core, Cottonwood Flats, Woodland Park and Bench area.

HISTORICAL SIGNIFICANCE

Telkwa has a rich history dating back to the early 20th Century and the history of the Village has been shaped by events of the past. The first town site in the area was called Aldermere. This town was established by travelers and prospectors following the Telegraph Trail and the lure of the Gold Rush. The town was built of the steep slopes of the Bulkley Valley. When the Grand Trunk Pacific Railway was being constructed in 1907, many residents of Aldermere gradually located to the base of the town to what is now known as Telkwa to be closer to where water and the railway

was predicted to pass. The railway, however, was routed through to the foot of the Hudson Bay Mountain as an alternative to passing through Telkwa. It was at this point in time that the plans for the neighbouring community of Smithers were underway. The Village of Telkwa was established in 1907.

Many buildings which are a part of Telkwa's past still stand today. They serve and both a reminder and tribute to the heritage and history of the Village. The first church, St. Stephen's Anglican Church, was built in 1910 is one of the oldest standing buildings. The first main Telkwa school house, built in 1920, also remains and today houses the Telkwa Museum

The Village of Telkwa evolved into a resource based community and took part in the mining, agriculture, and forestry industries. Forestry began in Telkwa in the 1910's with a large sawmill and continued for some time before being relocated to Smithers. Agriculture and forestry still contribute to the local economy and supply work to the labour force.

The Village of Telkwa has an extensive history in coal production. The Telkwa coalfield extends 50 km along the Bulkley River with coal being mined from the coalfield in the early part of the century. Between 1918 and 1970, the Telkwa coalfield produced approximately 433,000 tonnes of thermal coal. Since this time there has been exploration around the possibility of developing a 1 to 1.5 million tonnes per year open pit thermal coalmine. In 1999 the present owners shelved the plans due to thermal coal prices and have not changed these plans since (MoE).

Telkwa became incorporated in 1952 as a predominantly natural resource-dependent community. In 1987, the Regional District of Bulkley-Nechako adopted the Smithers-Telkwa Rural Official Community Plan and later in 2002 the Village of Telkwa established its own Official Community Plan.

TRENDS

The following trends were identified as influential factors when planning for the long-term. Most of these trends are occurring across BC, however for smaller rural, amenity rich locations; these specific trends will heavily shape Telkwa's growth and liveability.

Aging Population

Most of North America will experience the impacts linked to the ageing of one of the largest demographic cohorts in human history such as, increases in life expectancy, distribution of wealth, staying in the work-force longer and changes in family and marriage composition. This ageing of society is often associated with the significant number of baby boomers who are now in their late 50s and early to mid-60s. There are significant implications associated with population ageing including, impacts to housing, labour markets, health care and recreation.

Climate Change and Environmental Awareness and Conservation

Globally, there is a growing recognition and awareness that unprecedented accounts of climate change are occurring due to human-based activities. Weather variability, intensity of storms and natural phenomenon, growing conditions, water supplies, pests and disease and integrity of wildlife habitat are all factors that are changing. There are two joint strategies used towards climate change action: 1) Climate Mitigation (making changes in the current system to lessen or avoid the output of CO_2 and/or mechanisms that will capture the existing CO_2 in the atmosphere, with the goal of bringing the levels of CO_2 back to an appropriate level, 350 ppm); and 2) Climate Adaptation (making changes on-the-ground, which allow society to adapt to the new climate). One of the key reasons the climate is changing is due to the continual increase of carbon into the atmosphere, in the form of CO_2, largely from burning fossil fuels for the purposes of transportation, manufacturing, heating, cooling, resource extraction and energy production (both electricity and

fuels). There is a need to identify and pursue ways of planning for the future that use these strategies to move towards a sustainable way of life that avoids the systematic increase of CO2 and other greenhouse gases into the earth's atmosphere.

Protection of the natural environment within and around the Village of Telkwa is critical to the maintenance of its water supplies, ecosystem integrity and liveability. The OCP recognizes that people are part of the ecosystem and the economy and society are dependent and fully integrated into the environment in ways that maintain or enhance the environment, rather than degrade or remove its ecological services it provides to the larger biosphere. The OCP recognizes that the municipal boundary is a jurisdictional measure of scope and that the ecological processes extend beyond these borders, and acknowledges the responsibility to be sustainable stewards in all spheres of long-term planning activities.

Migration

Migration to Telkwa and surrounding area is a growing trend due in part to the affordable land and housing costs. 2006 Census data illustrates that although there has been a population decrease between 2001 and 2006 there has been an increase of 30% in migration to the Village of Telkwa during that same time period. There are a number of employment opportunities and the area offers an attractive lifestyle. Employment, the natural environment, and the slow pace of life draw individuals and families to relocate to the Village of Telkwa.

Housing Prices

Rising housing costs are an emerging trend in Telkwa as shown in Table 1. Land values have been on a steady increase. In 2001 there were 479 total private dwelling which increased to 490 in 2006 (BC Stats). Though there was a decrease in population in this time, the number of dwellings has continued to rise. This trend may be making it difficult for local residents of Telkwa to purchase housing and land in Telkwa causing displacement.

Table 1 – Telkwa Historical Housing Values

Telkwa Housing Values		
Year	House Value	% change
2006	$110,924	
2007	$132,543	19.5%
2008	$167,491	26.4%
2009	$168,175	0.8%
2010	$178,316	5.7%

Tourism

In addition, tourism also has the potential to cause further displacement and can act as a double edged sword if not managed effectively. Like any industry, tourism has the potential to overwhelm a community displacing residents who seek a more authentic, quiet and affordable community lifestyle. More here

POPULATION AND DEMOGRAPHICS

Age Cohorts

Telkwa's population presents a very young profile, with 26.6% of the population under the age of 14 as shown in Figure 1. Figure 1 also illustrates that 6.6% of Telkwa's total population is over the age of 65 which is significantly below the provincial average of 14.6%. Lastly, the median age in the Village of Telkwa is 34.4 years compared to the provincial average of 40.8 years.

Figure 1 – Telkwa Age Distribution
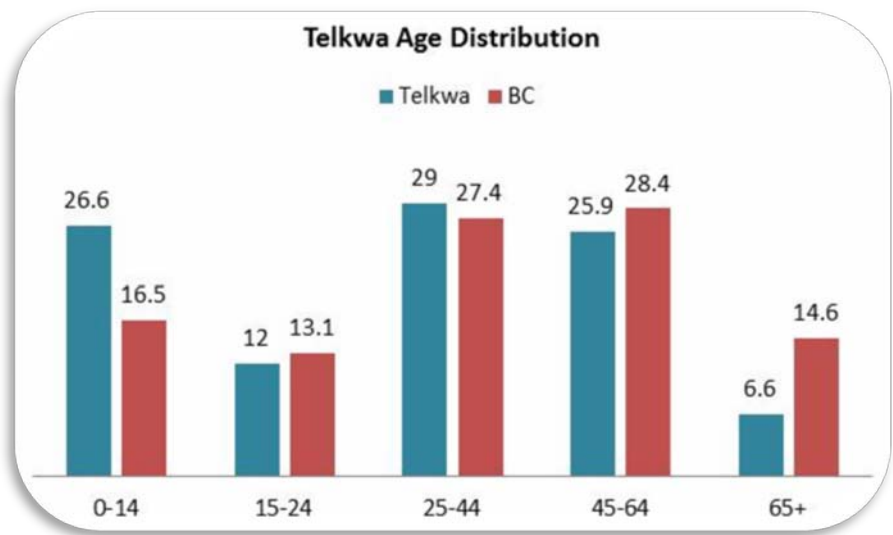
Population projections

A projection is a description of what the future would look like if certain changes occur between now and then. Predictions, forecasts, projections and extrapolations are essentially statements about what could result given a defined set of assumed circumstances. Population projections for the purpose of this report are based on three growth scenarios: 1) Low growth (1%), 2) moderate growth (2.5%), and 3) high growth (5.0%). Actual growth is difficult to predict and will likely fluctuate in response to economic conditions.

The population of Telkwa has decreased by 5.5% between 2001 and 2006. However, historical population growth provided by Statistics Canada illustrates that the Village of Telkwa has seen a population increase of 35% between the census years of 1991 and 2006.

Figure 2 illustrates both Telkwa's historical population and three growth scenarios. With a low growth scenario of 1%, Telkwa can expect approximately 366 new Telkwa residents by the year 2031 and 1100 new residents with a 2.5% population increase over the same timeframe.

Figure 2. Village of Telkwa Historical Population and Population Growth Scenarios
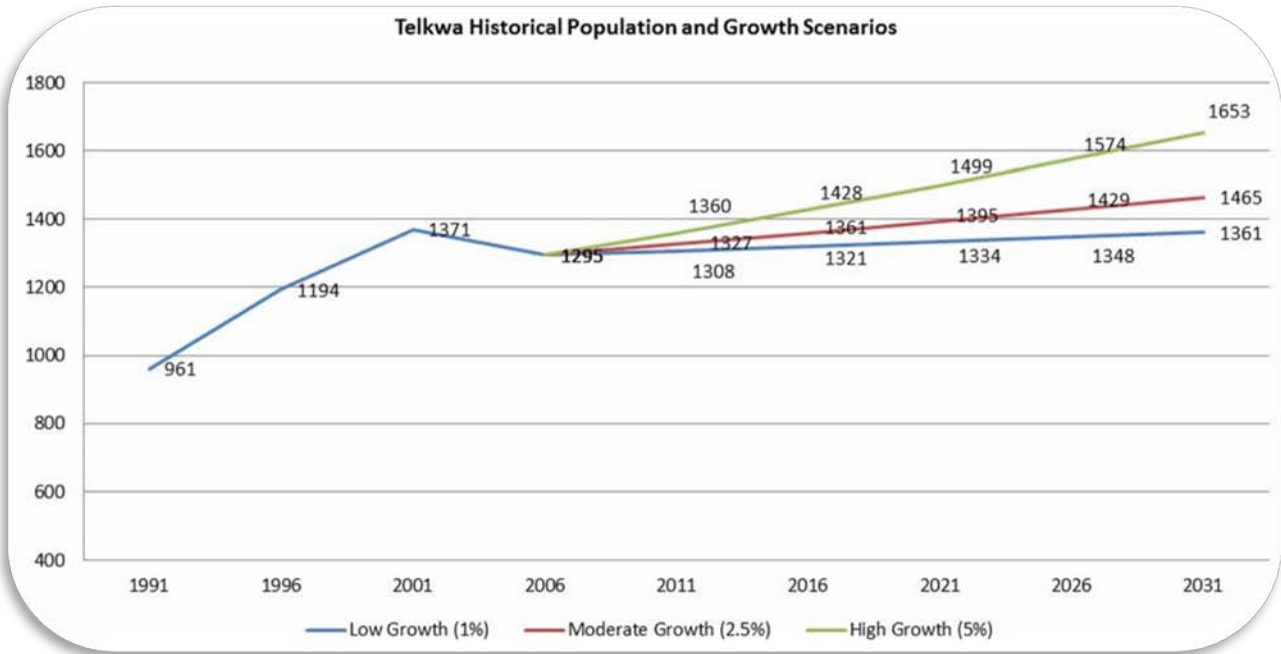
NOTE: The low growth rate of 1% was selected as this is the approximate anticipated rate of growth anticipated for the for the Bulkley Valley region for the foreseeable future (source: BC Stats). The high growth rate of 5% was selected as it represents the rate of growth for the province from 2001 to 2006 and this high rate of growth should be taken into consideration as Telkwa has shown strong population increases in the past.

Housing needs

There are approximately 460 dwellings found within the Village of Telkwa (Census 2006). The Village has seen a decrease in population of 5.5% between 2001 and 2006, but projects growth with the expansion of new residents, attractions, and tourism in the years to come. The 2006

Census data indicates the average persons per household for the Village of Telkwa is 2.8, which is slightly higher than the provincial average of 2.5.

Anticipated housing needs through to the year 2031 (based on population projections provided above) are illustrated in Table 2. The table illustrates that with a population growth rate of 1%, Telkwa will need to accommodate for the creation of 131 housing units by the year 2031. With a growth rate of 2.5%, Telkwa will need to provide an additional 393 homes within the same timeframe.

Table 2. Telkwa Housing Projections for 2031

Year	Housing Needs Through To 2031				
	2011	2016	2021	2026	2031
Low Growth (1%)	5	9	14	19	24
Moderate Growth (2.5%)	12	23	36	48	61
High Growth (5%)	23	47	73	100	128

NOTE: Although the provincial average household size is expected to drop slightly in the upcoming years, housing needs projections for this report are based on the current average household size of 2.8 remaining status quo.

Household types and stock

According to the 2006 Census, Telkwa consists of approximately 460 residential homes with 94.6% of these units being single detached homes, which is significantly higher than the provincial average of 49.0%. The remainder of the Telkwa housing stock consists of apartments/duplexes (2.2%) apartments under five storeys (2.2%) and moveable dwellings (1.1%). Only 4.3% of the homes are rented compared to the 30.1% provincial average.

There is a need for diversification in the housing stock of Telkwa to accommodate and foster growth and sustainability within the Village in the coming years. It is estimated that with low population growth of 1% or moderate growth of 2.5% there will be a need for between 6-15 housing units each year until the year 2031. It is expected that new housing units will be located on the bench in Telkwa; this will be the primary area for growth and expansion. The Village of Telkwa has expressed interest in diversifying the housing stock from predominately single dwelling housing in order to attract new residents.

This new housing mix will contain apartments, seniors housing, semi-detached and detached smaller housing units (to meet the needs of seniors). The Village of Telkwa, BC Housing and the

Seniors Housing Society have recently reached an agreement to build eight accessible housing units for seniors. This new complex will be located on upper First Street, close to Aldermere Ridge.

GOVERNANCE

Local

Established in 1952, the Village of Telkwa governance consists of one mayor and four councillors, alongside a team of dedicated staff members. Each elected official completes a 3-year term.

Regional

The rural area surrounding the Village of Telkwa is governed by the Regional District of Bulkley-Nechako (RDBN). At this time, the RDBN does not have a Regional Growth Strategy. As the Village of Telkwa continues to grow there will be a need for consistency between the Village of Telkwa and the Regional District of Buckley-Nechako in matters relating to planning and growth (see section 3.6).

REGIONAL CONTEXT STATEMENT

Section 866 of the Local Government Act requires that Official Community Plans include a regional context statement. There is currently no Regional Growth Strategy (RGS) for the Regional District of Bulkley Nechako (RDBN) which would illustrate how the Village of Telkwa planning and land use policies link and work toward the goals and objectives established by a RDBN Regional Growth Strategy (RGS). However, while creating the revised OCP, the Village of Telkwa Official Community Plan considered the following fourteen goals identified in the Local Government Act that highlight components of sustainable community development towards which an RGS should work:

1. Avoiding urban sprawl and ensuring that development takes place where adequate facilities exist or can be provided in a timely, economic and efficient manner.
2. Settlement patterns that minimize the use of automobiles and encourage walking, bicycling and the efficient use of public transit.
3. The efficient movement of goods and people while making effective use of transportation and utility corridors.
4. Protecting environmentally sensitive areas.
5. Maintaining the integrity of a secure and productive resource base, including the forest land reserves.
6. Promoting economic development that supports the unique character of communities.
7. Reducing and preventing air, land and water pollution.
8. Providing adequate, affordable and appropriate housing.
9. Ensuring adequate inventories of suitable land and resources for future settlement.
10. Protecting the quality and quantity of ground water and surface water.
11. Identifying settlement patterns that minimize the risks associated with natural hazards.

12. Preserving, creating and linking urban and rural open space including parks and recreation areas.
13. Planning for energy supply and promoting efficient use, conservation and alternative forms of energy.
14. Practicing good stewardship of land, sites and structures with cultural heritage value.

4.0 LOCAL ECONOMIC RESILIENCY

ECONOMIC OVERVIEW

Telkwa has numerous strengths upon which to base strong and diversified economic growth. These strengths include, access to natural resources, proximity to a variety of outdoor recreation and tourism opportunities, pristine natural environment, available physical space for new activities, entrepreneurs and accommodation types, a strong arts and culture base and a high quality of life for residents and businesses. Creating and maintaining a local economy is one foundation of a sustainable community and is one of the cornerstones of a more liveable community. Local economic development (LED) provides a valuable form of growth that contributes to a balanced and connected future. Without a resilient economy the liveability of a community can suffer, sometimes forcing residents to work farther and farther from home and outside of the local community. LED is economic development based in local community values and informed by best practices in economic, environmental and social sustainability.

Although still one of the most significant industries in BC, forestry's dominant role is diminishing as the Telkwa economy evolves and resource extraction becomes less prominent. However, other aspects of the industry continue to grow as the world market demands more value-added wood products and eco-certified products. Dairy farming, cattle ranching, and grain and vegetable growing are important activities in the area. The demand for a local dairy producer remains high.

Telkwa's spectacular natural setting provides for a wide range of recreational opportunities. Excellent opportunities exist for growth especially in the adventure tourism sector. Telkwa's unique heritage character offers opportunity in the area of cultural heritage tourism. Telkwa also has rich coal reserves and a history of coal mining.

According to 2006 Census data, the Village of Telkwa experienced an unemployment rate of 9.5% which is significantly higher than the provincial average of 6.5%. Table 3 illustrates that agriculture and resource based industries, manufacturing, business services and health care/social services are the top employment industries for the Telkwa labour force as highlighted by the 2006 Census data.

Table 3: Village of Telkwa Industry Composition

Village of Telkwa (2006 Census)			
Experienced labour force 15 years and over	**Total**	**Male**	**Female**
	675	**360**	**320**
Industry	**Total**	**Male**	**Female**
Agriculture and other resource-based industries	120	95	20
Construction	35	35	0
Manufacturing	75	65	10
Wholesale trade	15	10	10
Retail trade	60	25	30
Finance and real estate	20	0	20
Health care and social services	90	0	90
Educational services	60	0	50
Business services	75	60	20
Other services	125	60	65

ENVIRONMENTAL PRINCIPLE STATEMENT AND GOALS

Economic Sustainability Principle Statement:

A healthy local economy is essential for a sustainable and liveable community. It provides the resources that allow residents and a community to prosper. It brings employment and a solid tax base to support services, leading to healthier lifestyles and greater opportunities for personal fulfilment. With a strong economy a community can achieve a higher standard of development, provide more services, and enjoy an overall higher quality of life. The OCP recognizes the interrelated spheres of the local economy, including the business market (private and public companies, investments, and trading), and the social economy (social enterprises, community-based entrepreneurship, social capital and investment).

