

# Hudson Bay Mountain Prairie Village

## Land Use and Development Inventory and R8 Zone Review



Regional District of Bulkley-Nechako  
Planning Department  
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# Section 1: Background Review

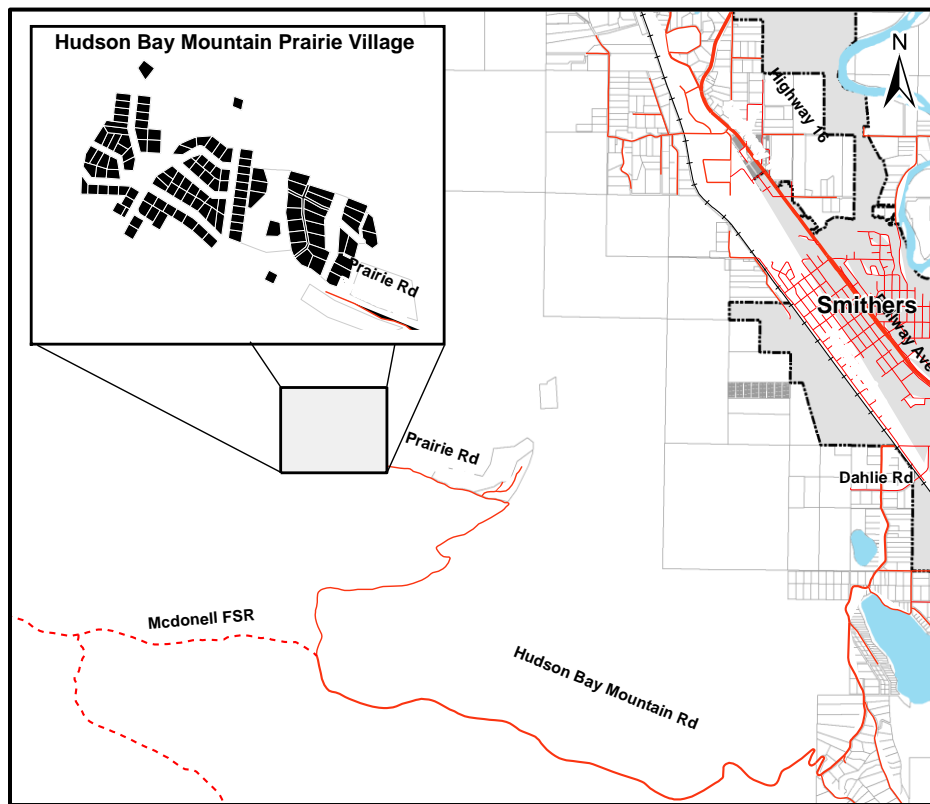
## Hudson Bay Mountain Prairie Village – R8 Zone Review

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### 1.0 Development History

Hudson Bay Mountain Prairie Village, (formerly known as the Cabin Colony) is located at the base of the ‘Ski Smithers’ ski resort on Hudson Bay Mountain. The community is a 30 minute drive from the Town of Smithers.

#### Study Area & Location Map



The mountain elevation reaches 2,331 metres with valleys, ridges and meadows attracting hikers and mountain bikers in the summer, and cross country skiers, snowshoers, and downhill skiers in the winter.

Development of the Prairie Village was initiated by squatters who built recreational cabins on Crown land without permission. In 1972 the Crown lands were subdivided under the Land Act (CLSR 38T 426) to allow for the formal sale or lease of the land by the users. The subdivision was approved under the *Land Act* by the Ministry of Lands, and was not approved by the Provincial Subdivision Approving Officer. It does not appear that access, servicing, parking, or other typical land use issues were given much consideration by the Province when developing the subdivision plan.

## 1.1 Zoning Regulation in the Prairie Village

Zoning was first applied to the Prairie Village in 1994, with the adoption of “Regional District of Bulkley-Nechako Zoning Bylaw No. 700, 1994.” The area was zoned Single Family Residential (R1). In 1995, Planning Department staff were directed by the Board to draft a new zone for the area given concern regarding the use of lots, and the area’s limited ability to accommodate on-site sewage disposal. The soils are characterized, in areas, as consisting of two feet or less of glacial till on top of bedrock. Therefore, there is limited ability to accommodate waste from outhouses.

