# Demographics & Land Base Report

December 2022



Village of Sayward

Prepared by the Mount Arrowsmith Biosphere Region Research Institute

Draft

# **Acknowledgements**

We respectfully acknowledge the location of the Village of Sayward in the unceded Traditional Territory of the K'ómoks, We Wai Kai and Wei Wai Kum First Nations, the traditional keepers of the land.

Cover image courtesy of the Village of Sayward

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#### Introduction

#### **Purpose**

The purpose of this report is to provide a deep understanding of the people (demographics) and the place (land base) of the Village Sayward. It provides both a snapshot of current conditions, using the 2021 Canadian census data, and trends over time. The report has been divided into two parts.

Part I is focused on demographics and covers the most common aspects of demographic analysis. Some graphic comparisons are made to British Columbia (BC) to give context. Other comparisons are made to conditions in Sayward over time, going back as far as the data is available and/or relevant.

Part II is focused on the land base and provides definitions and maps from available GIS data. While recognizing that humans are an inextricable part of the environment, it was useful to divide Part II into Physical Geography (those maps dealing with geological and biological information) and Human Geography (those maps dealing with human occupation and use of the land base).

#### **Data Limitations**

The majority of the data in this report comes from Statistics Canada and the GIS Data Catalogue, British Columbia. The 2011 census had very little information, likely due to cost saving measures by the government on the heels of the financial crisis. Therefore, many graphs will show 2001, 2006, and then 2016, 2021, skipping over 2011. Rather than having an explanation for each instance, please be aware of these potential gaps in information and read the axis labels carefully. Statistics Canada rounds to the nearest 5 on all census data, which is less relevant in a large community but more so in a small one such as the Village of Sayward. The data is still considered statistically significant, but there will be times that the rounded data does not add up perfectly. There are also instances of random rounding to the nearest 10, for the purpose of privacy and protecting individuals from being able to be identified (Statistics Canada, 2016).

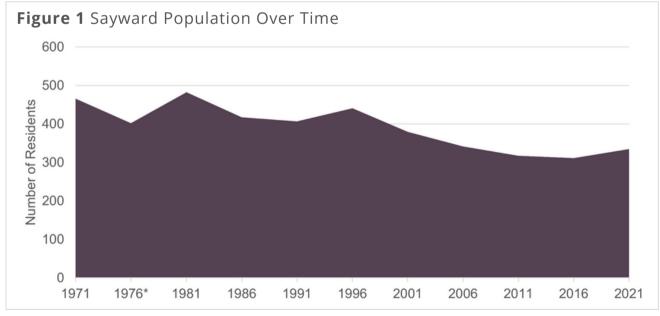
# Part I: Demographics

# **Population**

In 1968, Sayward was incorporated as a self-governing community. The next census was in 1971. Figure 1 shows the change in population over 50 years from 1971 to 2021, as per Statistics Canada's reporting on the census.

Since the census began measuring Sayward's population, the peak was in 1986 with 482 residents. There was then a slow decline in numbers until the low of 311 in 2016. Between 2016 and 2021 there was a 7.4% increase in the population.

Although the population has been increasing, the number of people per household had been decreasing. Couple households with children have been decreasing, while childless and one-person households have increased. As a result, the 7.4% increase in population has actually seen a 10% increase in households. The average household size went from 2.1 to 2.0 in 2021.