Overarching Local Economic Goals

1. To achieve a diversified local economy built on private business, social enterprise and the attractiveness of Telkwa as a place of collaboration and innovation;
2. To achieve an integrated transportation network and demand transportation management system that involves in the mobility of people, goods and services;
3. To build a two-way relationship with Smithers, where residents from Smithers come to Telkwa for specific amenities and services;

4. To achieve a myriad of climate change actions (adaptation and mitigation) that takes responsibility for a sustainable, positive community future by ensuring the ongoing health of the social, economic and natural environment through climate protection, both within and surrounding the Village of Telkwa; and

5. To achieve a system of infrastructure services, which integrates ecological, economic, physical and social factors in the design and provision of the service.

ECONOMIC OBJECTIVES AND POLICIES

4.1 Diversified Economy, Business Development and Job Creation

Objective:

4.1.1 To broaden the economic base through diversification and expansion of existing and emerging sectors.

Policies:

a) Encourage the increase in commercial space (rental);
b) Identify new forest programs that provide opportunities for economic development;
c) Establish an economic strategy to recognize non-timber forest products;
d) Investigate the development and uptake locally of co-generation and biomass-based energy;
e) Encourage the development of a collaborative community-based tourism plan, including sub-sectors such as eco-tourism, all-season tourism, agri-tourism, education tourism;
f) Establish a community reserve fund to support local entrepreneurship and innovation;
g) Examine the opportunity of being a research and development centre for Wildfire Management;
h) Support UNBC's health studies and provide doctor recruitment;
i) Support annexation and reclamation for industrial and eco-industrial lands and/or business park around the Airport area; and
j) Support and diversify local agricultural business and related sectors (agri-tourism).

Objective:

4.1.2 To encourage enterprise development that results in the creation of a variety of income levels.

Policies:

a) Establish an entrepreneurial hub with supportive services and programs;
b) Work with the Province to attempt to provide more local involvement in how forests are managed;
c) Support the traditional economic base of the resource and service sectors, but recognize and support the shift towards emerging sustainable resource management opportunities as the new core of the local economy;

d)   Support traditional trade and skill development centre (folk school);

e)   Identify and support home-based businesses; and

f)   Facilitate efforts to enhance and maintain telecommunication services.

Objective:

4.1.3 To establish two functioning and interconnected commercial cores: 1) Service Centre; 2) Old Town Centre; and three residential neighbourhoods: 1) Tower Road; 2) Cottonwood; and 3) Woodlands.

Policies:

a)   Establish and support land use policy structure in terms of zoning and two development permit areas, which create simple fast-tracked redevelopment of these urban areas & interconnected trails;

b)   Support incentives for new small scale, mixed use commercial development to occur in downtown cores;

c)   Establish safe and accessible pathways between the various centres and neighbourhoods; and

d)   Provide signage and other visual elements to delineate boundaries of centres and neighbourhoods.

Objective:

4.1.4 To develop strong networks, alliances and partnerships across disciplines and sectors in order to achieve integrated results.

Policies:

a)   Support the development of a community-based investment criteria;

b)   Partner with local stakeholders to support a community-based investment fund;

c)   Continue to support community organizations found within the Bulkley Valley which provide programs and services to Telkwa residents;

d)   Continue to support relationship building with neighbouring municipalities and Wet'suwet'en Nation to build an economic region;

e)   Encourage public/private/partnership arrangements, and financial partnerships where appropriate for development opportunities; and

f)   Partner with regional post-secondary institutions to create centres of excellence in the areas of fine arts, timber-frame building and eco-adventure sports and recreation.

Objective:

4.1.5 To achieve a local manufacturing and service industry in the region that focuses on sustainable energy-based product/service design.

Policies

a)   Collaborate, encourage, and support Canada Mortgage and Housing Corporation (CMHC) Net Zero Energy Healthy Housing Initiative and/or Equilibrium Housing Project;
b)   Investigate participating in the Provincial Community Action on Energy and Emission Program;
c)   Promote and work to explore options to diversify the District's energy supply via renewable energy options such as solar photovoltaic, solar hot water, bio-fuel from waste and geothermal heat pumps/research and map energy opportunities and link them with development, large energy users, and Village buildings;
d)   Create contiguous development (avoiding gaps of undeveloped properties);
e)   Initiate requirements/incentives for the installation of solar hot water panels for residential homes;
f)   Attract "green" manufacturing industries to Telkwa;
g)   Examine and promote the creation of solar energy zones in the Zoning Bylaw, which specify standards for roof pitches, solar access provisions and street orientations in order to preserve solar energy options;
h)   Explore the possibility of creating and diversifying community energy and heating system(s) (heat recovery, wind, solar power, etc.);
i)   Create a neighbourhood energy utility through partnerships with the private sector, using biomass or heat recovery from the sewer system; and

j)   Create a pilot project solar powered/geothermal/off-the-grid development or building in conjunction with a private developer of government entity.

Objective:

4.1.6 To strengthen an existing linkage with Smithers, where residents from Smithers come to Telkwa for specific amenities and services.

Policies:

a)   Inventory destinations, activities and services that draw Smithers residents to Telkwa;
b)   Encourage local entrepreneurship around the concept of building better ties with Smithers;
c)   Provide special transit days for Telkwa events; and
d)   Promote local businesses within a one-window approach.

Objective:

4.1.7 To encourage ways to engage residents and businesses in community development and operations and to provide year-round employment.

Policies:

a)   Encourage the creation of value-added forestry, labour intensive products;
b)   Support sustainable and community appropriate growth, including employment opportunities, small business retention/expansion, population increases and expansion of the taxation base;
c)   Identify education and training specialization in order to attract residencies and students;
d)   Develop age-friendly developments in order attract retirees and/or surrounding residents from the countryside looking for assisted living opportunities;
e)   Encourage and promote development of an eco-industrial park and/or business park supporting alternative energy, alternative grey-water treatment, etc.;
f)   Support office and commercial uses in industrial areas, which complement industrial redevelopment;
g)   Create an industrial complex building, powered by alternative energy, units available to rent to locals (i.e. garage bay for fixing cars, wood shop for value added manufacturing, office space for meetings);
h)   Attract higher level of tele-communications coverage;
i)   Support the generation of a renewable local fuel for the area;
j)   Participate in the Provincial government green energy programs;
k)   Support the cradle-to-cradle concept for incoming and outgoing flows of material;
l)   Support the development of a light industrial sector, including clean/green, technological; sustainable industries and renewable energy opportunities; and
m)   Support renewable energy opportunities, both small and large scale.

4.2   Tourism

Objective:

4.2.1 To identify strategies and actions that will assist in developing year round tourism opportunities.

Policies:

a)   Market community on the environmental features and amenities found within the area;
b)   Assist in creating local agri-tourism and eco-tourism opportunities;
c)   Designate areas in desirable locations to be used for tourism-based uses (i.e. viewscapes, access to trails, etc.);
d)   Encourage sustainable development of based tourism services, including food and beverage establishments, overnight accommodations and land and water based tour operators;

e)   Cooperate and partner with groups and agencies in the tourism, arts and recreation sectors to encourage and strengthen economic development and to support the "Gateway to Tyhee" initiative.

f)   Work in partnership with MOT to provide proper road access to backcountry amenities;

g)   Designate an area with the town boundary for short-term parking opportunities;

h)   Build on the steelhead fishing and the activities associated with this sport (i.e. boat cleaning, trailer storage, tackle-shop);

i)   Create a signage plan that highlights local attractions to encourage longer visitations to the area;

j)   Identify and create a space where local artisans could display arts and crafts on a regular basis;

k)   Build upon themes associated with "rock, wood and water"; and

l)   Consider implementation of municipally subsidized Development Cost Charge (DCC) rates for new development within the new town centre to stimulate development and redevelopment of the area.

4.3   Resource Management

Objective:

4.3.1 To achieve a neighbourhood approach to managing energy, material and resource flows.

Policies:

a)   Work towards achieving an Integrated Resource Recovery (IRR) system;

b)   Create a neighbourhood energy utility through partnerships with the private sector, using biomass or heat recovery from the sewer system;

c)   Continue to partner with the Regional District to ensure effective solid waste management services for Telkwa that would include more inclusive recycling options and green technologies; and

d)   Educate and engage local residents in water, rainwater, liquid and solid waste management issues.

Objective:

4.3.2 To pursue development of renewable energy resources and resource management related technologies and supportive industries.

Policies:

a)   Collaborate with surrounding government organizations and communities in order to capitalize on federal programs to support alternative and renewable energy sources, such as bioenergy an biomass, geothermal, solar, wind, and micro-hydro;

b)   Construct a municipally controlled recycling depot in collaboration with a local recycling group; and

c)   Continue to work with the regional district and support recycling programs, options and alternatives and look into the feasibility of building a Telkwa recycling depot.

Objective:

4.3.3 To create an urban infrastructure landscape that is aesthetically pleasing, low impact to the environment and responsive to the local character of Telkwa.

Policies:

a)   Ensure location and construction of infrastructure services is sensitive to environmental concerns; and

b)   Require new development to locate all utilities (including power, phone, etc.) underground and encourage existing development to locate utilities underground where feasible.

Objective:

4.3.4 To assist in the reduction of landfill waste.

Policies:

a)   Continue to encourage residents and businesses to reduce solid waste through reduction, recycling and re-use;

b)   Implement Extended Producer Responsibility policy with the top sector that is bringing materials and resources into the Telkwa community;

c)   Work on partnership with the Regional District and provide environmentally safe disposal options for toxic substances;

d)   Encourage Regional District to mitigate the impacts of landfill sites;

e)   Ensure new development pays its fair share of infrastructure and capacity costs; and

f)   Work with the development community to provide servicing for newly-developing and redeveloping properties.

5.0ENVIRONMENT

ENVIRONMENTAL OVERVIEW

Ecological integrity and protection of environmental features are integral components of Telkwa's OCP vision. The community shares a special bond with the surrounding natural environment and prides itself in the relationship community members share with natural areas, such as Tyhee Lake Provincial Park, the Bulkley and Telkwa Rivers, and the surrounding forest reserve lands. There is a strong desire within the community and beyond, to ensure these environmental features and others are preserved, protected and enhanced for future generations to enjoy.

NATURAL ENVIRONMENT OVERVIEW

Habitat and Wildlife

From a land use perspective there are a number of constraints to development in Telkwa due to the river floodplains and steep slopes. There is existing development located within the floodplains (Cottonwood Flats and the downtown core) and each year melting snowmelt and ice jams pose as a potential threat to the Village core.

The Bulkley and Telkwa Rivers flow through Telkwa. The Bulkley River is a Class II angling river providing excellent steelhead and salmon fishing. The rivers are relied on as a fishery resource and they are also the lifeline and life supply for fish and wildlife in the area.

The land and soil are rich and fertile creating ideal conditions for the thriving agriculture industry present in the region. As a result, the agriculture industry is a mainstay for the Village of Telkwa and Bulkley Valley.

The Village of Telkwa and surrounding region share the natural environment with an array of wildlife, including, bears, moose, deer, marmots, osprey, and eagles. Individuals frequently come into contact with wildlife. Conflicts between wildlife and humans within British Columbia communities have been on the rise in recent years and continue to rise today as we encroach further into wildlife habitat. To date, management of human/wildlife conflicts has largely been reactive with problems managed after they develop.

To manage the reactive approach to wildlife management the Village of Telkwa has joined and adopted the Bear Smart Project. This project is designed to study bear issues in the community. This program is partnered with the Telkwa Community Initiative Society (TCIS).

Water

The Village of Telkwa lies within Bulkley River Watershed. The surrounding river system plays an important geographic role in the community. The Bulkley and the Telkwa Rivers both provide important geographic components of the geographic makeup of the community.

The Bulkley River Watershed provides:

> Fresh water for potable uses;
> Natural stormwater infiltration system and treatment services;
> Healthy ecosystems for wildlife and ecosystems; and
> Water for growing food and other products vital to the resiliency of the local economy.

Riparian areas found along streams, lakes, and other bodies of water often support productive ecosystems and a rich diversity of plants and animals. Water-loving plants, birds, amphibians and small mammals all thrive in these ecosystems. Larger animals use them for various reasons, such as foraging or giving birth. Refer to Appendix B for Telkwa Riparian Area Regulations.

In addition to the specific policies related to water management in the OCP, the community of Telkwa recognizes the value of taking a watershed approach to its long-term planning and development practices and as many municipal operations as possible. A watershed approach is when decision-making processes utilize the geographic scope, as the unit of measurement when analyzing specific community components such as infrastructure development, population growth, community identity and culture, and resource management (forest, agriculture, energy).

Environmental Sustainability Principle Statement:

Environmental sustainability is achieved by taking an informed approach towards resource management in order to ensure the health of the overall system is maintained and able to carry out local ecological processes that support Telkwa's culture and economy.

Overarching Environmental Goals

1. To achieve a watershed approach to long-term planning for Telkwa;
2. To achieve a level of stewardship and conservation by individuals, families and organizations in Telkwa;
3. To achieve a cradle-to-cradle approach to material and resources, in order to lessen emissions, environmental impacts and achieve local cost recovery;
4. To achieve a healthy environment and lessen hazards and emergencies; and
5. To achieve a pristine network of wildlife habitat.

NATURAL ENVIRONMENTAL OBJECTIVES AND POLICIES

5.1   Conservation and Stewardship

Objective:

5.1.1 To protect and enhance the quality of Telkwa's rivers, streams and ground water sources in order to provide an integrity level that supports the ecological services of the Telkwa River and Bulkley River and Watershed.

Policies:

a.   Support and establish a Groundwater Protection Plan;
b.   Require the implementation of Telkwa Riparian Area Regulations for all development occurring within in a Riparian Area;
c.   Conserve and protect productive fish and wildlife habitats from human-based disturbances;
d.   Promote retention of natural vegetation along natural boundary of the river;
e.   Restrict the use of pesticide and other chemicals on lawns and on-grade surfaces;
f.   Encourage onsite treatment of stormwater with use of best management practices such as oil collectors at drains; and
g.   Require all developments to use proper construction and development best management practices such as silt fences, erosion control, etc.

Objective:

5.1.2   To act as stewards of the pristine area that surrounds the Telkwa community.

Policies:

a)   Encourage neighbourhood monitoring and stewardship programs and liaise with local stewardship organizations for mapping local knowledge;
b)   Encourage significant trees to be protected for heritage and ecological benefits;
c)   Require developments within steep hillside areas to prepare vegetation management plans;
d)   Inventory, protect and enhance environmentally sensitive areas (ESA's), including natural watercourses, riparian and steep or unstable slopes;
e)   Identify and support wildlife corridors within Telkwa and surrounding area; and
f)   Provide incentives and partnership opportunities to regenerate brownfield sites in order to limit ecological and human health impacts.

Objective:

5.1.3   To encourage the development and adoption of policies that contribute to the reduction and prevention of air pollution.

Policies:

  a) Create an appropriate regulation and/or awareness regarding excessive idling of automobiles;
  b) Maintain and support a wood-stove replacement program and relevant bylaw for residential areas; and
  c) Establish education material with regards to suitable burning practices (weather, things not to burn, etc.) and/or alternatives to burning (i.e. composting, biomass energy production, etc.).

Objective:

5.1.4   To minimize risks to life and property from natural hazards and disasters, such as floods, erosion and slides.

Policies:

a)   Where lands subject to flooding are required for development within the municipal boundaries, the construction and siting of buildings shall be flood-proofed to those standards specified by the provincial ministry;
b)   Encourage onsite practices to manage stormwater collection and infiltration;
c)   Work with surrounding jurisdictions to create fuel management prescriptions for deadwood protection;
d)   Minimize development within sensitive or hazardous areas;
e)   Require geotechnical engineering assessments for all development (land subdivision and building permit) found within a hillside area, as depicted in Appendix A, Map 3 or 2.0ha or > in area; and
f)   Maintain a Wildfire Plan.

Objective:

5.1.5   To protect valuable existing green space/open space and foliage through appropriate regulations and guidelines on both private and public lands.

Policies:

a)   Require all new sub-divisions to incorporate wildlife corridor accessibility, application of alternative design standards, and tree protection covenants;
b)   At time of development application require native landscaping (trees, shrubs and plants) in all new subdivisions, developments and redevelopments;
c)   Identify wildlife and wilderness connectivity opportunities through natural corridors, and surrounding watersheds;
d)   All new development are required follow Provincial BearSmart guidelines;
e)   Work towards becoming a BearSmart Community;

f)   Inventory, protect and enhance environmentally sensitive areas (ESA's), including natural watercourses, riparian and steep or unstable slopes; and

g)   Require environmental impact assessments within riparian areas as identified in Appendix B.

5.2   Climate Change and Energy

Objective:

5.2.1 To pursue climate change adaptation measures to ensure long-term decisions are congruent to climate change trends and patterns.

Policies:

a)   Use results of municipal energy audit and build corresponding abatement strategies for municipal facilities and operations;

b)   Encourage community and economically-driven food production areas;

c)   Conduct an assessment of ecological sensitivities; and

d)   Investigate and implement management direction (planting different tree species, targeted harvesting, other stand treatments, integrated strategic planning).

Objective:

5.2.2 To pursue climate change mitigation measures to contribute to the global objective of bringing CO2 concentrations in the atmosphere to a 350ppm level.

Policies:

a)   Measure CO2 emissions, set targets and develop action plans;

b)   Reduce community-wide GHG emissions to 33% below 2007 levels by 2020, 80% below 2007 levels by 2050;

c)   Require full life cycle cost assessments for all municipal building energy-related decisions (e.g. heating, cooling or water energy systems);

d)   Increase efficiencies in energy use where feasible;

e)   Investigate the feasibility of a green procurement policy;

f)   Switch to renewable forms of energy where feasible;

g)   Assessment on woodstoves inversions and wood heat;

h)   Substitute materials for ones that use a less amount of embodied energy;

i)   Plan future land uses and growth areas to achieve a net-zero energy demand for the community;

j)   Implement the use of solar power wherever possible for municipal infrastructure (crosswalks, lighting, pump stations, boardwalk, etc.);

k)   Expand a net-zero emissions sewer system and eliminate septic systems where possible;

l)   Encourage compact development to save on transportation and energy costs; and

m)   Recognize the efficiency of new technology in wood burning for heat and power production.