In 1995 the Regional District applied the Hudson Bay Mountain Recreational Residential (R8) Zone to the Prairie Village. The zone does the following:

1. *limits the use of the dwellings to 200 days per year;*
2. *limits the building size to a gross floor area of 110 m<sup>2</sup> (1,184 ft<sup>2</sup>);*
3. *limits the building height to 8 m (26.25 ft.);*
4. *prohibits home occupations; and,*
5. *limits the number of dwellings to one seasonal dwelling per parcel.*

### Current Zoning Map



There are three properties located within the Prairie Village neighbourhood zoned Large Holdings (H2) rather than the R8 Zone. The H2 Zone does not limit the use of the time an owner can use the dwelling, and does not limit the size and height of the buildings. The H2 Zone also allows 2 Single Family Dwellings, has a minimum parcel size of 8 ha., and allows a relatively wide range of uses.

## 1.2 Zoning Amendments:

There have been three amendments to the R8 Zone in the Prairie Village neighbourhood. Two amendments changed zoning from H2 to R8 to facilitate boundary adjustments. The third amendment was to allow the Sidewinder Inn to operate a bed and breakfast accommodation, as a home occupation, to a maximum of six beds, to be in operation no more than 200 days per year.

## 1.3 Official Community Plan

The Prairie Village is currently designated as Ski Smithers Development Area (SSDA) under Smithers Telkwa Rural Official Community Plan No. 1704, 2014. This designation area includes the Hudson Bay Mountain Estates, which is the newer subdivision that has its own sewer and water system that can support full time residences.

The purpose of this designation is to provide for the expansion, and possible redevelopment of the ski hill including new recreation and accommodation facilities.

Objectives and policies that relate to the built environment of the Prairie Village and accommodation facilities are listed below.

### 3.6.1 Objectives:

- (a) *To encourage development of safe, functional and attractive alpine community.*

### 3.6.2 Policies:

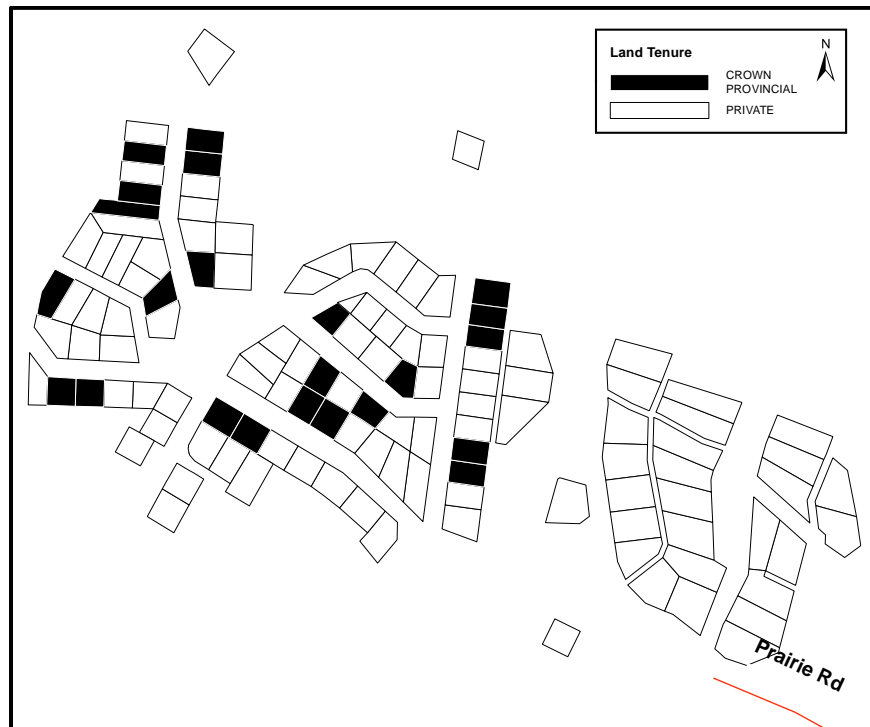
- (a) *Includes a diversity of housing types and densities*
- (b) *Incorporates alpine building styles that integrate the natural environment and the varied topography of the area*
- (c) *Includes dwelling units that are used for tourist accommodation on a daily, weekly or monthly basis*
- (f) *Encourages the control of drainage in a manner which does not increase discharge off the land, or alter the drainage pattern in a manner that negatively impacts other land*
- (j) *Does not have an unacceptable negative impact on significant views*

## 1.4 Land Tenure and Ownership

In 1995 when the R8 zone was created 35% of the parcels in the cabin area were privately owned. The majority of the lands were leased from the Crown. Currently 101 parcels (82% of the parcels) are privately owned.