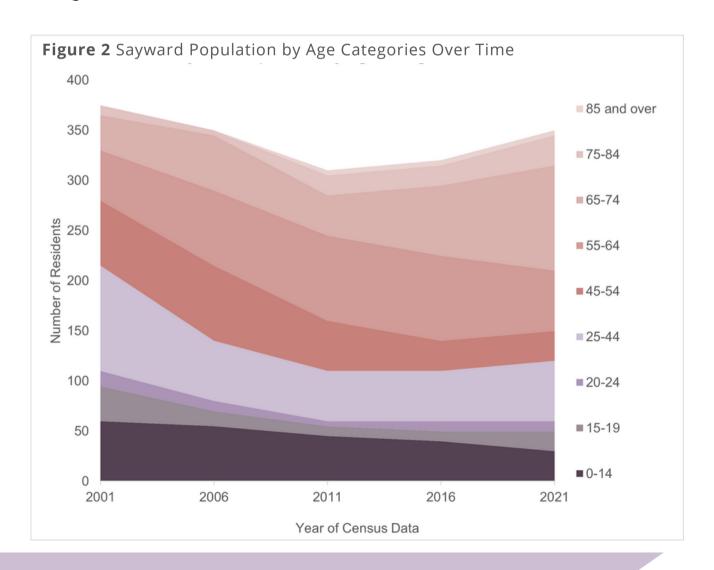


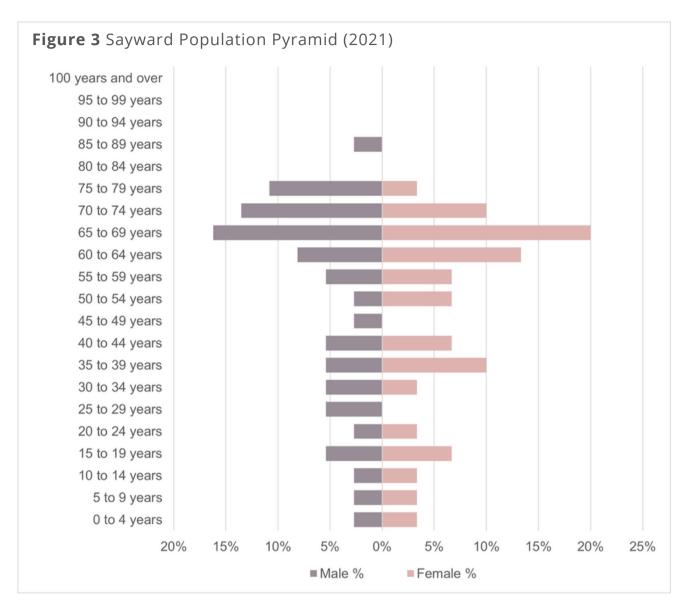
\*The 1976 census showed 383 people, which was adjusted in 1981 to 402, in order to account for the same physical area as the 1981 census subdivision.

## Age

Over the five decades of the census being taken in Sayward, the complexity and detail of the data points has grown. In the early census, only population totals (and sometimes gender totals) were taken. In the 2001 census, there were only 11 categories for different age groupings. That has gradually grown to 22 categories in the 2021 census. Figure 2 shows the shift of Sayward's age profile over 20 years, using the categories that are common to all five censuses.

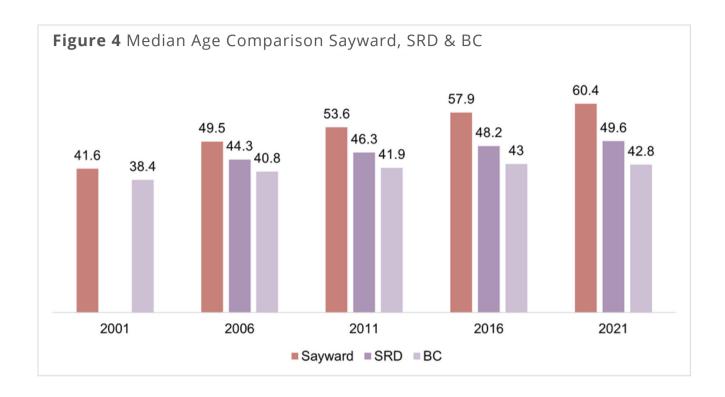
Under 15 years of age has been a slowly shrinking category. The greatest amount of growth has been in the category of 65-74 years old, with the most noticeable change since 2011.