Objective:

5.2.3 To support sustainability-based sectors and processes.

Policies:

a)   Encourage specialization of community-based assets and skills (i.e. fishing, eco-tours, woodworking, forestry, farming, music and arts);
b)   Maintain opposition to coal methane gas/prospecting activity in the Telkwa area; and
c)   Attract "green" manufacturing industries to Telkwa.

Objective:

5.2.4 To achieve a basic level of awareness and understanding of climate change by community.

a)   Encourage locals to co-learn with other communities (via webinars, conferences, education, technology research and development) where ideas are explored and best management practices are successful.
b)   Encourage local GHG abatement, adaptation and mitigation strategies unique to Telkwa to be taught at local schools and within the workplace.

Objective:

5.2.5 To investigate and implement where appropriate renewable energy solutions (both for production and use) for all municipal facilities.

a)   Encourage the deployment of renewable energy production;
b)   Pursue added-value opportunities with surround deadwood for bio-energy purposes;
c)   Collaborate with other organizations in Telkwa to strive to reduce GHG emissions;
d)   Integrate the importance of energy management to all aspects of the community's social, economic and environmental well-being;
e)   Recognize the community's global citizenship (linking local efforts to regional, national and international energy and emissions policy);
f)   Work with all stakeholders to better understand the local effects of climate change, and identifying both the benefits and impacts on the environment, society, and the economy; and
g)   Engage and educate the Telkwa community on issues pertaining to climate and community issues can be linked and discussed.

BUILT ENVIRONMENT OVERVIEW

Water Infrastructure

The Village of Telkwa draws its water from two sources; a well and an infiltration gallery. Water from the well is not sufficient enough on its own to supply the Village with water. The average per capita water consumption per day for the Village of Telkwa is 132 gallons/day (600 L/day). To meet the demand for water an infiltration gallery is used. This infiltration gallery extracts water directly from the Bulkley River and not subjected to treatment. There is one water reservoir for the Village of Telkwa.

"The Village of Telkwa draws its water supply from two sources: surface water drawn from the Bulkley River and one deep well that is used during the months of peak water consumption or as an emergency backup to the Water Treatment Plant."

"The Bulkley River is the surface water source for the Village of Telkwa, withdrawn via an intake system 70 m upstream of the Coalmine Road bridge on the west bank of the river. This directly feeds the Water Treatment Plant. The groundwater source is one deep well located on Hwy 16 adjacent to Firehall #1, providing approx. 60 L/min into the system."

The Village of Telkwa has one reservoir. It is located on Morris Hill south behind the Bulkley River and outside Village boundary. It has the capacity to hold a total of 200,000 Imp. Gallons (909,000 L). This is not a sufficient amount of storage. Additional storage is needed in order to provide water for fire, emergency shortage, and to balance the peak day demands. The recently replaced water main along highway 16 is moving the Village of Telkwa one step closer towards a carrying capacity that will allow for an additional reservoir to be constructed on the east side of town.

High turbidity levels in both the Bulkley and Telkwa rivers are associated with spring runoff and heavy rainfall. Turbidity levels in the Bulkley River ranged from 0.42 to 58 NTU (nephelometric turbidity unit). The levels in the Telkwa River normally ranged from 8 to 38 NTU. A peak level of 275 NTU was measured in the Telkwa River of June 28, 2002

Concentrations of iron and manganese in the river water exceeded the AO (aesthetic objective) specified in the Guidelines for Canadian Drinking Water Quality (GCDWQ) occasionally. Levels of iron and manganese were measured up to 1.9mg/L and 0.12 mg/L

The water pipes streaming through the Village of Telkwa also pose as a health risk for residents. The pipes are created of asbestos, 50 years old and are in need of replacement.

Wastewater Collection, Treatment and Disposal

The wastewater plant includes one anaerobic lagoon, two aerated lagoons, diffused air aeration system, piping, a two cell effluent exfiltration basin and appurtenances.

The present peak flow is estimated by the Village at 850 m3/d and the average day flow is estimated at 600m3/d. The lagoon overflow system is intended to commence operation when the flow reaches 1,300 m3/d. It is estimated that the flow may increase to 1,900 m3/d in a flood situation with several pumps running. The maximum rate of which the effluent is to be discharged is 850 m3/day. The characteristics of the effluent is to be equivalent or better than: 1) Biochemical Oxygen Demand (BOD) 45mg/L 2) total Suspended Solids (TSS) 60mg/L.

Stormwater Collection and Discharge

The majority of drainage is by roadside ditches and culverts under roads and driveways. There are also short sections of storm sewer within the Village of Telkwa. A Stormwater Management Plan was contracted the intention of serving as a guide to the development of an effective overall system for Telkwa.

The Village is divided in half by the Bulkley River running alongside the Yellowhead Highway (Highway 16). Along the highway there are a number of sub-catchment basins that drain directly into the Bulkley River. The Cottonwood area of Village consists of several sub-catchment basins that also drain into the Buckley River, Telkwa River and Deland Creek. Many of the roads so not meet the design standards laid out in the Village's Subdivision and Development Bylaw. Improper roadside ditching creates surface drainage problems that decrease the life expectancy of the road.

The existing drainage system consisting of culverts, open ditches and streams, and short sections of underground storm sewer service the current drainage patterns of the Village. This system includes pipelines along Hankin Avenue (discharging into the Bulkley River); Aspen Crescent (discharging into the Deland Creek); Chestnut Street to Poplar Street, Coalmine Road and Dogwood Street (discharging into Deland Creek).

Transportation

Roads

The village of Telkwa is comprised of three main road types; these are major arterial roads, residential collectors, and local roads. The two major arterial roads that run through Telkwa are Highway 16 and Coalmine Road. Both are maintained by the Ministry of Transportation though a

portion of Coalmine Road in located within the boundaries of Telkwa. Coalmine Road is also largely used by logging trucks, accounting for 4.5% of traffic on the route.

Over the past decade, the Ministry of Transportation has discussed a number of changes to major road network plans, including a bypass route between Smithers and Telkwa.

The following systems of transportation are available in the Village of Telkwa:

✓ Telkwa is on the Canadian National Rail line linking Prince Rupert and Prince George;
✓ Passenger Rail Transport includes VIA Rail;
✓ Greyhound Canada; and
✓ Car rental and air transportation available out of Smithers.

A. HIGHWAY 16

Highway 16 is currently the main access point to and from the Village of Telkwa. Traffic counts were administered in 2005 and then again in 2007 to record vehicles totals along Route 16. Traffic volumes for Route 16, at the end of Pleasant Valley Bridge, approximately 5 km west of Houston complied by the Ministry of Transportation in 2007 indicates an average annual daily traffic total of 3,112 vehicles. This total is based on traffic traveling in both directions. This total illustrates an increase in the amount of traffic when compared to the average annual daily traffic total of 2,881 complied in 2005. The traffic volume for Route 16, 0.1 km East of Queen Street in Smithers complied by the Ministry of Transportation in 2005 indicates an average annual daily traffic total of 10,791 vehicles (both directions).

B. COALMINE RD

Coalmine Road is the main arterial that connects the residential neighborhoods (Woodlands, Cottonwood and the rural residences outside the existing municipal boundary), and the airport and industrial lands to the Old Town Centre and Highway 16 corridor. The road crosses an on-grade CN rail-line and crosses a one-lane bridge. This transportation connection demands the most attention with regards to safety, future growth and improvements for multi-use transportation uses that occur.

C. Transportation Strategy

The associated mapping found in Appendix A "Map 5 - Growth Potential" and "Appendix A Map 2 - Transportation and Trails" have been prepared to provide an overview of the road network and specific areas that shall be incorporated into future development projects.

A long-term goal for Telkwa is to improve local road network in order to improve four main components:

1. Emergency Response (currently the Bulkley River and CN Rail line, pose as high risk areas for causing disruption to local traffic and essential services)
2. Access to resource and infrastructure lands (across the Telkwa River is a large area of forested lands affected by the pine-beetle, as well as the community sewage treatment system);
3. Allow future residential and commercial growth to occur close to central amenities (Barbeque Lands, Schools, Old Town Core, Trails, Highway 16); and
4. Better routing for local traffic (lessen curves and to bring traffic to main intersections. Examples include:

    i. Upgrade Bulkley River bridge with a 2 lane bridge that crosses the river at the base of Hanson Ave, that includes the ability for the CN line to run under the bridge, and to achieve an architectural feature for the town;
    ii. Prepare feasibility study and long-term goal of creating a bridged transportation route over the Telkwa River (potentially at the south-end of the Cottonwood residential area);
    iii. Upgrade existing Bulkley River bridge to be a pedestrian/bicycle only transportation linkage.
    iv. Improve Tower Road/Highway 16 intersection to accommodate added traffic and to signal to Highway traffic the entrance to Telkwa (i.e. light-controlled, or large round-about); and
    v. Improve Telkwa High Road/Highway 16 intersection in order to fix sight-lines and turning lanes.

Railway

VIA Rail offers operates "The Skeena" passenger train service which runs from Jasper to Prince Rupert and back again. This service offers stops in Telkwa, Prince George, Smithers and other communities located along Highway 16. The Village of Telkwa is located on the CN rail line serving the Port of Prince Rupert (Grand Trunk Pacific Railway). This rail line forms an important CN secondary main line to Prince Rupert which is a primary marine-railway connection. Prince Rupert Container Terminal is the newest in North America and the first dedicated ship to rail container terminal. It has a current capacity of 500,000 Twenty Foot Equivalent Units (TEU) annually and plans to expand capacity to 2 million TEU's annually. (Source: Northwest BC Forest Coalition)

The proposed grade separation located in Smithers, BC at Dahlie Road is expected to facilitate efficient intermodal train service to and from the Prince Rupert container terminal. The project will enable an increase in train length from the present 8,000 feet to 12,000 feet or a 50% increase in capacity per train. This increase in capacity at the Prince Rupert port and the upgrades in Smithers

will result in a future increase in the number and frequency of rail based traffic found in Telkwa, and thus impacting road crossing safety, automobile idling, noise pollution and higher risk to emergency disasters, water supply, and natural ecosystem. It is important to note that the Village maintains a second fire hall due to the crossing cutting the community in half.

Solid Waste Management

Solid waste is managed by the Regional District of Bulkley-Nechako. Garbage collection is administered by the Village of Telkwa within the Village boundaries, primarily for residential users. The collected refuse is then transported by truck to a District-operated waste transfer station, located on Donaldson Road. From the transfer station, refuse is relocated to an expanded District-owned landfill site. This landfill is located at Knockholdt, east of Houston.

The Smithers/Telkwa Transfer Station, located approximately 1 km west of Telkwa, is managed under the care of the Environmental Services Department of the Regional District of Bulkley-Nechako. This facility accepts a number of materials for recycling (small volumes of construction, demolition waste, land clearing debris, clean wood waste, metal product and appliances, glass, auto batteries).

The Refuse shed on site accepts any materials that are usable, or that may be salvaged, which are then free to the general public. A multi-Drop Depot (Product Care) accepts pesticides and herbicides, flammable liquid, gasoline, oil based and latex paint, and aerosol cans. There are no current recycling programs in Telkwa. Residents of the Village of Telkwa must transport their recycling to Smithers for disposal.

BUILT ENVIRONMENT OBJECTIVES AND POLICIES

5.3   Water, Wastewater and Stormwater

Objective:

5.3.1 To supply Telkwa residents with a high quality of potable water based on the watershed's carrying capacity in a sustainable manner.

Policies:

a)   Protect water sources, by means of conservation or restrictive land-uses;
b)   Require all new developments to achieve a supply of treated water, including filtration and disinfection;
c)   Maintain a well-designed and well-operated distribution system;
d)   Require mandatory and comprehensive testing of drinking water;
e)   Require public notification and reporting of water quality problems;

f)   Work towards looping all water lines within the Village;

g)   Provide adequate resources to operate water systems and enforce the law; and

h)   Create an auxiliary power system for water treatment and distribution.

Objective:

5.3.2 To continually work towards achieving water efficiencies and implementation of appropriate technologies.

Policies:

a)   Require all new developments to incorporate onsite rainwater storage capabilities;

b)   Promote the use of gray-water systems;

c)   Undertake to upgrade policies and regulations related to the Village water system;

d)   Conserve potable water by means of implementing water metering in the Village;

e)   Promote water demand education, management and conservation as a component of a sustainable community;

f)   Implement public educational programs encouraging responsible water use and conservation technologies;

g)   Encourage requirements and incentives for low water use fixtures (i.e. low flow shower heads and toilets); and

h)   Prohibit the use of bulk water sales.

Objective:

5.3.3 To provide an efficient, cost-effective and low energy emissions waste water system.

Policies:

a)   Implement a tangible asset inventory;

b)   Create a strategic management system in order to eliminate sewer and stormwater infiltration; and

c)   Create a sewer infrastructure plan, which examines the feasibility of connecting all unserviced properties in Telkwa to the existing sewage system.

Objective:

5.3.4 To create a storm water management system.

Policies:

a)   Minimize impervious surfaces where possible;

b)   Mitigate environmental impact of surface parking by encouraging permeable surfaces and appropriate catch basins for contaminants;

c) Continue to install and replace storm sewers for adequate capacity and depth to serve the needs of existing and new development;

d) Encourage development applications to review risk of flooding of lands and to prepare a mitigation plan for reducing onsite factors that increase the flood event.

5.4 Transportation

Objective:

5.4.1 To reduce GHG emissions related to transport of goods and services and personal transportation.

Policies:

a) The Village will work with other governmental and non-governmental partners to promote a per capita continual reduction in transportation GHG emissions within the Village of Telkwa by 50% to the year 2020 and 100% by 2050.

b) Using the below policies to continually move towards the above target.

Objective:

5.4.2 To achieve an increase in non-vehicular modes of transportation (walk/bike/skateboard) within an inter-modal system.

Policies:

a) Promote creation of solar-powered street lighting (full light-cutoff) from the Highway Commercial area to Three Corners;

b) Allow alternative transportation features (car-share space, electric car recharge, bus stop) be the equivalent to a portion of the parking requirements for all new developments;

c) Improve the visual appeal of Highway 16 corridor and move hydro and other utilities underground to improve the visual appeal of the highway corridor;

d) Mandate bike-parking facilities;

e) Establish a Bicycle Plan for Telkwa using Provincial funding sources;

f) Identify a signage program of well-defined and consistent gateways, signs and route markers that encourages visitors to explore and discover the community;

g) Create "human scale" frontages and development that encourage walking;

h) Investigate the feasibility of a pedestrian and bike bridge to southwest side of river to promote non-motorized recreational link to biking and hiking trails in the around Smithers; and

i) Expand the regional transit service between Telkwa, Smithers & Houston.

Objective:

5.4.3 To look for partnerships opportunities with senior government funding for major transportation infrastructure projects, such as:

a) Replacement of Bulkley River Bridge;
b) Improved rail crossing over Coalmine Road;
c) Pedestrian friendly standards incorporated with Highway 16
d) Development of a multi-use path connection Telkwa to Smithers (used for alternative transportation options and recreation); and
e) Feasibility study regarding construction of bridge over Telkwa River to access Tatlow Road.

Policies:

a) Pursue the application of the following funding programs:

   I.   Levies;
   II.   Strategic Budget Allocations;
   III.   Gas Tax Fund;
   IV.   Green Municipal Fund;
   V.   Public Transportation Infrastructure Funds;
   VI.   Canada Strategic Infrastructure Fund; and
   VII.   Infrastructure Canada Program.

b) Prepare feasibility studies to identify which infrastructure projects will bring the highest socio-economic advantage to Telkwa and the surrounding area.
c) Work with senior levels of government to identify solutions for the CN railway (bridge crossings, on-grade crossings, and risk analysis of derailment)

Objective:

5.4.4 To integrate transportation, and energy considerations with land use and settlement planning to achieve mobility, conservation, safety and efficiency goals.

Policies:

a) Utilize Smart Growth planning principles for land use decision making, including the exploration and adoption of alternative development road standards, bicycle lanes, pedestrian movement and mixed use, so residents can live, work, play and shop close to home;
b) Work in collaboration with MOTI to ensure safe vehicular and non-vehicular movement at Highway 16 intersection by implementing traffic control measures and other options;

c)   Continue to promote safety first planning principles, for all modes of transportation such as vehicle, transit, pedestrian and bike travel;

d)   Reduce visual impacts of the automobile by encouraging commercial, institutional, and multi-family residential developments to 'hide' surface parking, behind or beside buildings, with landscaped or fenced screening;

e)   Minimize the intrusion of major traffic flows into neighbourhoods.

f)   Prepare and implement a transportation action plan that supports OCP transportation policies (bus stop locations, bike racks, parking areas, signage);

g)   Install traffic calming measures and suitable crosswalks zones; and

h)   Upgrade gravel roads based on priority, level of demand & type of use.

Objective:

5.4.5   To collaborate with all levels of government, community groups and local residents in order to create a suitable transit services network that meet the needs of the community.

Policies:

a)   Identify and develop a central transportation node for multi-modal transit options (car-pooling, car-sharing, greyhound, bike-share);

b)   Where suitable, increase pick-up/drop-off locations as development and rider-ship increases;

c)   Identify future locations of pick-up/drop-off within development applications;

d)   Increase frequency based on special events, common activities and demography of users;

e)   Encourage domestic trips within Telkwa boundary to be a free service; Investigate the possibility of operating a transit service that extends to the rural areas around Telkwa in order to draw in more users and bring people into the town centre; and

f)   Establish a park and ride area for residents travelling to work at same location or who have similar shifts (i.e. Houston for mill).

6.0 THE SOCIAL SYSTEM

Village of Telkwa Official Community Plan

SOCIAL SYSTEM OVERVIEW

The high quality of life the Village of Telkwa and the surrounding area provides for its residents is one of the most valuable elements of living in the community for many residents. This high quality of life includes, the close proximity to numerous outdoor recreational pursuits, a rural lifestyle, high level of health care and supporting services found within the community, the feeling of community safety for residents of all ages, access to high level educational and recreational services and the relative affordable costs of living in the community.

Emergency services

In BC, local authorities are responsible for planning for and operating emergency responses to disasters such as fires, floods, earthquakes, etc. Local authorities are municipalities and Regional Districts. Under the PEP umbrella, certain responsibilities or functions were assigned to others. the Emergency Social Services Program (ESS) and Search and Rescue and Road Rescue. The Village of Telkwa is the "local authority" for Telkwa.

The Village of Telkwa Fire Department consists of approximately 23 volunteer members. Services provided by the department are provided from two stations which service the Village of Telkwa area and part of Electoral Area A.