This increase in private ownership has resulted in an increase in building activity and an increase in the size of recently constructed buildings.

## Current Land Tenure



### 1.5 Building Sizes are Increasing

The area was serviced with electricity in 2005. This allowed the establishment of an on-site water supply. Also, as noted there was a notable change of tenure from leases to ownership. These changes made it feasible for people to build larger dwellings in the last 15 years.

The Prairie Village was included in the Regional District's Building Inspection Area in 2005. From 2005 until December 2016 the Regional District has received a total of 12 (10%) Building Permit Applications for properties located in the Prairie Village. The Average Total Floor Area of the buildings built with permits is 150.13 m<sup>2</sup> (1,616 ft<sup>2</sup>).

Most new dwellings are two-story, and a notable portion of the ground floor of the dwellings is identified for uses that are exempted from the Gross Floor Area (GFA) calculation (parking, water cisterns). There has been concern expressed that the GFA calculation is not a reliable method to regulate floor area. Some new dwellings have water cisterns indoors which allows for a notable increase in overall building size. There is also concern that people are exaggerating the space needed for parking, and that this area will be later converted into living space.

## Section 2: Inventory

### Hudson Bay Mountain Prairie Village – R8 Zone Review

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#### 2.1 Inventory Results

During the summer of 2016 the Planning Department visited each lot in the Prairie Village to inventory the development and land use that exists. The information collected during the site visits was combined with information available from the BC Assessment Authority and building permit data to complete the inventory. The following is a presentation of the inventory results.

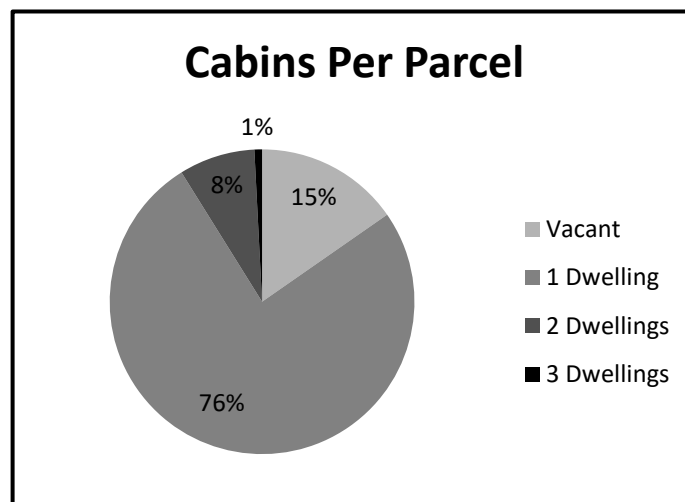
##### Parcels and Number of Dwellings:

There are a total of 124 parcels in the Prairie Village. There are 19 vacant and 105 developed parcels. During the inventory it was noticed that some parcels have more than one dwelling, contrary to zoning. In total, 117 dwellings were found on the 105 developed parcels. A total of 94 parcels contain one dwelling each, 10 parcels contain 2 dwellings each, and 1 parcel contains 3 dwellings.