The local Village of Telkwa Fire Department is also an acting Medical First Responder and is trained in Road Rescuing. Under mutual aid agreements that are in place with the Town of Smithers, District of Houston, Village of Burns Lake, Village of Granisle and Regional District of Bulkley-Nechako, the Village of Telkwa Fire Department also assists with fire suppression in the larger areas if required.

There is presently no organized Search and Rescue in the Village of Telkwa; however, there are a number of Search and Rescue societies in surrounding communities (i.e. Houston, Burns Lake, Smithers). There is also an organized Buckley Valley Search and Rescue.

Residents of the Village of Telkwa utilize the Smithers RCMP detachment for police service The British Columbia Ambulance Service is located in communities outside Telkwa in Smithers, Houston and Granisle.

The Village of Telkwa has recently designed an Emergency Preparedness Plan. The Plan was created to guide the Village of Telkwa in the daily activities of emergency management. The document provides a detailed plan which includes operational guidelines for coordinating response to hazards and risk that arise and threaten residents of the Village of Telkwa. It seeks to coordinate the Municipalities and the Regional District of Bulkley Nechako.

Education

Telkwa currently has one elementary school. Telkwa Elementary services the Village of Telkwa under the jurisdiction of School District No. 54. The closest high school, Smithers Secondary, is located in Smithers. High school students commute by bus each day. The Bulkley Valley Learning Center is also located in the neighbouring community of Smithers.

There are no secondary schools located within the Village of Telkwa. Post-secondary institutions services within the Region include:

- ✓ Northwest Community College (Houston and Smithers Campuses); and
- ✓ College of New Caledonia (Vanderhoof, Fort St. James, Fraser Lake, and Lakes District Campuses).

Early Childhood Development

Norma's Ark offers early childhood development for residents of Telkwa. The play–day centre offers daycare services for children ages 30 months to five years of age. The centre also offers an enriched program for pre-schoolers, after school care and parents and tots play groups. The facility is located directly across from the Telkwa Elementary School. There are also a number of organizations which service the Village of Telkwa and aid in providing information, services and support to families with children who need it (i.e. Bulkley Valley Child Development Centre).

Healthcare and Social Services

The chief public health and safety building in Telkwa is the fire hall which is located on Highway 16. The Village of Telkwa does not have a hospital within the boundaries. The Village of Telkwa has an Emergency Response Coordinator which is administered by a volunteer. There is an up-to-date emergency response plan for the Village of Telkwa.

Those needing medical services must utilize those offered by Smithers. Smithers houses the Bulkley Valley District Hospital. This facility provides emergency, surgical, maternity, and palliative services. Services include physiotherapists, dentists, massage therapists, long term care, home care nursing, and speech language pathologists.

Health Care Services offered and available within the Regional District of Bulkley-Nechako include hospitals, medical offices, dentists, eye care, chiropractors, physiotherapists, counselling and seniors care. These services are all located within Smithers. Telkwa currently offers a reflexology the following health-related services.

Voluntary, Non-Profit Clubs and Organizations

The Village of Telkwa has a high rate of volunteerism. Community members wear a number of hats with many involved in more than one organization. The Village of Telkwa has a very active community and a high level of community participation when it comes to volunteering and community events. There are a number of organizations, clubs, and associations which service every facet of community life.

Housing

Diversity of housing is essential to a healthy community. OCP's can direct the development of diverse housing types to accommodate the various housing needs of existing, as well as future residents, and to meet the changing needs of the various age groups of residents.

There are approximately 1,666 dwellings including, seasonal residences. 81.4% are owned compared to the 69.7% Provincial average, while 18.6% of Telkwa residents rent. The avg. number of people per household in Telkwa is 2.3 compared to the 2.7 Provincial average.

Housing typology is predominantly single-family dwellings. This housing type accounts for 72.40% of the total Telkwa housing stock compared to the 49% BC average. There is also a very high percentage of mobile dwellings found within Telkwa, which accounts for 19.8% of the housing stock compared to the 2.6% provincial average. Other housing types found in Telkwa in small percentages include, apartments/duplex (3%), Semi-detached houses (1.5%) and Apartment building <5 storeys (2.4%).

In November 2010, the Telkwa Seniors Housing Society (TSHS) was selected as the non-profit operator for an affordable rental housing development for low income seniors and people with disabilities. Eight Apartments for seniors and persons with disabilities have been recently constructed, located at 1540-1554 First Avenue, Telkwa, BC. These apartments have been purchased through the Canada-BC Affordable Housing Initiative Agreement with matching contributions by the Province under the Seniors' Rental Housing (SRH) initiative and by the Government if Canada through Canada's Economic Action Plan to provide affordable housing for independent seniors and people with disabilities (BC Housing). These apartments are being developed and amended through the Canada-BC Affordable Housing Agreement. Joint contributions from the Government of Canada, through Canada's Economic Action Plan, the Province under the Seniors' Rental Housing and the Village of Telkwa by the donation of the land and assistance through the process made this development possible. The Telkwa Seniors' Housing Society was formed in 1996 with the purpose of providing housing for seniors so they could continue to reside in the local community (BC Housing).

Social Sustainability Principle Statement:

For the community to function in a sustainability manner, the fundamental human needs of its residents must be met without undermining the environmental sustainability. As a socially sustainable community there must be the ability to maintain and build on its own resources and have the resiliency to prevent and/or address problems in the future.

Overarching Social Goals

1. Provide a level of diverse housing types and densities to accommodate the various housing needs of existing, as well as future, residents and to meet the changing needs of the various age groups of residents;
2. Create a healthy and safe community that allows all residents to meet their fundamental human needs;
3. Encourage and support a network of volunteerism that continues the "identity" of Telkwa;
4. Foster a set of partnerships and networks within the community that work towards the greater whole; and
5. Achieve a community that is physically accessible, inclusive to all, and respects diversity.

6.1   Health and Safety

Objective:

6.1.1 To support the provision of providing sound primary healthcare services for the community.

Policies:

a)   Promote a healthy corresponding built environment (housing, roads and pathways) in order to increase the opportunities for local residents and visitors to make healthy lifestyle choices;
b)   Encourage the linkage of Lawson road with Woodland area to improve emergency evacuation condition;
c)   Support an area for a multi-faceted health unit or wellness centre within the Village of Telkwa;
d)   Recruit healthcare professionals to provide suitable services and expertise for the community of Telkwa;
e)   Encourage assisted living housing and care for elders and persons requiring moderate supportive housing;
f)   Make available appropriate services to allow for hospice and end-of-life living at home residences; and
g)   Ensure fire, police, ambulance, health and emergency response services keep pace with growth in the Telkwa community.

Objective:

6.1.2 To reduce the risk of harm to public health and property in areas that experience floods, wildfire and erosion.

Policies:

a) Ensure the community has a Community Emergency Plan, and that all schools, residents and major employers are aware of the plan and their role in the event of an emergency;

b) Mitigate the risk of property damage and danger to residents associated with flood events by encouraging flood-susceptible lands to be used for agricultural, park, open-space and recreation; and

c) Use the Sensitive Ecosystem Map (Appendix A – Map 3) to guide land-use decisions) in order to lessen risk of hazardous lands.

6.2   Education and Learning

Objective:

6.2.1 To provide a full continuum of education outlets and opportunities for continual learning.

Policies:

a) Pursue the development of a learning centre (second school, centre of excellence, post-secondary) within the Tyhee Lake Road area and or in long-term growth area south of the Bulkley River;

b) Encourage the broader use of the school facilities; and

c) Work with School District 54 to develop a K-12 school facility in Telkwa.

6.3   Accessibility and Inclusiveness

Objective:

6.3.1 To provide opportunities for citizens to contribute positively to the community through volunteering, the provision of leadership development and support, and the empowerment of community members to identify needs, set priorities and pursue a common vision.

Policies:

a) Address volunteer burnout with volunteer recognition and celebration;

b) Recognize and include surrounding rural residents and businesses whom identify Telkwa as their community;

c) Provide incentives for residents of all ages to volunteer for community organizations and events;

d)	Require youth training and involvement in the community and encourage leadership education and guidance; and

e)	Establish a community coordinator to liaise with all groups and provide formal communication and knowledge sharing between organizations.

Objective:

6.3.2 To support and encourage projects that involves the entire community.

Policies:

a)	Provide a favorable living environment for the elderly, including implementing "barrier-free" designs for the elderly in public places;

b)	Offer affordable and appropriate recreation, leisure and cultural activities, programs and facilities to a diverse community; and

c)	Build age-friendly developments to reflect ageing population and attract retires based on the natural amenities, arts community, and small town charm.

## 6.4	Local Food System

Objective:

6.4.1 To provide the residents of Telkwa with the opportunity, knowledge and resources to produce, acquire, eat, enjoy and celebrate affordable and nutritious local food.

Policies:

a)	Require Comprehensive Development areas with arable land to dedicate a percentage of land for local food production;

b)	Support agricultural processing facilities in Telkwa and area;

c)	Continue to support local farmers markets and assist in finding a space for year-round sales;

d)	Link food security and economic development initiatives;

e)	Designate appropriate neighborhoods for animal husbandry;

f)	Support organic food production;

g)	Encourage food producers to retail locally;

h)	Support the expansion of local food organizations and a community focused agricultural forum; and

i)	Support and encourage educational workshops that provide food production awareness and preservation techniques;

j)	Support the expansion of community gardens and collective food storage, production and cooking;

k)	Investigate the ability to create local soil and nutrients from local waste and natural material;

l)	Encourage the development of rainwater collection for irrigation;

m)	Incorporate food-safe kitchens in public institutional buildings;

n)   Retain agricultural viable properties for green houses, nurseries and meet dairy and egg production; and

o)   Ensure the continuation of small scale farms to encourage local small scale agricultural production and create viable farming operations through increased agri-tourism.

6.5   Housing

Objective:

6.5.1 To reduce GHG emissions related to residential use and the construction industry.

Policies:

a)   The Village will work with other governmental and non-governmental partners to promote a per capita continual reduction in residential GHG emissions within the Village of Telkwa by 50% to the year 2020 and 100% by 2050.

b)   Using the below policies to continually move towards the above target.

Objective:

6.5.2 To achieve a level of new building and retrofitting that allows Telkwa to move towards a net-zero emission building stock.

Policies:

a)   At the time of a building permit application, all existing dwelling units are required to complete an energy assessment to determine Energuide rating;

b)   All new residential developments and large renovations shall achieve a minimum Energuide 80 rating;

c)   If the building permit is for a new building, an energy footprint model must be submitted with building permit application;

d)   Owners and tenants are encouraged to equip their dwelling units with EnergyStar appliances and to follow these top ten tips for achieving energy efficiency;

e)   All new housing developments are required to install an external electrical outlet of the building to support the recharging of electric vehicles;

f)   All new subdivisions greater than 5 lots must include the following onsite energy strategies:

g)   Site planning that maximizes solar gain and shading;

h)   Suitable vegetation and foliage to shade in the dwelling in the summer months and to allow solar gain in the winter months;

i)   Install neighbour-based energy production (geo-thermal, heat recovery from waste, micro-wind, and other alternative energy systems);

j)   Storm water collection for the use of local food production, landscaping and other non-potable water demands;

k)   Pursue the development of a Telkwa-unique green dwelling unit pilot project;

l)   Encourage clustering of buildings to minimize heat loss and disturbance to natural drainage, vegetation and wildlife habitat;

Objective:

6.5.3 To ensure the availability of a range of housing typologies and tenures to meet the diversity of needs of the community of Telkwa.

Policies:

a)   Residential developments containing six units or greater, are required to incorporate a portion of the dwelling units to be rental;

b)   Development industry is encouraged to provide a mix of detached residential, semi-detached, triplex, 4-plex and other medium density residential typologies;

c)   Create density incentives and partnership options on municipal land for apartment uses;

d)   Ensure all multi-family and affordable housing units proposed shall contain a diversified mix of sizes (varied floor space for family, bachelor and disabled persons, etc.);

e)   Residents of Telkwa are encouraged to self-organize into groups to facilitate the realization of co-housing, co-operative and other forms of collective tenure;

f)   Allow for small-lot residential developments in order to encourage smaller sq. ft. houses and less of an environmental footprint to the environment;

g)   Encourage a diversity of housing types and densities through the creation of flexible zones "flexi-zones" and incentives in the zoning bylaw;

h)   Permit mixed commercial, residential and industrial residential developments; and

i)   Create a suitable zoning structure to accommodate residential-based tourism developments (i.e. Bed and Breakfasts, vacation rental, nightly rental above commercial space).

j)   Subdivision of larger residential parcels (2 ha or>) and/or the amendment to existing land-use designations for the purpose of additional residential parcels are encouraged to occur within or neighbouring existing rural residential clusters.

k)   Seek partnerships with BC Housing, CMHC and the private sector to create affordable housing developments;

l)   Permit secondary suites in all detached residential units;

m)   Work with affordable housing stakeholders in the development of a transitional house for people looking for moderate-supportive housing units; and

n)   Encourage assisted living housing and care for elders and persons requiring moderate supportive housing.

7.0 CULTURAL SERVICES

CULTURAL SERVICES OVERVIEW

The diverse cultural elements of a community, both tangible and intangible, are avenues through which many socio-economic and environmental dimensions of a community are embodied. Key cultural elements in the community can also be used as anchors and focus points for policy and planning efforts to ensure cultural resources are integrated as a component of a community's sustainability.

Culture and Heritage

The Village of Telkwa has a rich and diverse cultural base with a variety of clubs, organizations and associations such as the Telkwa Environmental Society, Museum Society, Seniors Society, Kinsmen, and Telkwa Community Initiative Society. There are frequent musical and theatrical events. The community and surrounding area has an abundance of local artists. The Telkwa Museum captures the rich history of the community and a small piece of British Columbia's History.

Culture does not simply refer to arts and music; there is a strong outdoor recreation culture amongst the residents of the Village of Telkwa. Many residents actively partake in outdoor recreation activities in the area, such as hiking, biking, skiing, and fishing. There is a strong social element with regard to all the outdoor activities providing opportunities for the community to meet and share stories.

There are a number of community events that take place annually such as the Telkwa Barbeque and Demolition Derby and the Canada Day celebrations which contribute to local culture. Telkwa also has a strong culture of volunteerism. The community has a strong base of dedicated volunteers. Community barbeques, fundraisers, and the local fire department would not be possible without the participation of volunteers. The success of these events and community services which contribute to the sense of community culture.

Telkwa also offers a rich heritage. Museums and heritage sites play a large part in the uniqueness of the Telkwa community. There are approximately 26 heritage buildings; many are still standing from the turn of the century. The old town site of Aldermere is also present in Telkwa and contributes to the unique character and history of the Village. A local farmers Markets, craft fairs and antiques equally contribute to the cultural heritage experience found in Telkwa.

Parks and Trails

The Village of Telkwa includes an abundance of parks. Within the boundaries of the Village of Telkwa there is Tyhee Lake Provincial Park. This park is situated in the Bulkley River Valley and is well used by the Village and surrounding communities, consisting of a total of 33 hectares. Visitors

and residents of nearby communities can enjoy hiking, swimming, picnicking, and nature viewing in the summer. Winter conditions allow the park to be used for ice fishing and cross-country skiing.

In close proximity to the Woodlands subdivision is the Telkwa Barbeque Grounds. This is a central area for the community and is well used for a number of events and activities. Eddy Park and the Riverside Park are located in the downtown area of Telkwa are. In the Woodlands Park residential neighbourhood there is a small neighbourhood park.

In 1997, a Heritage Trail System was created in Telkwa using funds provided by Forest Renewal BC. This trail system consists of a network of heritage trails that connect the historic town site of Aldermere, the downtown core of Telkwa and Tyhee Lake. The trail system totals 7 km in length.

Trails in Telkwa have been discussed and identified as a potential area for growth and expansion in the past. The creation of new trails would contribute to the quality and number of recreations activities and opportunities available in the Village of Telkwa.

In the bench lands section of Telkwa there are additional trails. This trail system is referred to as the "ice trail". This name was given to the trails historically when residents of the town site of Aldermere travelled between the lake and town site in order to obtain ice to preserve foodstuffs.

The Village of Telkwa and outskirts have been framed and sculpted by the land and its features. Rivers, flood plains, and steep slopes surround the downtown core of Telkwa and residential neighborhoods. These features have created a number of open and natural spaces within Telkwa that are used for a variety of reasons. Bird watching, scenic points, and wildlife viewing are a few of the opportunities present in Telkwa as a result of the open spaces.

Recreation, Facilities and Festivals

The Village of Telkwa holds a number of recreational facilities to support activities and recreation teams in the community. Tennis courts, a community hall, 2 ice rinks, and a seniors centre. There is also a soccer field/baseball field located at the Derby site. For major recreational facilities (i.e. an indoor pool and indoor ice rink) residents of Telkwa must commute to the town of Smithers. The Telkwa Barbeque which occurs near the end of August is one of the longest-running festivals in BC and will celebrate its 100th Anniversary in 2012.

Arts and Heritage

Arts, culture and heritage play many roles within a community. Vibrant and diverse arts and cultural activities are an important contribution to the vitality of the community and economy. Arts and culture contribute to well-designed public spaces and play an important role in making local

environments more attractive. Arts and heritage are increasingly recognized as significant contributors to community identity, diversity and overall quality of life and the Village of Telkwa has recognized the potential in this sector and is investigating methods to identify and foster economic development with respect to arts, culture and heritage.

Cultural Services Principle Statement:

The diverse cultural elements of a community, both tangible and intangible, are avenues through which many socio-economic and environmental dimensions of a community are embodied. Key cultural elements in the community can also be used as anchors and focus points for policy and planning efforts to ensure cultural resources are integrated as a component of a community's sustainability.

Overarching Cultural Goals

1. To achieve comprehensive parks, trails and open spaces networks available for all residents of Telkwa;
2. To achieve a diverse set of community-based recreation opportunities for all residents of Telkwa that improve the quality of life and provide a means of social interaction for all;
3. To achieve a community with a thriving social economy; and
4. To achieve a physical (artifacts, buildings) and non-physical (stories, knowledge) relationship to the heritage of Telkwa.

CULTURAL SERVICES OBJECTIVES AND POLICIES

7.1 Parks, Trails and Open Spaces

Objective:

7.1.1 To create a recreation system that connects community parks, trails and open space and the all residential areas.

Policies:

a) Extend trails (acknowledging adjacent private ownership of property);
b) Create safe outdoor play areas designed by youth;
c) All new developments are required to provide appropriate public access and transportation connections to the development or help upgrade existing trail connections that lead to the development site;
d) Identify a network of community corridors connecting the two main centres, major attractions (i.e. Eddy Park, Aldermere Trails, Tyhee Park) and other natural features within Telkwa and the immediate vicinity;
e) Require suitable accessibility and include accessible amenities where terrain and natural eco-systems permit;

f) Prioritize trail system within the Telkwa boundary and the surrounding area to include activities such as walking, hiking, running, horse-back riding, wild-life viewing, snowmobiling, all-terrain vehicles, zip-lines, x-country biking, downhill biking;

g) Encourage community-based events and festivals that centre around the activities listed in 4.1f);

h) Equip trails with proper signage, staging areas for parking, and dog waste bags and receptacles; and

i) Partner and develop a trail system connecting the Telkwa community with the surrounding country-side (Quick, Round-lake) and beyond (Smithers).

j) Create a hierarchy of trails and proper signage that instructs and provides ease of route finding, difficulty of trail and popular landmarks and local amenities;

k) Identify, protect and enhance public views and vistas within parks, trails and open-space environment;

l) Negotiate with the Province and private property owner(s) to provide access through and/or on property for public pedestrian trail accesses by securing right-of-ways and easements. Where possible work to purchase these lands for controlled and dedicated community use; and

m) Identify trails on crown, private and park land and navigate the legal responsibilities and maintenance challenges of these trails.

Objective:

7.1.2 To achieve a strong network of facilities and services to accommodate a multi-faceted approach to recreation and leisure for residents and visitors.

a) Create a Parks and Recreation Open Space and Trails (PROST) Master Plan, which includes a common sign theme and deployment plan for all recreational amenities;

b) Map existing trails (GPS), so a complete trail inventory can be conducted and produced and make available to the public accurate mapping of existing trail locations;

c) Create a designated mountain bike park;

d) Develop a comprehensive trail inventory and establish "made in Telkwa" trail standards;

e) Create a central community gathering place;

f) Work with local motorized recreation groups to determine appropriate recreation areas;

g) Establish a reserve fund and plan to fund and improve parks including, the Rotary Sports Park, sports fields and playgrounds; and

h) Design more opportunities for walking, cycling and other forms of alternative transportation.

i) Habitat network (wildlife corridors, nesting areas/dens and food supply);

j) To maintain green space along the Bulkley River.

7.2   Recreational Facilities

Objective:

7.2.1 To ensure existing and future recreation facilities are centres of activity and serve the interests of the community in a financially sustainable manner.

Policies:

a)   All new recreation-based facilities and capital investments shall be designed by a multi-generational, multi-disciplined, community-based team via an integrated design process;
b)   Encourage partnerships with School Village for property use;
c)   Establish a protocol with all pertinent local stakeholders/organizations to ensure efficient and effective use of community assets;
d)   Investigate feasibility of indoor-ice facility or upgrading outdoor ice-rinks;
e)   Create a Telkwa Recreation coordinator position to encourage the expansion of services and potential recreation tourism opportunities in the community;
f)   Continually improve facilities and programs to be accessible and that meet the evolving needs of the community;
g)   Continue to be a community that maintains and enhances expanded year round recreation programming for all ages;
h)   To promote fitness, health and well-being;
i)   Food-safe kitchens;
j)   Indoor and outdoor recreation;
k)   Encourage pilot programs;
l)   Encourage the use of locally-based skills, knowledge and expertise;
m)   Require programs and services to support a multi-generational audience;
n)   Further investigate the feasibility of an indoor community swimming pool;
o)   Work closely with community organizations and assist the public in becoming self-sustaining in leisure pursuits; and
p)   Work with neighbouring jurisdictions to create linkages to Regional amenities.

7.3   Partnerships

Objective:

7.3.1 To strengthen the Village of Telkwa's relationship with Wet'suwet'en First Nations and building bridges of diversity and cultural understanding.

Policies:

a)   Continue and support the Community to Community (C2C) initiative and identify linkages with Arts and Culture; and

b) Identify areas in town that would be appropriate for First Nation recognition, interpretation, display of art, heritage and stories.

7.4   Public Art

Objective:

7.4.1 To promote arts and the continual development of a physical inventory of arts projects displayed in public spaces, both indoor and outdoor.

Policies:

a) Foster community partnerships in support of arts and culture;
b) Continue to provide use of public open spaces for community events and ceremonies;
c) Support access to spaces that accommodate arts and cultural programs, activities and events; and that preserve, celebrate and share the community's history and achievements;
d) Encourage the installation of public art on or within public buildings and property;
e) Work with local business, tourism, economic development and cultural organizations to identify ways to facilitate partnerships in furthering cultural development in Telkwa, including the expansion of existing events, development of new events, and the integration of cultural activities with business and tourism;
f) Develop solid relationships with community groups, neighbouring communities and Provincial ministries;
g) Identify opportunities to support the arts when making planning, service, and program decisions;
h) Integrate arts and culture into community planning, recreation programming and economic development;
i) Require all new developments participate in a public art program that includes all public areas, new commercial, institutional and multi-family developments throughout Telkwa to support the work of local artists, enhance public buildings, streetscapes and other public spaces. The components of this program include:
    i. 1% of the value of capital budgets for above ground projects allocated towards the purchase/commission and maintenance of public art to be displayed in public areas; and
    ii. 1% of budget for municipal building construction/renovation projects, or park redevelopment allocated to the purchase/commission and maintenance of public art for the building, structure, or park.

Objective:

7.4.2 To establish a supportive foundation for the arts system.

Policies:

a)   Encourage the development of an arts guild that works with local building, street furniture, interior design, culinary;

b)   Prepare an inventory of local skills and assets that can be leveraged for future programs;

c)   Encourage live-work studios, and home-based work arrangements for artists and artisans;

d)   Consider an arts centre and/or an arts school that would service the entire community and surrounding region;

e)   Encourage community programming for a variety of artistic disciplines; and

f)   Acknowledge arts-based infrastructure (equipment, tools, facilities, materials) as optional amenity contributions from future development applications.

7.5   Heritage

Objective:

7.5.1 To establish a robust heritage network, both through physical and story-based assets.

Policies:

a)   Develop a heritage site development plan for Aldermere Heritage site using a comprehensive development area and development permit area;

b)   Encourage the retention of the Bulkley River Bridge to be restored and used as a pedestrian connection;

c)   Encourage initiatives of private owners to preserve the heritage characteristics of their sites;

d)   Encourage the retention and adaptive re-use of older buildings in the downtown core with significant heritage/architectural merit, and promote awareness of historical sites;

e)   Develop a heritage inventory and action plan for bringing heritage artifacts on designated areas throughout the village.

8.0 GROWTH MANAGEMENT & LAND USE

Land Use Patterns and Built Form Overview

The OCP provides a framework that ensures that growth within the Plan area is conducted in a manner that best reflects the social needs of the community at large, acknowledges environmental considerations and echoes the economic needs of the Telkwa community. It is recognised that there is a strong influence from nearby Smithers on the level of future demand of new residential growth and the associated services required to support such growth.

Telkwa is the closest community in proximity to Smithers, the largest urban area in the Regional District, and has historically provided distinct opportunities in the Bulkley Valley. Surrounded by unique natural amenities, such as the Tyhee Provincial Park, Telkwa and Bulkley Rivers, forest reserve lots, and the surrounding mountain ranges, Telkwa can be viewed as the gateway to wilderness, recreation and sport activities, on many different levels. Originally settled higher on the northern shelf of the bench-lands, and formerly named Aldermere, Telkwa has spread out around three main transportation corridors transacting the town: 1) Provincial Highway 16, 2) Bulkley River and 3) CN Rail-line. Telkwa has two undefined commercial centres located along Highway 16: 1) The older town core located between Hankin Ave. and Eddy Park; and 2) west of Telkwa High Road to approximately Hudson Avenue.

The majority of the residential neighbourhoods can be found in three areas: 1) residential dwellings within the commercial centres, 2) north of the Highway 16, Tower Road area, 3) and the largest residential housing stock being found south of the River in the Cottonwoods area and Woodlands area.

The most common and used form of residential land within the Village of Telkwa and surrounding area are family-single dwellings. There are also mobile homes, townhouses, and duplex/triplex though substantially less than the number of single-family dwellings. In the future, it is expected that single family residential uses will be developed into well-defined neighborhoods within the downtown core of Telkwa. It is evident there are a number of single-dwelling houses in the area and there is a definite need for seniors housing and assisted living complexes in the area to accommodate the aging population.

Telkwa's location within the Bulkley Valley provides ample access to agricultural land. This agricultural land base within Telkwa is the mainstay of Telkwa's local economy. The main agricultural enterprises in the valley are cattle and dairy milk production. The area within the boundaries of Telkwa is best suited to ranching and beef production. The resource lands of Telkwa encompass lands valued for agriculture, forestry, natural resource extraction and environmental conservation opportunities.

Commercial centres

A. Old Town Centre

The Old Town Centre is a grid-pattern neighbourhood, bordered by the large hill on the east side and Eddy Park on the west. It lies beside the Bulkley River and is contained by the Bench-lands to the north. The area consists of commercial and residential land uses, heritage buildings, a riverfront pathway and park, elementary school, church, museum, post office and the municipal offices.

Key Highlights:

- ✓ Flood plain limits to development;
- ✓ Transportation issues:
    - i. Narrow or no sidewalks along Highway 16;
    - ii. Dangerous pedestrian crossings and vehicle intersections;
    - iii. Noise and air pollution from large trucks; and
    - iv. Beautification of highway infrastructure.
- ✓ Several empty commercial lots and derelict building stock;
- ✓ Lack of central parking for longer-term visitors;
- ✓ High visibility (all residents that live to the South of the River are required to pass through this area to access Highway 16;
- ✓ Intact heritage buildings; and
- ✓ Several key viewscapes (Eddy Park and Riverfront Trail, Water-Tower Hill, Boat Launch, Views of bridges).

B. Tyhee Gateway Centre

The Tyhee Gateway Centre is a more recent commercial development that lies to the west of the Old Town Centre and runs linearly along Highway 16 and includes more automobile-based commercial enterprises, small-scale tourism and large-lot residential uses, some including home-based occupations. The Tyhee Gateway is bordered by Telkwa High Road to the east, which leads to Tyhee Provincial Park, and agricultural lands lying to the west of the commercial area up to the municipal boundary.

Key Considerations:

- ✓ Flood plain constraints to the south side of Highway 16;
- ✓ No sidewalks or bike lanes;
- ✓ Unmarked access and egress for onsite parking;
- ✓ Surrounded by birch and cottonwood forest;
- ✓ Close proximity to Smithers; and
- ✓ Large parcels for larger commercial opportunities.

Residential Neighbourhoods

A. Tower Road and Benchlands

- ✓ Future residential growth;
- ✓ Wetlands and forested areas;
- ✓ Viewscape opportunities;
- ✓ Aldermere - Tyhee connector Trail and connections to Old Town Centre, Eddy Park and Service Centre area; and
- ✓ Added traffic to Tower Road/Highway 16 intersection.

B. Cottonwood

- ✓ Infill opportunities on large lots;
- ✓ Floodplain regulations;
- ✓ Mixed-use through small agricultural and home-based businesses; and
- ✓ Telkwa River Trail connections to Barbeque Lands and Old Town Centre.

C. Woodlands

- ✓ Future residential growth;
- ✓ Viewscape opportunities;
- ✓ Connecting trails to Barbeque Lands, river and trails and Old Town Centre; and
- ✓ Added traffic to Bulkley River Bridge and on-grade railway crossing.

Working Towards a Village-Concept

Telkwa currently has large undeveloped lots that are currently designated for primarily residential use, however are not planned to accommodate smart growth development and thus could lead to a negative impact to the quality of life for existing Telkwa residents. To ensure population and economic growth can be accommodated, land within the municipality must be more integrated and strategic. This strategy will use planned growth to enhance the quality of life of the Village, while at the same time maintaining the village character principles that are present today. Current growth areas lay to the northern edges of the townsite (between the Bench and Tyhee Provincial Park) and to the south-eastern edge (next to the Woodland area). Infill opportunities exist within the townsite however require land-use changes, development permit guidelines to guide natural hazards (floods and steep slopes) and re-routing of transportation network.

Desired Outcomes from land-use growth:

Med-high density growth near (5 minute walking distance) amenities and essential services (Old Town Core, Eddy Park, Rec Lands and River trails):

- ✓ Re-development of building stock;
- ✓ Addition of secondary suites to existing and new SFD;
- ✓ Infill of vacant lots; and
- ✓ Conversion of land-use and zoning.

Majority of increased commercial around two existing cores (Old Town Core & Service Centre):

- ✓ Mixed commercial/residential (areas where residential is only allowed on 2nd story);
- ✓ Preservation of heritage buildings;
- ✓ Nodes of community gathering; and
- ✓ Placement of public art.

Designate general areas for neighbourhood services (i.e. mailbox, bike repair, notice board, compost/recycling, hair salon, corner store, café, pocket park, outdoor rink) in designated neighbourhood areas:

- ✓ Conversion of Single Family Dwelling buildings;
- ✓ Temporary/seasonal use; and
- ✓ Intersection of vehicular and non-vehicular traffic.

Comprehensive development areas for transition areas to encourage mixed-use and zoning flexibility, as well as optimizing density bonusing scenarios;

- ✓ Dedication of open space and trails;
- ✓ Amenity contribution to community (construction of cash, land, transfer); and
- ✓ Achieve a strong urban/rural boundary (be careful of uncontrolled growth).

Confirming a conceptual scenario for long-term growth is a primary component to an Official Community Plan, and the following policies are in place to guide its implementation.

GROWTH MANAGEMENT / LAND USE OBJECTIVES AND POLICIES

8.1 Growth Management

Objective:

8.1.1 To direct growth around existing amenities and services.

Policies:

a) Use development permit areas to designate and guide commercial development within the community towards two centres;
b) Create more residential opportunities in close proximity to the Barbeque Lands, Trail Network, Downtown Core and River parks (with recognition of floodplain levels);
c) Establish design principles (landmarks, pathways, nodes and edges) for each centre;

d)   Provide diverse housing options through infill, new development, redevelopment, and interconnectivity, while minimizing the impact of new development in established areas.

Objective:

8.1.2 To encourage the development of a complete community that enhances the long-term benefits of the community.

Policies:

a)   Promote development that creates an increase of pedestrian-based mobility, including connecting the community through infill and trails;
b)   Ensure developments and redevelopments provide amenities, trails and/or parkland that is complimentary to existing recreational infrastructure;
c)   Evaluate new development, redevelopment, interconnectivity with the aim to protect viewscapes (identified in Appendix A, Map 3 – Sensitive Ecosystem Areas);
d)   Support a safe pedestrian and cycling environment;
e)   Encourage green infrastructure and technology;
f)   Encourage a mixture of uses, typologies, architectural designs;
g)   Promote quality construction and high-energy efficiency and durability; and
h)   Ensure accessibility and safety is designed to allow 8 and 80 year-olds to be mobile within the community.

Objective:

8.1.3 To protect the natural environment, including aquatic ecosystems (lakes, rivers and streams), environmentally sensitive areas and rare species.

Policies:

a)   Use sensitive ecosystem inventory mapping to guide land use, layout and development patterns;
b)   Require integration of green space/open space/public space into all developments;
c)   Avoid disturbance in ecological sensitive areas and hazardous lands;
d)   Encourage community stakeholders to inventory local ecological assets;
e)   Encourage local stewardship practices with local ecological assets; and
f)   Establish an approximate value to the natural capital within Telkwa.

Objective:

8.1.4 To achieve a high-level of public engagement and awareness and understanding to community planning and the implementation of the community vision.

Policies:

a)   Encourage community and stakeholder collaboration;
b)   Require annual newsletters to community residents with updates on the progress of implementing the community vision; and
c)   Make fair, cost effective and consistent development decisions.

9.0 IMPLEMENTATION

The simple act of stating community goals and objectives never assures their realization. Rather, it is necessary to utilize a variety of methods to confirm that aspirations of the community are consciously being worked towards. In order to fulfill the vision expressed in Part 2 of this plan, the policies contained in the previous sections must be implemented. A program of implementation helps to facilitate the orderly development and control of land in the best interests of the community. The process of implementation includes many different elements, which reflect legislative authority, municipal procedures and council policies.

Land-Use Designations

Note: See Appendix A, Map 1 (Land Use Map) for detailed land use locations.