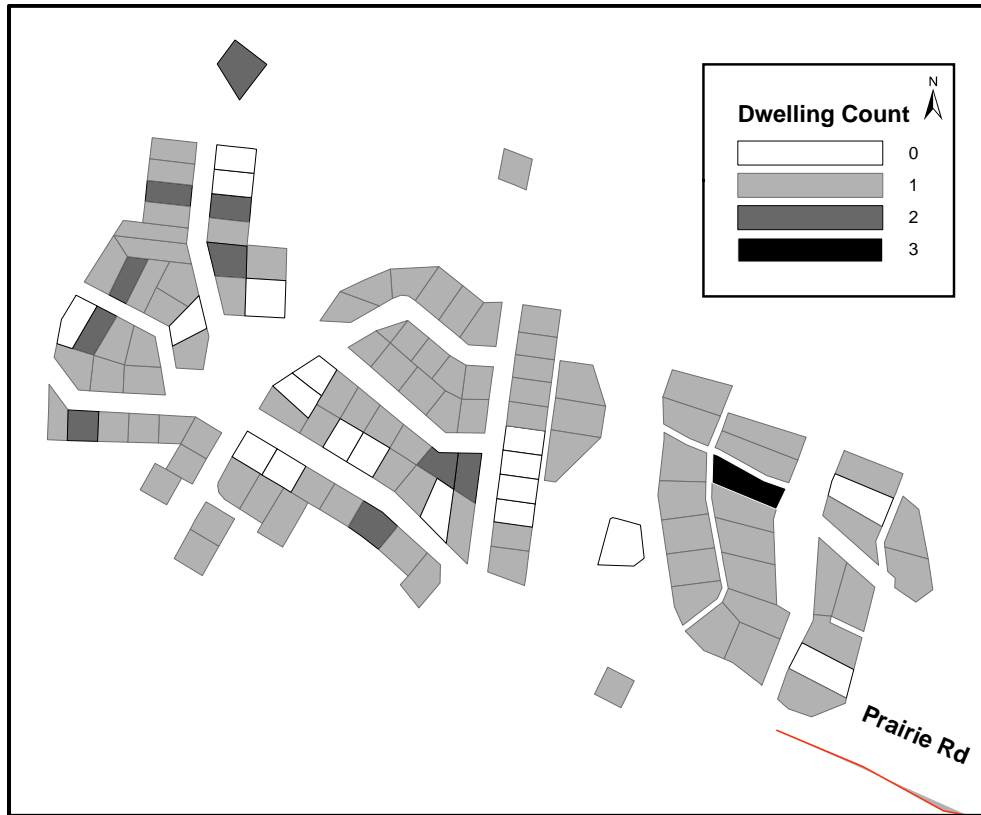
Primary dwellings are defined as the dwelling on the parcel that was measured as having the largest total floor area (TFA).

**Cabins Per Parcel**

Vacant	19	15%
1 Dwelling	94	76%
2 Dwellings	10	8%
3 Dwellings	1	1%
<b>Total Parcels</b>	<b>124</b>	<b>-</b>



## Dwelling/Parcel Map



All secondary dwellings were 1 story and averaged 20 m<sup>2</sup> (219 ft<sup>2</sup>) in size. The parcel containing three dwellings consisted of two Yurts and one typical cabin. The pictures below show examples of Prairie Village lots containing additional dwellings. The yurts are shown in the second picture below.





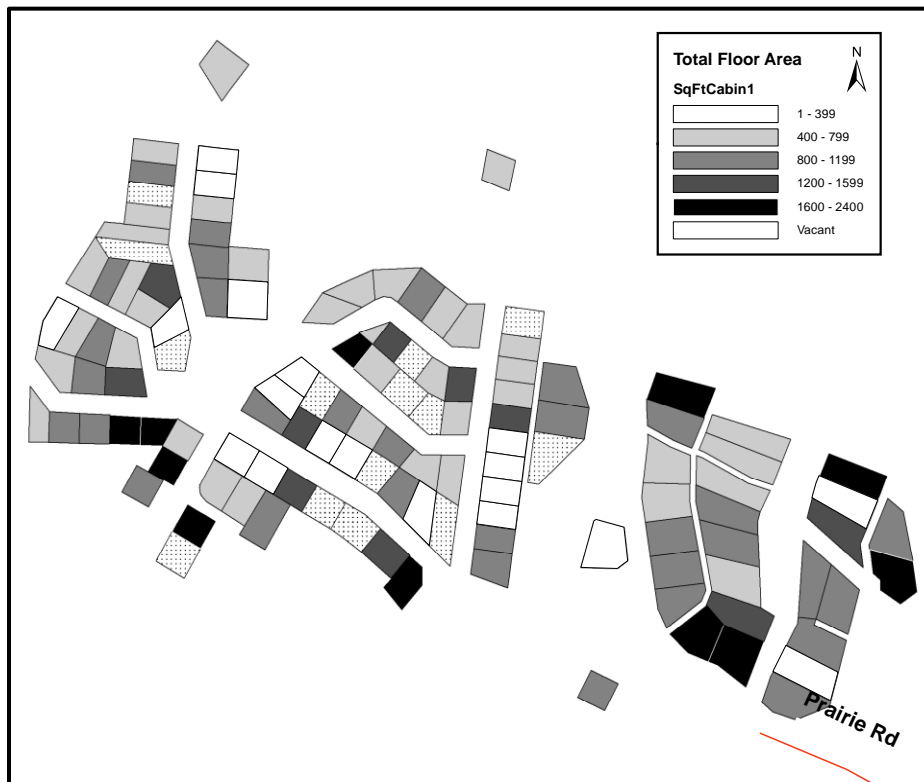
### Total Floor Area (TFA):