OCP Land-use Designation	Anticipated Zone & Permitted Uses
(RR) Rural Resource To recognize and support rural resource activities (farming, forestry, aggregate extraction, renewable energy production) within the plan area in order to preserve resource land in order to ensure present and future food production and sustainable management of resources. *Residential subdivision in an area designated Rural Resource may be permitted provided that it: - Involves land that is unsuitable for resource use; - Will have minimal impact on existing or potential use of adjacent parcels; - Has an adequate supply of domestic water and means of sewage disposal; and - Has been approved by the appropriate Provincial agency having authority if the Agricultural Land Reserve.	- Farming - Sustainable Resource Management (wood fibre, aggregates, renewable energy generation and distribution) - One residential unit per RR parcel
(RES) Residential To provide opportunities for a wide range of housing forms at various densities, and under various forms of tenure, to accommodate all income, age groups and households types.	- R1 (inc. secondary suites, garden suites) - R2 (duplex, triplex, 4plex) - R3 (multi-unit residential > 4 units, apartments, row-housing, condos) - R4 (small lot, strata lot) - Affordable housing - MH (manufactured home) - Home Occupation <35% of Principal Dwelling Unit

(CD) Comprehensive Development	CD -1 - Tyhee Road
Larger, undeveloped parcels in Telkwa offer unique advantages in terms of size and scale of development, in addition to incorporating innovative mixes of land uses. Developments proposed within Comprehensive Development (CD) designated areas shall be developed according to the corresponding zones and permitted uses found in the Telkwa Zoning Bylaw. The CD Land Use provides for flexibility and mix of land uses, housing types, densities, public open space, infrastructure and amenities.	- Single-detached residential - Duplex - Triplex/4plex - Mixed residential/commercial - Small-lot residential - Live/Work Studio - Resort Condominium - Hotel - Guest House - B&B - Affordable Housing - Recreational Facilities - School/learning centre - Park & trails - Public Utility - Home Occupation (limited to single-detached dwelling & duplex) - Community garden/greenhouse - Accessory buildings **CD -2 - Hubert Street** - Single-detached residential - Duplex - Small-lot residential - Home occupation - B&B - Guest House - Park - Affordable Housing - Community Garden - Accessory buildings **CD-3 Aldermere** - Interpretative Signage - Public Exhibit - Demonstration heritage village (temporary residential, commercial) - Educational facility - Park

(CD) Comprehensive Development Continued	**CD-4 - Highway #16** • Single-detached residential • Duplex • Triplex/4plex • Mixed residential/commercial • Small-lot residential • Live/Work Studio • Commercial Retail • Large Retail (base floor area: 750m2) • Guide and Tour Services • Home Occupation • Park • Trail • Parking • Accessory buildings **CD-5 Birch Street** • Single-detached residential • Duplex • Secondary Suite • Multi-unit residential • Small-lot residential • Modular Home Park • Home occupation • B&B • Park • Affordable Housing • Community Garden • Accessory buildings **CD-6 Chestnut** • Single-detached residential • Rural residential • Duplex • Multi-unit residential • Secondary suite • Home occupation • B&B • Park • Accessory buildings

(COM) Commercial To encourage the centralization of commercial services in order to provide business opportunities, core services, employment opportunities, and a pedestrian-friendly streetscape for residents and visitors of Telkwa.	• Retail, Office, Restaurant • Accessory Residential (residential units above first storey) • Flex-space (entrepreneurship, arts space, studio) • Gallery,
(SCOM) Service Commercial To provide for auto-mobile-based services that are accessible to major arterial roads (i.e. Highway #16)	• Fuel Service Station & Mechanic • Highway Commercial • Storage
P2 Institutional To provide for public or private community-based institutional uses, including schools, places of worship, gyms, arenas and other facilities for the purposes of learning, reflection, sports and recreation, and social activity.	• Community Centre • Places of Worship • Gallery & Museum • Farmer's Market • Fire/Police • School • Mountain Biking, zip-lining, Frisbee golf
(IND) Industrial To provide a suitable inventory of land for industrial and supportive uses in order to create a supply chain for business development, employment opportunities, innovation and entrepreneurship.	• LI- Light Industrial (industrial/residential, workshop, small-scale manufacturing and processing distribution, storage) • MI- Medium Industrial (manufacturing, processing) • HI- Heavy Industrial (heavy equipment, assembly, auto-wrecking, industrial fuel storage, hazardous materials)
(P1) Parks , Trail & Environmentally Protected Areas To provide a diversity of dedicated land areas throughout the community for the purposes of recreation and environmental conservation.	• Municipal Park • Municipal Trails • Regional Park • Provincial Park • Environmentally Protected Areas (Riparian buffers, land covenants*) * LGA s.219 allows for private restrictive covenants to protect areas of land in perpetuity.

Development Permit Areas

The purpose of a Development Permit Area (DPA) may be to:
   a) Protect development from hazardous conditions;
   b) Protect agricultural land;
   c) Protect the natural environment, its ecosystems and biological diversity;
   d) Revitalize an area in which a commercial use is permitted;
   e) Establish objectives to define the form and character of intensive residential development and/or to establish objectives for the form and character of commercial, industrial or multi-family residential development; and
   f) Establish objectives to promote energy conservation, water conservation and reduce greenhouse gas emissions.

Development Permit Areas can also promote energy and water conservation and reduce greenhouse gas emissions at the single family dwelling level. The scope of this legislation includes the following:

   a) Window glazing and orientation for solar energy gain;
   b) Southerly exposure for proposed buildings;
   c) Landscaping that requires less water and less dependence on irrigation (i.e. xeriscaping);
   d) Drainage by infiltration and increasing permeability;
   e) Use of natural vegetation to reduce cooling nodes;
   f) Siting of buildings;
   g) Energy efficiency;
   h) Form and exterior of buildings;
   i) Specific features in the development; and
   j) Machinery, equipment and systems that are external to buildings.

Bill 27 requires local governments to develop targets for GHG emission reductions and report on progress. Local governments may tailor DPA guidelines so that development will contribute to specific measurable targets for the community.

Telkwa's Development Permit Areas are shown in Appendix A, Map 4 and follow eligibility as per Section 919.1 of the Local Government Act. Owners/Authorized Agents are required to obtain a development permit prior to altering, developing, or subdividing lands subject to a development permit as specified in Section 920 of the Local Government Act.

> #1- Old Town Centre
> #2- Tyhee Gateway Centre

Where land is subject to more than one development permit area designation, a single development permit is required. The application will be subject to the requirements of all

applicable development permit areas, and any development permit issued will be in accordance of all such areas.

9.2.1 GENERAL POLICIES

Unless exempted by Section 9.2.3 all proposed development, redevelopment and subdivision are required to obtain a Development Permit prior to any construction, alteration or subdivision of land.

9.2.2 DEVELOPMENT PERMIT INFORMATION REQUIREMENTS

In consultation with the Village, applicants for a Development Permit may be required to submit appropriate reports certified by qualified professional indicating land use suitability for their proposal which should also include any mitigation recommendations from the qualified professional in relation to the proposed development. Although not an exhaustive list, professional reports may include the following:

a) Geotechnical report: for properties having any slopes greater than 30%;
b) Environmental report;
c) Wildlife Study;
d) Rainwater Management Plan;
e) Archaeological Impact Assessment;
f) Traffic Impact Assessment.

9.2.3 DEVELOPMENT PERMIT EXEMPTIONS

All proposed developments, redevelopments and subdivisions are subject to a Development Permit unless specifically exempted by this section.

A Development Permit will not be required provided that at least one of the following exemptions is met.

Exemptions to Development Permit:

a) The construction is for the purposes of a single family dwelling unit or duplex within a residential area;
b) Subdivisions creating four or fewer lots (none of which is sub dividable under the applicable zoning regulations and for this purpose a lot identified on a subdivision plan as a remainder is a lot created by the subdivision);
c) The value of the proposed construction is less than $50,000;
d) Planting or replanting of native trees, shrubs or ground cover for slope and soil stabilization, habitat improvement, erosion control and beautification;

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e) Structural alteration of legal or legal, non-conforming buildings and structures within the existing footprint;

f) Construction within a building that does not require exterior alterations;

g) Replacement of exterior finishes using the same or similar materials and colours;

h) Emergency procedures to prevent, control or reduce erosion or other immediate threats to life and property including:

   i. Emergency actions for flood protection and erosion protection;

   ii. Removal of hazard trees (as determined by a qualified professional);

   iii. Clearing of an obstruction from a bridge, culvert or drainage flow;

   iv. Repairs to bridges and safety fences in accordance with the *Water Act*; or

   v. The use of land is for outdoor recreational purposes and does not include buildings and structures other than fencing or nets.

Development Permit Area #1 – Old Town Centre

AREA

Development Permit Area #1 known as OLD TOWN CENTRE, as indicated on Appendix A, Map 4.

JUSTIFICATION

One of two commercial centres, the Old Town Centre, is currently the primary area for essential services (school, municipal office, post office, church) and in the past contained the majority of commercial services.   The local government objective is to ensure that the subject lands achieve 1) Design standards, which portrays a heritage core mixed with new residential developments that take in the scenic viewscapes of the river and mountains. 2) Pedestrian interconnectivity between the Tyhee Gateway Centre, Benchlands and the south side of the Bulkley River where the recreation lands, Woodland residential area and Cottonwood residential area, and industrial lands can be found; and 3) To achieve an area powered by district-energy system for existing and new developments.

DESIGNATION

Section 919.1(1) (d) of the Local Government Act – revitalization of an area in which commercial use is permitted;

Section 919.1(1) (f) of the Local Government Act – establishment of objectives for the form and character of commercial, industrial or multi-family residential development; and

Section 919.1 (j) establishment of objectives to promote the reduction of greenhouse gas emissions.

GUIDELINES

Development permits issued in this area shall be in accordance to the guidelines listed below for Form and Character and Interconnectivity and GHG Reduction.

FORM AND CHARACTER

General
✓ Buildings and the open space around them shall contribute to the image of a high quality, traditional main street (façade facing street frontage and/or riverside, front entry, covered entrance, front lighting on signage and architectural features, natural landscaping, durable hardscaping);
✓ Encourage the creation of residential/commercial developments with the residential on the second storey;
✓ Design of developments or re-developments should consider the design of adjacent buildings and open-space;
✓ Telkwa's accumulations of snow are to be considered in design and material selection. All pedestrian and vehicle access points must be protected from snow shed and ice accumulation;
✓ Variety, continuity and pedestrian interest should be expressed in the design of buildings, especially at the ground level. Massive structures and long expanses of straight walls must be avoided;
✓ Use changes in building material to relate building frontage to pedestrian scale;
✓ Use of medians to allow for temporary uses and activities;
✓ The design elements of the rear and sides of buildings must be considered;
✓ In general, historical building colours and muted tones that are drawn from the natural surroundings are appropriate;
✓ Building lighting shall be subdued and directed away from adjacent properties. Front-lighting is preferred over other forms of illumination;
✓ Signage must be consistent with building design and positioned not to obscure architectural details. Signs must not arbitrarily overlap window openings, columns or other architectural features;
✓ Mechanical equipment & waste containers shall be appropriately screened and buffered to reduce any negative visual and acoustical impacts;
✓ Above ground fuel storage tanks for service stations are not supported; however, approval of above ground tanks may be considered on a site-by-site basis provided that the location of the tanks is screened by buildings and landscaping and that adequate traffic circulation can be maintained.

MATERIALS

✓ Building materials must be durable and withstand the local climate;

✓ The use of high quality materials with a natural appearance is an important concept to creating harmony and character; and

✓ Most appropriate materials include wood, rock & stone, however similar materials can be presented at time of development permit application.

INTERCONNECTIVITY AND GHG REDUCTION

✓ Dedication of trail and public right-of-way space to create a riverside walking loop;

✓ Placement of bicycle lock-up facilities

✓ Dedication of public right of ways for access to riverside and connecting paths to subsequent areas of Telkwa

✓ Trail signage for pedestrians and non-motorized users

✓ Placement of benches and covered areas for pick-up areas (i.e. bus, car-pool, taxi)

✓ Designed for universal accessibility

✓ Snow removal and lighted areas

✓ Mixed-use commercial/residential development

Development Permit Area #2 – TYHEE GATEWAY CENTRE

AREA

Development Permit Area #2 known as Tyhee Gateway Centre, as indicated on Appendix A. Map 4.

JUSTIFICATION

As the primary junction for travelers heading to the Tyhee Provincial Park or for automobile-based travelers looking for services, the Tyhee Gateway Centre will require a coordinated approach towards the design of the buildings, traffic routing, signage and assignment of accessory uses in the area. The local government's objective is to ensure that the subject lands achieve 1) Design standards, which portrays a commercial service-centre reflecting Telkwa's outdoor adventure, and local natural features; 2) Interconnectivity between the Old Town Centre and the trails and pathways to Tyhee Provincial Park and the riverside trail; and 3) Cluster development respects the existing form and character of Telkwa.

DESIGNATION

Section 919.1(1) (d) of the Local Government Act – revitalization of an area in which commercial use is permitted;

Section 919.1(1) (f) of the Local Government Act – establishment of objectives for the form and character of commercial, industrial or multi-family residential development;

Section 919.1 (1)(g) of the Local Government Act - in relation to an area in a resort region, establishment of objectives for the form and character of development in the resort region; and

Section 919. (1)(j) of the Local Government Act - establishment of objectives to promote the reduction of greenhouse gas emissions.

GUIDELINES

Development permits issued in this area shall be in accordance to the guidelines listed below and in accordance with Ministry of Highway's policies and regulations.

FORM AND CHARACTER

GENERAL

✓ Buildings and the open space around them shall contribute to the identity of a sport and wilderness experience;
✓ All tourist-commercial developments are to achieve a LEED standard of development;
✓ Developments are encouraged to utilize mixed-use tourist-commercial uses with accommodation opportunities;
✓ Drive-thru commercial activity is prohibited;
✓ Vehicular access and egress to the property shall be minimized (i.e. designated entrances, shared-access agreements);
✓ Sufficient turning radius and parking capability for coach buses;
✓ Shared parking areas, with natural landscaping;
✓ Consistent application of signage form and character:
✓ Similar heights
✓ Shared directory signs
✓ Front-lit signs
✓ Telkwa's accumulations of snow are to be considered in design and material selection. All pedestrian and vehicle access points must be protected from snow shed and ice accumulation;
✓ The design elements of the rear and sides of buildings must be considered;
✓ Signage must be consistent with building design and positioned not to obscure architectural details. Signs must not arbitrarily overlap window openings, columns or other architectural features;
✓ Mechanical equipment and waste containers shall be appropriately screened and buffered to reduce any negative visual and acoustical impacts; and
✓ Above ground fuel storage tanks for service stations are not supported; however, approval of above ground tanks may be considered on a site-by-site basis provided that the location

of the tanks is screened by buildings and landscaping and that adequate traffic circulation can be maintained.

MATERIALS

- ✓ Use of local materials (wood, rock, stone) are to be used in the exterior and interior of buildings;
- ✓ Building materials must be durable and withstand the local climate;
- ✓ The use of high quality materials with a natural appearance is an important concept to creating harmony and character in the Bulkley Valley; and
- ✓ Most appropriate materials include wood, rock & stone, however similar materials can be presented at time of development permit application.

INTERCONNECTIVITY AND GHG REDUCTION

- ✓ Interconnectivity of properties in the Gateway area with Tourist Information Centre;
- ✓ Placement of public right-of-way dedication for paths, exits, entrances to relate to point of pedestrian controlled highway crossing and/or underpass;
- ✓ Sufficient signage and location of multi-use paths to link visitors and residents with Tyhee Gateway Centre and Old Town Centre areas;
- ✓ Collaborative effort of creating a transportation centre (bus pick-up/drop-off, shuttle area, rental cars, long-term parking for campers,
- ✓ Placement of bicycle lock-up facilities;
- ✓ Trail signage for pedestrians & non-motorized users;
- ✓ Placement of benches and covered areas for pick-up areas (i.e. bus, car-pool, taxi);
- ✓ Provide snow removal & electricity (photo-voltaic preferred) for lighted areas;
- ✓ Mixed-use commercial/residential development; and
- ✓ Shared electrical outlets for the purpose of electric car re-charging.

AMENDMENT PROCEDURES

Bylaw # 613, 2011 Telkwa Official Community Plan sets out an amendment procedure that allows OCP amendment applications to be received and processed as follows below:

Why would you need to amend the Plan?

OCP amendments are usually triggered by site-specific rezoning proposals that are inconsistent with the OCP. Other changes to the OCP may be proposed by Village staff to keep the Plan up-to-date and to meet the needs of a changing community.

Who is TAPC?

The Telkwa Advisory Planning Committee (TAPC) provides advice to Council on amendments to the OCP. TAPC is a committee, which represents broad community interests. Their mandate is to review and advise Council on OCP amendments, within the context of the existing OCP and community input. TPAC has a membership of community TAPC. Council appoints members to TPAC for a two-year term and considers their recommendations when making amendment decisions. Appointments overlap to provide continuity on the committee.

Why is TAPC important?

Consideration of OCP amendment applications by TPAC will:

- Maintain a broad community context for OCP land use decisions by separating OCP amendment decisions from rezoning applications. Site specific rezoning considerations often obscure the broader question of what is good for the community as a whole.
- Provide consistency in processing OCP amendments. This is important to ensure all applications are considered equally and fully, in a timely manner.
- Build a sense of certainty for future land use decisions. Council, the development community and the public can better assess the probable future outcome of future land use decisions through a strong and community based OCP.

Are there public participation opportunities?

There are two opportunities for the applicant and the general public to comment on a proposed amendment to the OCP:

1. A presentation or written submission to TPAC at their open meetings, during the Analysis and Review phase of the Plan amendment process; and
2. A presentation or written submission to Council at the Public Hearing during the Bylaw phase of the Plan amendment process.

When can rezoning applications be submitted?

The earliest any rezoning applications, which are inconsistent with the OCP, can be submitted is after the OCP Public Hearing has been concluded.

HOW TO MAKE AN OCP AMENDMENT APPLICATION

The following steps will assist you through the OCP Amendment process:

1. Pre-Application Meeting
   - Application requirements and process reviewed with Village of Telkwa staff.

2. Application Submission
   - All applications to amend the OCP must be submitted to initiate the process.
   - Completed application form with all supporting documentation.
   - Community Plan amendment application fee.

3. Review Period
   - Referrals made to appropriate internal and external stakeholders.
   - Preparation of staff report to Telkwa Planning Advisory Committee.
   - Letter sent to applicant, which includes the staff report to TPAC and TPAC meeting schedule.
   - Telkwa Planning Advisory Committee (TPAC)
   - Application presented to TPAC, by both the applicant and staff at an open meeting of TPAC, for their review and recommendation. TPAC may hear public presentations about your application at this meeting.
   - On-site signage is required seven (7) days (not including Sundays and holidays) before the open meeting of TPAC. Erecting the sign is the responsibility of the applicant.
   - TPAC will make its recommendations to Village Council.

4. OCP Amendment Bylaw
   - Report from staff including the recommendation of TPAC goes to Council for consideration.
   - Council may give first and second readings to the OCP Amendment Bylaw at this time.

5. Public Hearing
   - Hearing fee due once the Public Hearing has been called by Council.
   - Presentation by applicant can be made to Council at the Hearing. Please note that a presentation is not a requirement; however, it is prudent to be available to answer any questions from Council.
   - Please note that after the Public Hearing, Council is not permitted to receive any additional information regarding the application

6. Adoption of the Bylaw
    - Council makes its final decision regarding the proposed OCP amendment. If successful, Council will give the OCP Bylaw third reading and adoption.

What Will It Cost To Make An OCP Amendment Application?

The cost of assembling supporting documentation for the application.

Two step fee:

1. $500.00 Official Community Plan amendment application fee.
2. $300.00 Public Hearing fee, plus the cost of any presentation materials needed at the Hearing if applicable.
3. The cost of on-site signage.

Other development applications you may need:

Rezoning
Development Permit
Subdivision
Building Permit – For further information on these processes, please contact the Village of Telkwa.

REQUIRED DOCUMENTS

The following documents must be completed and accompany an application to amend the OCP:

OCP Amendment application form signed by all of the owners of the subject property. If a consultant is acting on the owner(s) behalf, an Agency Agreement form, which authorizes the consultant to act on the owner(s) behalf, is required to formally recognize the consultant as an agent of the owner.

Application fee receipt ($500.00) - this fee covers the cost of processing the application.

Title for the subject property - the Title can be no older than two (2) weeks at the time your application is submitted to ensure up-to-date information about ownership.