During site visits measurements were taken to estimate the Total Floor Area (TFA) of the dwellings. The TFA is the total combined floor area of all livable space of all floors. Areas with dirt floors or a ceiling height of less than 6 feet were not considered livable space. Where accurate data exists from building permit records, that data was used. The TFA identified is shown in the table below. The map below shows the distribution of dwelling sizes in the neighbourhood. The mean TFA of the cabins inventoried is 70 m<sup>2</sup> (753 ft<sup>2</sup>).

**Inventoried Total Floor Area**

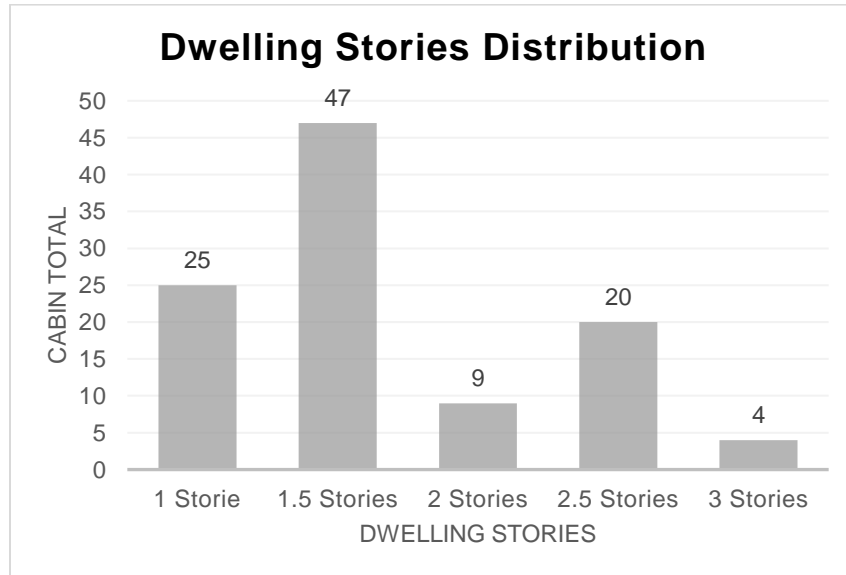
Category	Range (m <sup>2</sup> )	Range (ft <sup>2</sup> )	Cabin Count	Percentage
Very Small Dwellings	0 - 37	0 - 399	26	22.22%
Small Dwellings	37.16 - 74.22	400 - 799	38	32.48%
Medium Dwellings	74.32 - 111.39	800 - 1199	32	27.35%
Large Dwellings	111.48 - 148.55	1200 - 1599	10	8.55%
Very Large Dwellings	Over 45.30	Over 1600	11	9.40%
<b>Total</b>			<b>117</b>	

**Dwelling Size Distribution Map**



## Height

To determine the heights of the cabins we looked at the number of stories, and the floor area of the 2<sup>nd</sup> or 3<sup>rd</sup> floor for each primary cabin. A 2<sup>nd</sup> or 3<sup>rd</sup> floor that was less than half of the area of the main floor is described as a 0.5 story. Of the 105 primary cabins inventoried, we found that the majority, 47 (45%) of cabins are 1.5 stories. Only 25 (24%) are 1 story, 9 (9%) are 2 stories, and 24 (23%) are more than 2 stories.



## Sewage Disposal:

Of the 105 developed parcels, 92 had at least one outhouse and 13 did not have a visible outhouse.

There were 53 permits approved by Northern Health for an outhouse with a holding tank. It is estimated that half of the dwellings are serviced primarily by an outhouse with a holding tank and half are serviced primarily by a traditional dug outhouse.

The size of the lots and the area's soil structure precludes a Type 1 septic disposal system. A Type 2 or 3 system may be accommodated subject to an evaluation of each lot and approval by the Northern Health Authority. Given the soils, cost of a type 2 or 3 system, and limited water supply it is anticipated that dwellings will continue to rely on pit privies and holding tanks for sewage disposal.



## Section 3: Owner Survey

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#### 3.1 Survey Results

Staff undertook a survey of Prairie Village property owners to gain an understanding of the opinions regarding development in the Prairie Village, and the existing regulations.

A total of 212 Cabin Owners were identified using BC Assessment ownership data. The questionnaire was mailed out to these owners on February 9, 2016. The cabin owners were able to send back the questionnaire via a self-addressed-stamped-envelope, by email, or by phone. Of the 212 questionnaires sent, 95 (45%) were returned.

#### Questionnaire Design:

The questionnaire was designed to focus on resident's opinions on the regulations that control building height and size.

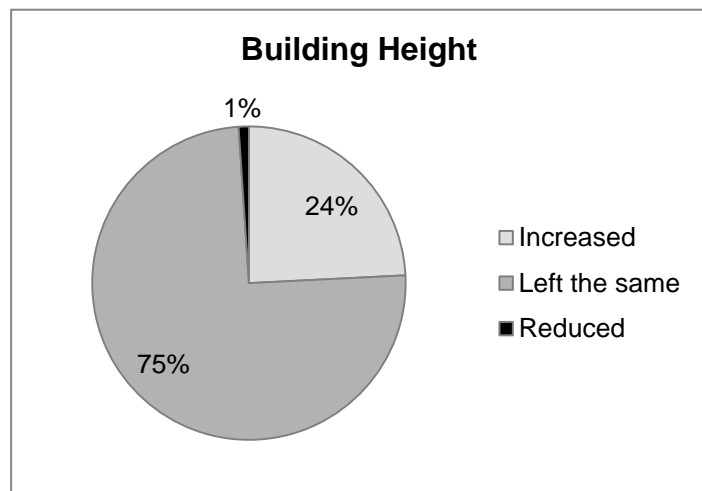
Two multiple choice questions were asked regarding Building Height and Gross Floor Area regulations. The questionnaire asked the respondent if they preferred to *increase*, *leave the same*, or *reduce* the existing regulations.

The second question asked the respondent to choose between the *Total Floor Area* option or the *Gross Floor Area* option. If respondents chose *Total Floor Area* option, there was space provided for the respondent to fill in a suggested maximum size.

At the end of the survey, there was additional space left for comments. Below is a summary of the results.

#### Question 1: Building Height

All of the 95 respondents filled out the building height question. 24 respondents (24%) listed their preference for the building height regulation to be increased. The majority of people preferred to leave building height the same, at 8 m. (26.25 ft). Only 1 respondent preferred the building height to be reduced.



### Preferred building height (increase)

Of those who preferred an increase, 21 respondents specified a preferred height. Below is a list of the recommended heights listed by the respondents.

Increased to		Count
9.14 m	30 ft.	7
9.75 m	32 ft.	6
10 m	32.8 ft.	4
11 m	36 ft.	3
12 m	39.3 ft.	1
<b>Total</b>		<b>21</b>

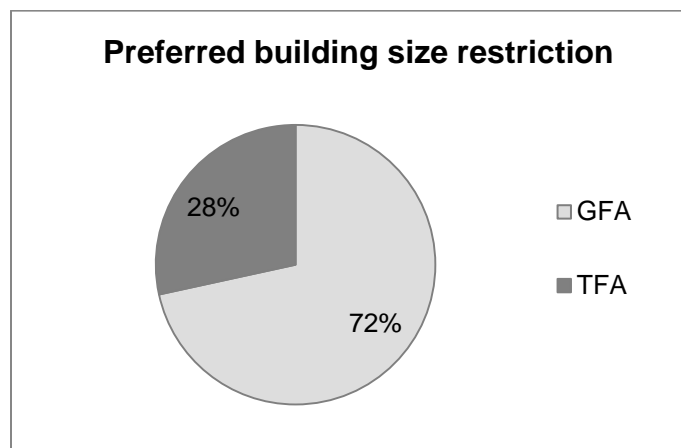
### Preferred building height (decrease)

As mentioned above, only 1 respondent preferred a decrease in building height. However, three respondents filled in building heights that were lower than the current 8 m (26.25 ft.) building height regulation. The table below shows a list of the recommended heights listed by the respondents.