All relevant Covenants associated with the property - this will identify any restrictions for development that may already be registered on title for the property.

A location plan indicating where the property lies in relation to the surrounding neighbourhood - this information is necessary to provide a clear understanding of where your proposed land use change is to occur.

A statement of intent which indicates the current OCP designation and the proposed OCP designation - the statement should also provide a brief rationale for the request in relation to five (5) goals of Telkwa's OCP.

OCP AMENDMENT ASSESSMENT CRITERIA

Applications will be assessed on the ability of the amendment to maintain or achieve one or more of the goals of Telkwa OCP. Applications have the greatest opportunity for success if the proposal is consistent with the following goals of the Plan:

Goal 1 - Build Complete Neighbourhoods - with a mix of land uses and densities in identified urban centres in a way that reflects local character, and enhances liveability and employment opportunities.

Goal 2 - Protect the Environment - by identifying and protecting natural diversity and ecosystems in the course of land use and development.

Goal 3 - Manage Growth - by focusing future development to any of the three urban centres and the comprehensive development areas that surround these three nodes and thus preventing the spread of residential and commercial development into the rural land areas.

Goal 4 - Improve Mobility and Servicing - by creating greater accessibility and more opportunity for safe and convenient movement around the town, and by making effective use of existing road, sewer, water, storm and other municipal services, and to leverage future development to bring a higher level of services to the existing community.

Goal 5 - Ongoing Planning and Community Involvement - through the initiation of public involvement in the maintenance and achievement of OCP goals, and involvement in the preparation of the design and details related to the proposed amendment.

Other Documents

Zoning Bylaw

This bylaw controls the land-use designations within the Village of Telkwa. Amendments to the zoning bylaw will be prepared to implement the land use policies updated and contained in this Plan.

Fiscal Program

Implementation of many of the policies contained in this Plan depends on the expenditure of Village funds. The Five-year Financial Plan, Annual Report, and Reserve Funds, in particular, must reflect the policies of the Official Community Plan with regard to the physical infrastructure.

Appendix A

Village of Telkwa Mapping

Map 1 – Village of Telkwa Land Use Designations

Map 2 – Village of Telkwa Transportation & Trails

Village of Telkwa Official Community Plan

Map 3 – Village of Telkwa Sensitive Ecosystem Areas

Map 4 – Village of Telkwa Development Permit Area

Village of Telkwa Official Community Plan

Map 5 – Village of Telkwa Utility Growth Potential

Village of Telkwa Official Community Plan

Appendix B – Village of Telkwa Riparian Area Regulations

BYLAW NO. 613, 2011

VILLAGE OF TELKWA
OFFICIAL COMMUNITY PLAN

APPENDIX "B"
RIPARIAN AREAS REGULATION

Table of Contents

INTRODUCTION

Riparian zones are areas of land and vegetation adjacent to creeks, rivers or other bodies of water that provide a range of important functions, including fish and wildlife habitat, erosion, flood protection, sedimentation control and stream bank stability. Riparian areas need to remain in a largely undisturbed state to provide these functions.

The Riparian Areas Regulation (RAR) was enacted in accordance with the Fish Protection Act of British Columbia in July 2004 and implemented on March 31, 2005. Policies within the Village of Telkwa Official Community Plan identify the importance of riparian and wetland areas within the Village of Telkwa. The purpose of the Regulation is to protect the features, functions and conditions that are vital in the natural maintenance of stream health and productivity. These vital features, functions and conditions are numerous and varied and include such things as:

a) Sources of large organic debris, such as fallen trees and tree roots;
b) Areas for stream channel migration;
c) Vegetative cover to help moderate water temperature;
d) Provision of food, nutrients and organic matter to the stream;
e) Stream bank stabilization; and
f) Buffers for streams from excessive silt and surface runoff pollution.

The RAR model uses Qualified Environmental Professionals (QEPs), hired by land developers, to:

a) Assess habitat and the potential impacts to the habitat;
b) Develop mitigation measures; and
c) Avoid impacts from development to fish and fish habitat, particularly riparian habitat.

The cost of this assessment is the responsibility of the land developer, allowing governments to focus on monitoring and enforcement within their respective jurisdictions. By conscientiously following the assessment procedure set out in the Regulation, the QEP and the land developer will have applied due diligence in avoiding a harmful alteration, disruption or destruction (HADD) of riparian fish habitat.

The assessment management and methods are key components of the regulatory regime for riparian protection that is clear and measurable, but does not rely exclusively on default setbacks. The assessment is based on the best available science with respect to riparian habitats.

1.0 MANAGEMENT AND METHODS

The Riparian Area Regulation (RAR) assessment methods are to be followed with additional consideration of cumulative impacts of development along the entire length of the stream or

wetland. Trails can be located inside or outside the protective buffer zone; sections within or through sensitive habitats need to be constructed with high standards and are acceptable where:

a) The ground is stable or will not be detrimentally impacted by the constructed trail;
b) The sensitive habitat will not be impacted by the presence of the trail (some bird nest sites and sensitive ecosystems may be adversely affected);
c) The habitat features are identified by interpretative signs including statements about their sensitivity to uncontrolled access; and
d) Access is limited to the designated trail, through fencing, planting and designated people areas.

With effective planning and design, the Village of Telkwa can utilize some sensitive habitats as features in greenways, linear walkways and park trail networks and as green space amenities.

1.1 Where Properties are Adjacent to a Riparian Feature:

a) No building shall be constructed, nor mobile home located within 15 horizontal meters of the natural boundary of the riparian feature; this may be reduced to 7.5 horizontal meters where the frontage is on bedrock or adequately protected from erosion or through works designed by a suitably qualified professional engineer and a member in good standing of the Association of Professional Engineers and Geoscientists of BC; and

b) Areas used for habitation, business, or storage of goods damageable by floodwaters shall be established within any building at an elevation such that the underside of the floor system thereof is no lower than 2 meters above the 100 year floodplain natural boundary of the riparian feature.

1.2 Change In and About a Stream:

Culverts, bridges, bank protection works, pipeline crossings and other changes in and about a stream (as defined in the *Water Act*) may negatively impact on the legal rights of downstream water licensees, water channel stability, flood levels and on the fish resource values. These changes in and about a stream are therefore regulated under Section 9 of the *Water Act* and Part 7 of the *Water Act* Regulations to minimize these negative impacts.

1.3 Stormwater Management

During the past two decades, a significant body of research has been completed regarding the impacts of urbanization on streams, lakes, oceans and wetlands. The findings clearly demonstrate that the most important impacts of urbanization on streams in order of importance are:

a) Changes in hydrology;
b) Changes in riparian corridor;

c) Changes in fish habitat within the stream; and
d) Water quality (see definition)

Stormwater is the component of runoff that is generated by human activities. Stormwater is created when land development alters the natural hydrological cycle or water balance. To mitigate the cumulative impacts of stormwater resulting from changes to the natural water balance, the Province of BC has developed a guidebook to assist local governments, engineers and planners in clearly understanding the broader issues and strategies currently available to correct stormwater-related problems.

2.0 REPORTS REQUIRED

2.1 Assessment Report

An Assessment Report is required for the Village of Telkwa before development is approved to proceed. This must be completed by a Qualified Environmental Professional (QEP) at the developer's expense. The Assessment Report must provide the following components:

a) Evidence of the QEP"s qualifications;
b) Assurance that proper assessment methods will be followed;
c) Information regarding the following components: streams, fish presence, fish habitat, animal presence, riparian vegetation and other ecosystem conditions that support fish life processes, removal of hazard trees, windthrow, drip zone and rooting strength, encroachment, sediment and erosion control measures, floodplain concerns and on-site stormwater management;
d) Information regarding potential impacts of the proposed development, mitigation options and design alternatives;
e) Evidence that the development will not result in Harmful Alteration, Disruption, or Destruction (HADD) of riparian areas;
f) Assurance that the slope stability will not be jeopardized if the area has a slope of 30% or more; and
g) Identify measures that will be required to maintain the integrity of the riparian area.

2.2 Proposal for Management of Sediment

A proposal for the management of sediment during construction is required and needs to show how the stream, wetland, or any associated drainages will be protected from sediment, erosion, areas of exposed soil and runoff impacts that may result from construction or land clearing activities.

2.3 Drainage Plan

A drainage plan must be completed that includes recommendations for implementation with the proposed development that address the following factors:

a) water quality;
b) water quantity;
c) erosion control;
d) impact on fish and wildlife habitat; and
e) physical riparian functions.

The drainage plan should aim to minimize to the fullest extent the impact the development may have on the riparian area.

2.4 Viewscape Plan

A viewscape is all of the land and water seen from a point or along a series of points (e.g., a road or trail); it is also a point being viewed (e.g., a lookout, building, or sign). Viewscape management includes describing, planning, and designing the visual aspects of all components of the area, then working to achieve specific related objectives. Existing trees and native vegetation within the riparian assessment area are to be retained as much as possible; therefore, a Landscape Architect will complete a viewscape plan prior to any clearing or land alteration.

2.5 Re-Vegetation Plan

A QEP, in conjunction with a landscape architect, is required to provide a re-vegetation plan *if* the proposed area to be developed was previously cleared of native vegetation, or is cleared during the process of development. Conditions and requirements respecting implementation of the vegetation management may be specified in a development permit. The chosen vegetation should be native to the Village of Telkwa, and be selected for erosion control and/or fish habitat and animal habitat values as needed. Vegetation species used in replanting, restoration and enhancement shall be selected to suit the soil, light, and groundwater conditions of the site.

3.0 EXEMPTIONS

a) Emergency procedures to prevent, control, or reduce immediate threats to life or property, including:

    i. Emergency actions for flood and erosion protection, and clearing of obstructions from watercourses;

ii.   Emergency works to protect, repair, or replace public utilities;

iii.   Clearing of an obstruction from a bridge, culvert, or drainage flow;

iv.   Repairs to bridges or safety fences; and

v.   Removal of trees when there is an imminent danger of the tree. All actions used to resolve emergency situations must be reported to the Village of Telkwa Public Works Department and, if appropriate, the federal and provincial authorities immediately. Any emergency works are to be undertaken in accordance with the Provincial *Water* and *Wildlife Acts* and the Federal *Fisheries Act.*

b)   Removal of individual invasive species identified by a QEP, by hand or in a manner that does not unduly disturb surrounding native vegetation.

c)   The planting of native species trees, shrubs, or groundcovers for the purpose of enhancing the habitat values and/or soil stability within the development permit area provided the planting is carried out in accordance with the guidelines provided in the following documents: Stream Stewardship, 1993; the Environmental Objectives, Best Management Practices and Requirements for Land Developments March 2001, published by BC Ministry of Environment, Lands and Parks, or any subsequent editions.

d)   Works approved by the Village of Telkwa, Fisheries and Oceans Canada (FOC) and/or MOE with respect to installation of public utilities, sewer and water lines, stream enhancement, and fish and wildlife habitat restoration.

e)   Renovations to existing buildings and structures in or in close proximity to riparian areas provided the footprint of the building is not expanded and none of the list of activities under the definition of *Development* occur.

3.1 Types of development that the RAR does not apply to.

a)   Existing permanent structures and roads
b)   Mining activities, hydroelectric facilities and forestry (logging) activities
c)   Parks and parkland
d)   Existing Developing Permits
e)   Agriculture

4.0 MONITORING AND ENFORCEMENT

Monitoring of the proposed development site should be a collaborative effort between the following 5 participants:

a)   Local Government;

b) QEP employed by the developer;
c) Landowners;
d) Non-Government Organizations (NGO), and
e) General public.

The potential role of the general public would be to inform the QEP or the Village of Telkwa of violations. Enforcement of the development activities, such as land clearing and excavation, shall be done through a QEP as well as the Local Government. As part of their due diligence, QEP's are expected to document any compliance problems with respect to riparian areas and water quality so that the problems can be addressed promptly, with copies of all reports forwarded to the municipality. This documentation can include verbal advice and warnings of non-compliance to the land development proponent.

Following up on compliance problems will ensure they are addressed within a reasonable time period and, if they are not addressed, ensure these facts are also reported to the municipality. The Village of Telkwa may withhold occupancy permits or subdivision approvals if there is any report of non-compliance.

The importance of clearly identifying sensitive environmental resources as well as management and protection mechanisms for sensitive habitats and ecosystems in a plan prior to the design layout stage cannot be overstated.

5.0 ADDITIONAL TASKS FOR QUALIFIED ENVIRONMENTAL PROFESSIONALS (QEP)

a) All QEP"s will be employed and compensated by the developer.

b) The payment for the QEP is an agreement negotiated strictly between the developer and the QEP and does not involve the Village of Telkwa.

c) A QEP will determine appropriate setback distances for buildings, structures and uses, in relation to riparian areas.

d) Setbacks specified in the Zoning Bylaw for buildings, structures and uses, may be varied in accordance with the recommendations of a QEP to minimize encroachment into the riparian assessment area.

e) Applicants will be required to confirm, through survey by a certified BC Land Surveyor, the top of the stream bank in relation to the property lines and existing and proposed development.

f) There will be a minimum setback of 5 meters on all streams in the development proposal area regardless of whether they are fish bearing or not, as they are corridors for animals.

g) The QEP will use their own discretion to determine further setbacks or default to the "riparian assessment area" distances.

h) A QEP will determine appropriate timing, usage, and methods of construction that minimize the impacts on the riparian assessment area.

i) Permanent or temporary fencing measures may be required to be installed at the applicant's expense along the boundaries of the riparian area prior to any development activities in order to ensure that no encroachment occurs into the riparian assessment area at the time of construction.

j) A QEP will determine whether their presence is required during any *riparian land alteration* at the development site to ensure that HADD does not occur.

k) As part of their enforcement, the QEP will only be responsible for areas they have assessed.

l) A QEP will determine whether their presence is required during any riparian land alteration at the development site to ensure that Harmful Alteration, Disruption or Destruction (HADD) does not occur.

m) More than one QEP may be involved with the development depending on their strengths or expertise.

n) A QEP shall indicate in writing that all riparian area regulations have been met before the Village of Telkwa will issue occupancy permits.

6.0 ACRONYMS

DFO – Department of Fisheries and Oceans

FOC – Fisheries and Oceans Canada

HADD – Harmful Alteration, Disruption, or Destruction

MOE – Ministry of Environment, Lands and Parks

MOE – Ministry of Environment

NGO – Non-Government Organizations

OCP – Official Community Plan

QEP – Qualified Environmental Professional

RAR – Riparian Area Regulation

SPEA – Streamside Protection and Enhancement Areas

SPR – Streamside Protection Regulation

7.0 DEFINITIONS

"Animals" Means a mammal, reptile, amphibian or bird

"Assessment Report" A report prepared in accordance with the assessment methods to assess the potential impact of a proposed development in a riparian assessment area and which is certified for the purposes of this regulation by a qualified environmental professional.

"Cumulative Impacts" Those impacts that result from the incremental impact of our actions added to other past, present and reasonably foreseeable actions in the future.

"Development" Any of the following associated with or resulting from the local government regulation or approval of residential, commercial or industrial activities or ancillary activities to the extent that they are subject to local government powers under Part 26 of the *Local Government Act:*

    a) removal, alteration, disruption or destruction of vegetation;
    b) disturbance of soils;
    c) construction or erection of buildings and structures;
    d) creation of non-structural impervious or semi-impervious surfaces;
    e) flood protection works;
    f) construction of roads, trails, dock, wharves and bridges;
    g) provision and maintenance of sewer and water services;
    h) development of drainage systems;
    i) development of utility corridors;

j)   subdivision as defined in section 872 of the *Local Government Act*;

"Development Proposal" Any development that is proposed in a riparian assessment area that is within or partly within the boundaries of an existing development permit area.

"Fish" All life stages of:

a)   salmonids
b)   game fish, and
c)   regionally significant fish

"High Water Mark" For inland lakes, wetlands, those parts of the water body bed and banks that are frequently flooded by water so as to leave a mark on the land and where the natural vegetation changes from predominately aquatic vegetation to terrestrial vegetation (excepting water tolerant species).

"Invertebrates" Any species without a spinal column.

"Marine High Water Mark" For the ocean, the highest point that the ocean attains, i.e., the average level of high tide.

"Natural Boundary" Means the visible high water mark of a lake, watercourse, or other body of water caused by the usual action of the water in the ordinary years.

"Natural Features, Functions and Conditions" Includes but are not limited to the following:

a)   large organic debris that falls into the stream of streamside area, including logs, snags and root wads;
b)   areas for channel migration, including active floodplains;
c)   side channels, intermittent streams, seasonally wetted contiguous areas and floodplains;
d)   the multi-canopied forest and ground cover adjacent to streams that:

   i.   moderates water temperatures,
   ii. provides a source of food, nutrients and organic matter to streams,
   iii. established root matrices that stabilize soils and stream banks, thereby minimizing erosion, and
   iv. buffers streams from sedimentation and pollution in surface runoff;

e)   a natural source of stream bed substrates;
f)   permeable surfaces that permit infiltration to moderate water volume, timing and velocity and maintain sustained water flows in streams, especially during low flow periods.

"Permanent Structure" Any building or structure that was lawfully constructed, placed or erected on a secure and long lasting foundation on land in accordance with any local government bylaw or approval condition in effect at the time of construction, placement or erection.

"Qualified Environmental Professional" An applied scientist or technologist, acting alone or together with another qualified environmental professional, if:

a) the individual is registered and in good standing in British Columbia with an appropriate professional organization constituted under an Act, acting under that association's code of ethics and subject to disciplinary action by that association,
b) the individual's area of expertise is recognized in the assessment methods as one that is acceptable for the purpose of providing all or part of an assessment report in respect of that development proposal, and
c) the individual is acting within that individual's area of expertise.

"Ravine" A narrow, steep sided valley that is commonly eroded by running water and has a slope grade greater than 3:1.

"Riparian Area"
Areas adjacent to, streams, lakes, oceans and wetlands. These areas support a unique mixture of vegetation and habitat. Riparian areas are involved in the following actions:

a) filter contaminants from surface runoff and prevent erosion
b) sedimentation control
c) shade surface waters and maintain cool water temperatures
d) flood protection
e) provide fish and animal habitat and corridors
f) an important food source for fish, invertebrates and animals.

"Stream" Includes any of the following that provides fish habitat or an animal corridor:

a) a watercourse, whether it usually contains water or not;
b) a pond, lake, river, creek or brook;
c) a spring or wetland that is connected by surface flow to something referred to in the above point (a) or (b).