Decreased to		Count
6 m	20 ft.	2
7 m	22.96 ft.	1
<b>Total</b>		<b>3</b>

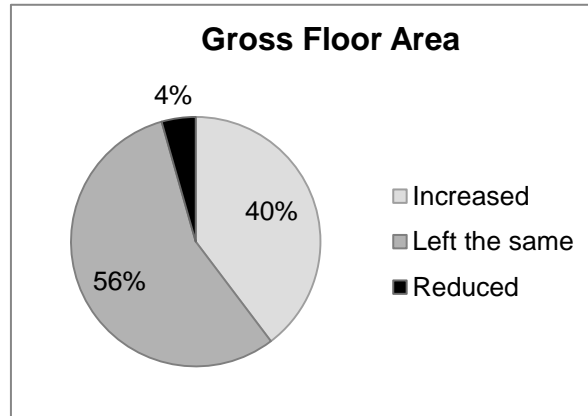
### Question 2: Gross Floor Area (GFA) or Total Floor Area

All respondents filled out Question 2. Of the 95 respondents 68 (72%) chose the Gross Floor Area (GFA) option to regulate the size of their seasonal dwelling; whereas, 27 respondents (28%) preferred to change to the Total Floor Area (TFA) option.



### Gross Floor Area (GFA)

Of those respondents who chose the GFA option, 27 (40%) respondents preferred to increase the GFA; 3 (4%) respondents preferred a reduction to the GFA regulation. A majority of 38 (56%) respondents preferred to not change the 110 m<sup>2</sup> (1184 ft<sup>2</sup>) GFA regulation.



### Preferred Gross Floor Area (increase)

It is noted that 13 respondents who identified a preference to keep the GFA also identified a preferred TFA maximum size. These numbers are shown to the right. There is some question whether these persons are intending to identify their preferred TFA or GFA.

Range (m <sup>2</sup> )	Range (ft <sup>2</sup> )	Count
0-119	1000 - 1299	2
120 - 139	1300 - 1500	4
140 - 185	1501 - 2000	2
186 - 232	2001 - 2500	3
233 - 278	2501 - 3000	2
		<b>11</b>

### Preferred Total Floor Area (TFA)

Of the 27 respondents who chose the TFA option, 22 (81%) respondents specified a maximum size preference, which is shown to the right. It is reasonable to consider that a TFA of 167 m<sup>2</sup> (1800 ft<sup>2</sup>) would on average be equivalent to a GFA of 110 m<sup>2</sup> (1184 ft<sup>2</sup>).

Range (m <sup>2</sup> )	Range (ft <sup>2</sup> )	Count	Percent
92.9 - 139.3	1000 - 1500	5	(23%)
139.4 - 185.8	1501 - 2000	8	(36%)
185.9 - 232.2	2001 - 2500	5	(23%)
232.3 - 278.7	2501 - 3000	0	
278.8 - 325.1	3001 - 3500	0	
325.2 - 371.6	3501 - 4000	0	
371.7 - 418.0	4001 - 4500	4	(18%)
	<b>Totals</b>	<b>22</b>	<b>100%</b>

It is apparent that the community is quite evenly split on whether the building size regulations should be reduced or kept the same, or increased.



## Section 4: Evaluation of Land Use Issues

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#### 4.1 Character

Neighbourhood character can be defined to mean the collective qualities and characteristics that distinguish a particular area or neighbourhood. For many Prairie Village property owners the character is defined by building scale, height, housing type, and architectural style. In staff's opinion the neighbourhood character is very much defined by a ski culture and the unique form of the majority of the buildings. Structures are built tall on posts to gain height due to the accumulation of snow. The majority of cabins are typically small and have an alpine styling. Historically, the area contained A-Frame style cabins that did not have running water and relied on outhouses for sewage disposal. Over 80% of the dwellings are under 111 m<sup>2</sup> (1200 ft<sup>2</sup>) in TFA.