"Streamside Protection and Enhancement Area (SPEA)" An area that is:

a) adjacent to a stream that links aquatic to terrestrial ecosystems and includes both existing and potential riparian vegetation and existing and potential adjacent upland vegetation that exerts an influence on the stream, and

b) the size of which is determined according to this regulation on the basis of an assessment report provided by a qualified environmental professional in respect of a development proposal.

"Water Quality" A term used to describe the biological, chemical and physical characteristics of water and its general composition. These attributes affect water's ability to sustain life and its suitability for human consumption.

"Wetland" The land that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal conditions does support, vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, fens, estuaries and similar areas that are not part of the active floodplain of a stream.

Appendix C – Glossary of Terms

Adaptation	The ability of a system (e.g. ecosystem, social systems) to adapt to climate change or other environmental disturbances. This may mean moderating potential damages, taking advantage of opportunities, or coping with the consequences.
Affordable Housing	Housing affordability is a function of housing cost and household income. Affordable housing is defined as housing which has a market price or rent that does not exceed 30% of income households which have income that is 80% or less than the median household income for the community. Affordable housing includes a variety of tenure models including ownership, rental, co-housing, cooperative and rental.
Agri-tourism	The act of visiting a working farm or any agricultural, horticultural or agri-business operation for the purpose of enjoyment, education or active involvement in the activities of the farm or operation.
Alternative Design Standards (ADS)	ADS are customized standards that improve the quality of design and efficiency in land use. Both the public and private sectors benefit from this smarter approach to development. They explore land development standards that are less expensive, less wasteful, and more environmentally and culturally sensitive.
Amenity	Means an item of benefit to the community that is determined through the development approvals process, and may include parkland, infrastructure, special housing, parking areas, streetscape improvements, community facilities and cash in lieu.
Amenity Migration	The movement of people from cities to rural areas for non-economic reasons.
Bear Smart Community Program	The Bear Smart Community program has been designed by the Ministry of Environment in partnership with the British Columbia Conservation Foundation and the Union of British Columbia Municipalities. It is a voluntary, preventative conservation measure that encourages communities, businesses and individuals to work together. The goal is to address the root causes of bear/human conflicts, thereby reducing the risks to human safety and private property, as well as the number of bears that have to be destroyed each year.
Bio-energy	Bioenergy is a type of renewable energy derived from biomass.

	Biomass is material produced by living organisms. It often refers to plant material produced through photosynthesis. However, some biomass can also be derived from animals and microorganisms.
Brownfield	Means lands that are abandoned, idled, or under used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contaminations. In municipal planning, brownfield land, or simply a brownfield, is land previously used for industrial purposes, or certain commercial uses, and that may be contaminated by low concentrations of hazardous waste or pollution and has the potential to be reused once it is cleaned up.
Buffer	Means an area typically within a lot, adjacent to and parallel with a property line, consisting of either existing vegetation or created by use of planted trees, shrubs, berms and fencing, and designed to obscure views from adjacent lots or public roads by at least 50% of the see through visibility.
Building Code of BC	Provincial legislation containing standards to which buildings must comply with health and safety requirements
Climate Change	Changes in long-term trends in the average climate, such as changes in average temperatures. According to the United Nations Framework Convention on Climate Change (UNFCCC), climate change is a change in climate that is attributable directly or indirectly to human activity that alters atmospheric composition.
Comprehensive Development (CD)	Means provisions for a mix of land uses within a specific area permitted through and implementing comprehensive development "CD" zoning category in the zoning bylaw.
Cradle to Cradle	A holistic economic, industrial and social framework that seeks to create systems that are not just efficient but essentially waste free
Density	Means a measure of the total number of dwelling units or total floor area on a parcel of land. Expressed as units per metres and/or floor area ratio (FAR).
Density Bonus	Means an increase in the allowable number of dwelling units or floor area on a parcel of land in exchange for an amenity provided by the developer for the community. Typically implemented through density bonusing provisions in the zoning bylaw.
Development	Means (a) removal, alteration, etc. of vegetation; (b) disturbance of soils; (c) construction of buildings and structures; (d) creation of non-structural impervious or semi-impervious surfaces; (e) flood

	protection works; (f) construction of roads, trails, docks, wharves, and bridges; (g) provision and maintenance of sewer and water services; (h) development of drainage systems; (i) development of utility corridors; (j) subdivision as defined in section 872 of the Local Government Act.
Development Permit Areas (DPA)	Means an area in which development and/or land alteration must follow specific guidelines and regulations as stated in a Development Permit.
Development Cost Charges (DCC's)	): Means monies that municipalities and regional districts collect from land developers to offset that portion of the costs related to these services that are incurred as a direct result of this new development. The demand created does not always relate to works that are located adjacent to the property being developed. For example, new development may require a local government to increase the size of its water storage reservoir. Developers pay DCC's instead of the existing taxpayers who are not creating the demand and are not benefiting from m the new infrastructure.
Eco-industrial Park	An eco-industrial park (EIP) is a type of industrial park in which businesses cooperate with each other and with the local community in an attempt to reduce waste, efficiently share resources (such as information, materials, water, energy, infrastructure, and natural resources), and produce sustainable development, with the intention of increasing economic gains and improving environmental quality. EIP's incorporate residential uses as well.
Ecosystem:	Means the basic functional unit in ecology, the interacting system of a biological community and its non-living environmental surrounds. These are inseparable and act upon each other.
Environmentally Sensitive Areas (ESA's)	Means those areas identified by a community and contained with Development Permit Area ESA's contain significant natural environmental features and their associated lands that require a level of protection to ensure their preservation. Natural environmental features may include land or land and water that contain fish or wildlife habitat, watercourses, estuaries, riparian areas, woodland vegetation, rock outcrops and lands with steep slopes.
EnerGuide	An EnerGuide rating shows a standard measure of your home's energy performance. It shows you (and future buyers) exactly how energy efficient your home is. The rating is calculated based on standard operation assumptions so that you can compare the energy performance of one house against another. The home's energy

	efficiency level is rated on a scale of 0 to 100. A rating of 0 represents a home with major air leakage, no insulation and extremely high energy consumption.
Environmental Impact Study (EIS)	A study undertaken by a registered professional biologist to evaluate the impacts of a proposed development on the natural environment including the following subject areas: a. Physical Environment including soil erosion, unstable slopes, streams, flooding, ground water, air quality, noise, contamination of land or water, and aesthetics; b. Biological Resources including birds, mammals, food chain effects, vegetation, biological diversity, loss or reduction of habitat, rare or endangered species, and rare or representative ecosystems.
Equilibrium Housing	Means the Canada Mortgage and Housing Corporation's (CMHC) net zero energy healthy housing initiative that has been officially branded Equilibrium Housing. It reflects the objective of balancing Canada's housing requirements with the need to preserve and protect the natural environment.
Flexi-zone	Means that permitted uses and other regulations may be modified depending upon if other conditions of the zone can be met. E.g. all forms of residential housing may be allowed in a zone however neighbourhood suitability, parking, open space, affordability, proximity to transit connections, etc. would all need to be met to be able to attain the higher density multiple-family use that is permitted in that zone.
Floor Area Ratio (FAR)	Means the ratio between the gross floor area of a structure and the gross area of the lot on which it is situated. FAR = Gross Floor Area.
Food Security	Access by all people at all times to enough food for an active, healthy life. Food security includes at a minimum: ready availability of nutritionally adequate and safe foods; and, an assured ability to acquire acceptable foods in socially acceptable ways.
Full Cut Off Lighting	Lighting that does not allow light to be emitted above the fixture and the fixture reduces glare by limiting the light output to less than 10% at and below 10 degrees below the horizontal.
Gray Water	Wastewater from household baths and washing machines that is recycled especially for use in gardening or for flushing toilets.
Green Building	Means the practice of increasing the efficiency of buildings and their use of energy, water and materials, and reducing building impacts

	on human health and the environment, through better siting, design, construction, operation, maintenance and removal - the complete building life cycle.
Green Infrastructure	The ecological processes, both natural and engineered, that act as the natural infrastructure. This includes swales, ditches, creeks, wetlands, parks, open space, vegetation, green roofs, gardens, working lands, aquifers and watersheds that supply drinking water.
Greenhouse Gas (GHG)	Components of the atmosphere that contribute to the "greenhouse effect." Some greenhouse gases occur naturally, while others come from activities such as the burning of fossil fuel and coal. Greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxide, and ozone.
Greenways	Means a system of continuous multi-modal trail corridors that link existing parks, forest lands, environmentally sensitive lands, engineered wetlands and other green spaces, including recreational and or transportation trails, throughout the whole a community.
Growth Management	A general term used regarding regulation of land use and development that seeks to focus, guide of contain urban development.
Habitat	Means the place where population (human, animal, plant or microorganism) lives and its surroundings, both living and non-living.
Hardscaping	The part of a building's grounds consisting of structures, such as patios, retaining walls, and walkways, made with hard materials.
Heritage	Means the set of all things, places and ideas inherited from the past which are of special significance to the collective life of a community, including both natural and human-built elements.
Heritage Site	Land, whether designated or not, including land covered by water that has a heritage value to British Columbia, a community or an aboriginal people.
Infill	As far as land use planning in BC is concerned, this term means to add new residential units to an existing neighbourhood. This may or may not include population increase as people per household declines. This can include a house, an apartment unit, a condominium or any other form of housing.
Infrastructure Services	The physical service elements without which a municipality cannot safely and efficiently function: roads, sidewalks, sanitary and storm sewer systems, water systems, etc.
Industrial Development	Means any land development activity in the community, including but not limited to, non-offensive types of industry, processing and manufacturing activities, but not including development activity intended solely for residential, retail and or office use. Industrial

	development also includes any addition, remodeling, relocation or construction requiring an amendment to an approved Industrial Comprehensive Development Zone
Institutional	Means an area specifically designated to encourage and contain new public and private Institutional development within the District. Typical of such development might be health care services complementary to those already in existence such as extended care and assisted living facilities. Institutional also refers to Public Utility lands.
Integrated Resource Recovery (IRR) System	IRR is an approach and a set of tools for planning and managing community infrastructure to maximize the recovery of value from waste resources.
Inventory (re. Climate Change)	A tool developed to better understand and predict the impact of GHG emissions on climate change. A climate change inventory may be used as a tool to develop atmospheric models, develop mitigation strategies, establish compliance records with allowable emission rates, and track the effectiveness of policies related to GHG emissions.
Landscaping	Means landscaping that provides sufficient quantity and quality of plant materials to screen parking, building, or hardscape areas of a project and provides colour and viewing interest.
LEED™	The Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings.
Life Cycle:	Refers to all stages of a building's development, from extraction of materials to construction, use, and disposal.
Livability	Livability refers to the environmental and social quality of an area as perceived by residents, employees, customers and visitors. This includes safety and health (traffic safety, personal security, and public health), local environmental conditions (cleanliness, noise, dust, air quality, and water quality), the quality of social interactions (neighborliness, fairness, respect, community identity and pride), opportunities for recreation and entertainment, aesthetics, and existence of unique cultural and environmental resources (e.g., historic structures, mature trees, traditional architectural styles).
Local Government Act:	A law enacted by the BC Legislature formerly called the Municipal Act. The purposes of this Act are: (a) to provide a legal framework and foundation for the establishment and continuation of local

	governments to represent the interests and respond to the needs of their communities, (b) to provide local governments with the powers, duties and functions necessary for fulfilling their purposes, and (c) to provide local governments with the flexibility to respond to the different needs and changing circumstances of their communities.
Median Household Income	As reported by the Census, it is a form of average representing the midpoint of all household incomes in an area.
Micro-wind (turbines)	Micro-wind (turbines) are small-scale wind turbines that convert wind energy into electricity.
Minor Repairs	Minor repairs refer to the repair of missing or loose floor tiles, bricks or shingles, defective steps, railing or siding, etc.
Mitigation (re. Climate Change)	An intervention to reduce the extent of global warming through reducing the sources or enhance the sinks of greenhouse gases.
Mixed Use	Provision of a mix of complementary uses, such as residential, community and leisure uses, on a site or within a particular area.
Multiple Family Residential	: Includes duplexes, triplexes, townhouses, garden apartments and apartment blocks with a maximum density of 10-50 units per hectare, depending on the provision of affordable and special needs housing.
Native Plants	: Means a plant that lives or grows naturally in a particular region without direct or indirect human intervention. These plants are adapted to the local climatic and soil conditions and therefore should be less dependent on inputs such as fertilizer and pesticides than many introduced species are.
Neighbourhood	An imprecisely defined area within which people live, work, learn, and/or play. Its edges may be well-defined or more loosely felt by residents. Although it is often defined by a radius equal to an easy walk, its size may vary, from an easily walkable district to a larger region. In some cases, neighborhoods may overlap, especially where they are well-connected.
Net-Zero Emissions	Net-zero emissions refers to an organization that has minimized its carbon footprint to zero; also referred to as being carbon neutral. The emissions are direct or indirect. Net zero emissions is achieved by balancing a measured amount of carbon released with an equivalent amount of sequestered off-set, or buying enough carbon

	credits to make up the difference. It is used in the context of carbon dioxide releasing processes, associated with transportation, energy production and industrial processes.
Open Space	Means land that is undeveloped or developed that can support plant materials; or has decorative landscape treatment; or that may be used by customers for recreation, circulation or may be viewed by them. Walkways, plant beds, lawns and terraces within an open space area may be included as part of such open space area. Paved parking lot areas used for auto circulation or parking do not qualify as open space.
Orientation (Solar)	Orientation of a structure for controlled solar gain is essential to the success of passive and active solar design elements. Sun charts and software assist in orienting a building for maximum solar benefit. Designing for solar considerations can substantially reduce both heating and cooling
Parcel	Means the minimum amount that a single user may occupy. In many cases, more than one parcel will be combined for development of a single building or cluster of buildings to be used by a single user.
Parkland	: Means an area of land preserved in its natural state or modified dedicated for public use.
Procurement	Means the acquisition of goods and/or services at the best possible total cost of ownership, in the right quantity and quality, at the right time, in the right place for the direct benefit or use of governments, corporations or individuals, generally via a contract.
Public Space	Means any of a variety of spaces that are accessible and usable by the general public, including but not limited to: plazas, parkland, courtyards, forecourts, sitting areas, widened sidewalks, stormwater/rainwater rain gardens and art or water features.
Qualified Environmental Professional (QEP)	Means "an applied scientist or technologist as defined in Appendix B the Riparian Areas Regulation, enabled by the Fish Protection Act, and amendments thereto."
Reclamation	The process of reconverting disturbed land to its former or other productive uses.
Regional Growth Strategy	Growth management is a process involving collective action between government, residents and businesses to develop solutions to problems associated with rapid population growth, and ensure the long-term livability of the region. The strategy represents an agreement, developed and approved by the member municipalities and the regional district in partnership, on social, economic, and

	environmental goals and priority actions.
Renewable Resource	A natural resource (such as wood, water, wind, solar energy, etc.) that can be replenished or replaced by natural processes.
Right of way	The right to pass over property owned by another, usually based upon an easement. (2) A path or thoroughfare over which passage is made. (3) A strip of land over which facilities such as highways, railroads or power lines are built.
Riparian Areas	: Means a streamside protection and enhancement area (SPEA's). Riparian areas are the terrestrial areas adjacent to a water body that are influenced by the soil moisture contributed by the water body.
Secondary Suite	Secondary Suite is an urban planning term for an additional separate dwelling unit on a property that would normally accommodate only one dwelling unit. A secondary suite is considered "secondary" or "accessory" to the primary residence on the parcel.
Smart Growth	Means a strategy for designing and building livable and sustainable communities and cities: communities are 'smart' when they work for people, give them the widest range of opportunities and ensure their health in social, economic and environmental terms.
Sprawl	The unlimited outward expansion of suburbs created by low-density residential and commercial development. Sprawl is characterized by low-density greenfield development; the separation of residential, work and shopping areas; lack of well-defined centres; and a road network consisting of very large blocks with limited points of entry into the blocks.
Streetscape:	Means the interrelationship of development, landscape and open space in a street. Also meaning an urban roadway design and conditions as they impact street users and nearby residents. Streetscaping (programs to improve streetscape conditions) can include changes to the road cross section, traffic management, sidewalk conditions, landscaping, rainwater management, street furniture (utility poles, benches, garbage cans, etc.), building fronts and materials specifications. It also involves improving signage.
Stormwater Management	Building and landscape strategies to control and limit stormwater pollution and runoff. Usually an integrated package of strategies, elements can include vegetated roofs, compost-amended soils, pervious paving, tree planting, drainage swales, and more.
Sustainability	Means that environmental and social systems continue to function long into the future. Economic systems must be healthy to help achieve the sustainability of environmental and social systems. Practices that would ensure the continued viability of a product or

	practice well into the future.
Sustainable Development	Means development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Principles of sustainable development are applied to the goal of creating a 'sustainable community' that has healthy natural areas, uses land efficiently, has vibrant, safe and accessible neighbourhoods, is designed for efficient resource use, transportation and servicing, and is equitable, affordable and fiscally responsible.
The Natural Step	Means a non-profit organization providing results-orientated advisory and training services to help community and business leaders integrate social, environmental and economic decision making into operations with a holistic, proven and scientifically-rigorous framework
Traffic Calming	Traffic calming involves changes in street alignments, installation of barriers, and other physical measures to reduce traffic speeds and/or cut-through volumes to improve street safety and livability.
Viewscape	Means a physiographic area composed of land, water, biotic, and cultural elements which may be viewed and mapped from one or more viewpoints and which has inherent scenic qualities and/or aesthetic values.
Walkability / Walkable	Walkability reflects overall walking conditions and usually takes into account the quality of pedestrian facilities, roadway conditions, land use patterns, community support, security and comfort for walking. The quality of pathways, building access ways and related facilities, the existence of sidewalks and crosswalks, roadway conditions (road widths, traffic volumes and speeds), accessibility (the relative location of common destinations) and the quality of connections between them all affect walkability.
Wastewater	The spent or used water from a home, community, farm, or industry that contains dissolved or suspended matter.
Watercourse	Includes any of the following that provides fish habitat: (a) a watercourse, whether it usually contains water or not; (b) a pond, lake, river, creek, brook; (c) a ditch, spring or wetland that is connected by surface flow to something referred to in paragraph (a) or (b).
Watershed	Area of land that contributes runoff to a particular, common body of water.
Zoning Bylaw	Means an implementation tool for the Official Community Plan, the zoning bylaw regulates land use, density and development for specific areas or parcels of land in the community.

Village of Telkwa Official Community Plan