The smaller dwellings ensure that views of the mountains are maintained and are not blocked by a neighbour's dwelling. The dominant features in the landscape are the trees and the natural environment, and not large imposing dwellings. The importance of maintaining this character is noted in the comments received in the questionnaire. However, the community is split on whether to increase the maximum building size.

#### 4.2 On-site Sewage Disposal

Records indicate that one of the main reasons the R8 zone contains a limitation on building size was out of concern for the number of outhouses in an area, which has shallow soils on top of bedrock.

It appears that over half of the cabins are using a pit privy with a holding tank, which is pumped out annually. This means there is likely to be less effluent distributed into the surrounding soils. There is some concern that holding tanks may fail, or effluent may be released illegally. However, this risk is considered to be low.

The area has a very limited ground water supply, and water must be shipped to the area and stored in cisterns. In winter water cannot easily be delivered, and holding tanks cannot be emptied. These access limitations force residents to limit waste water generation and holding tank use.

Staff do not foresee any notable sewage disposal issues provided that building sizes do not increase notably.

## 2.4 Parking and Prairie Village Access

The residents rely on overnight parking areas controlled and maintained by Ski Smithers. The Ski and Ride Smithers Ski Area Master Plan (2008) states that existing parking meets the current needs of the resort. However, there has been busy occasions where there is not enough parking available. The Master Plan states that “Whereas there are deeded and leased ski cabin properties within the existing and proposed controlled recreation area (CRA) and not all properties have formal right of way access, the tenure holder shall allow access, including by way of snowmobile, to all ski cabin properties. Snowmobile access across ski runs during lift operation hours will be controlled to meet safety requirements. Adequate parking will be made available for cabin owners and guests.”

The Planning Department asked Ski Smithers for comment on the R8 Zone review, and their provision of parking for the benefit of the Prairie Village, on a number of occasions. Unfortunately, no response was received.

There is concern that increasing the permitted size of dwellings will increase the need for additional parking, which is already in short supply during periods of peak ski hill use. If parking demand becomes too great Ski Smithers, or area residents, can be expected to ask the RDBN to facilitate a solution utilizing Crown land.







The existing R8 zone requires two off-street parking spaces per principle dwelling unit. This parking requirement was included in the zone to “ensure that cabin owners are aware that it is their responsibility to provide off-street parking in the event that their current parking area is no longer available.”

## Section 5: Recommendations

### Hudson Bay Mountain Prairie Village – R8 Zone Review

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#### 5.1 Gross Floor Area

Given the challenges associated with the application of the GFA regulation in the Prairie Village, and the concern that builders are taking advantage of the definition to increase building size, it is recommended that the Zoning Bylaw be amended to replace the GFA regulation with a regulation that uses a TFA measurement.

A TFA of 167.23 m<sup>2</sup> (1,800 ft<sup>2</sup>) is recommended as it is estimated to be slightly larger than a standard building with a GFA of 110 m<sup>2</sup> (1184 ft<sup>2</sup>). Therefore, the building size regulations are proposed to remain, in effect, similar to those that exist. Staff believe this is a reasonable compromise given the varied opinions of residents, and the desire to maintain the status quo with regards to sewage disposal and parking.

#### 5.2 Density

The inventory project brought to our attention the existence of 10 illegal second dwellings. All of the secondary dwellings were 1 story and averaged 20.3 m<sup>2</sup> (219 ft<sup>2</sup>) in size. Staff believe it is reasonable to amend the Zoning Bylaw to allow a second dwelling provided that the combined TFA of both dwellings does not exceed 167 m<sup>2</sup> (1,800 ft<sup>2</sup>). This will allow for increased development in the Prairie Village in a manner which will not jeopardize the character of the area, the sewage disposal situation, or the parking situation.

#### 5.3 Staff Recommendation

It is recommended that the Regional District Board direct staff to initiate an application to amend the R8 Zone in “Regional District of Bulkley-Nechako Zoning Bylaw No. 700, 1994” by:

- replacing the GFA restriction of 110 m<sup>2</sup> (1184 ft<sup>2</sup>) with a TFA restriction of 167.23 m<sup>2</sup> (1,800 ft<sup>2</sup>), and
- allowing a second dwelling provided that the combined TFA of both dwellings does not exceed 167 m<sup>2</sup> (1,800 ft<sup>2</sup>).