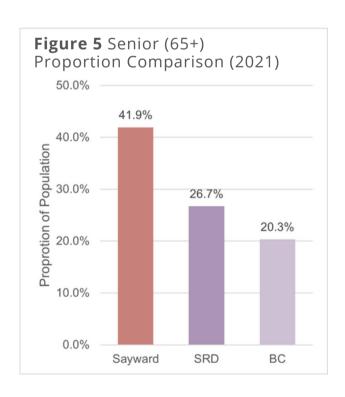


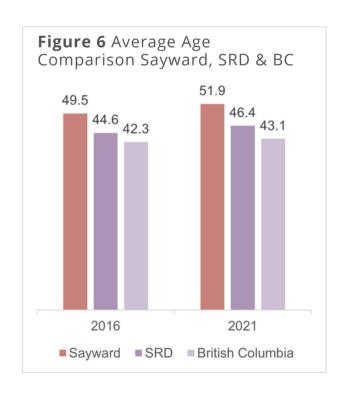


A population pyramid is the standard way to display the distribution of age and gender in a population. Sayward's 2021 population pyramid (Figure 3) shows the most populous 5-year age cohort as 65-69 years of age, followed by 70-74 years of age and 60-64 years of age. 42% of Sayward residents are 65 years + (Figure 5).

The average age of residents is 52, slightly higher than the BC average of 50 (Figure 6). However, median is the preferred measurement of nominal data such as age. The median age of residents in the Village is 60 years old, meaning 50% of residents are older than 60 and 50% are younger. From 2001 to 2021, the median age of BC has risen by 11% while that of the Village has risen by 45% (Figure 4).





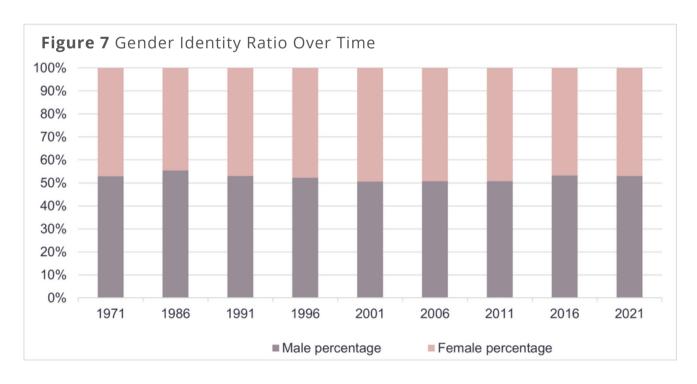


#### Gender

The historical gender ratio of the Village of Sayward has generally seen more than 50% of the population identified as male (Figure 7). This percentage was highest in the 80s at 55% male, evening out through the 90s and 00s, rising again in the last 10 years. In 2021 the overall ratio is 53% male to 47% female.

It might make sense to see a higher male population in an area with resource based employment, since these industries usually employ more men than women. In the working age category of 15 to 64 years old, though, there is only a slight difference at 51% male (Figure 3). Usually older adult populations have a higher ratio of women because of their longer life expectancy. Interestingly, this is not what we see in Sayward. While the 60-69 year old age categories have significantly higher percentages of women, the 70-89 year old age category has higher percentages of men (Figure 3).

Although gender has its own category in this report, there may be moments where it is relevant to other categories ahead. In these cases a chart or table will illustrate any significant differences between genders for the relevant category.

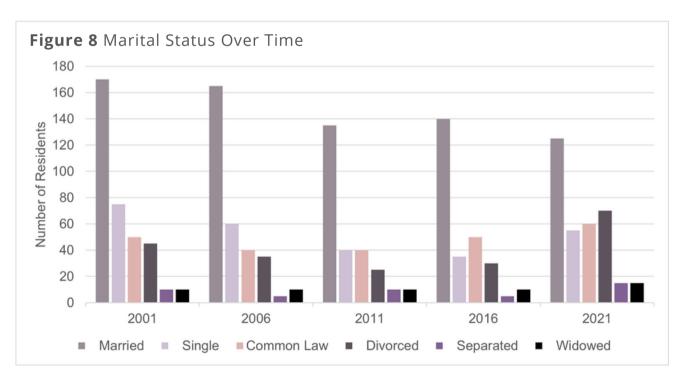


#### **Marital Status**

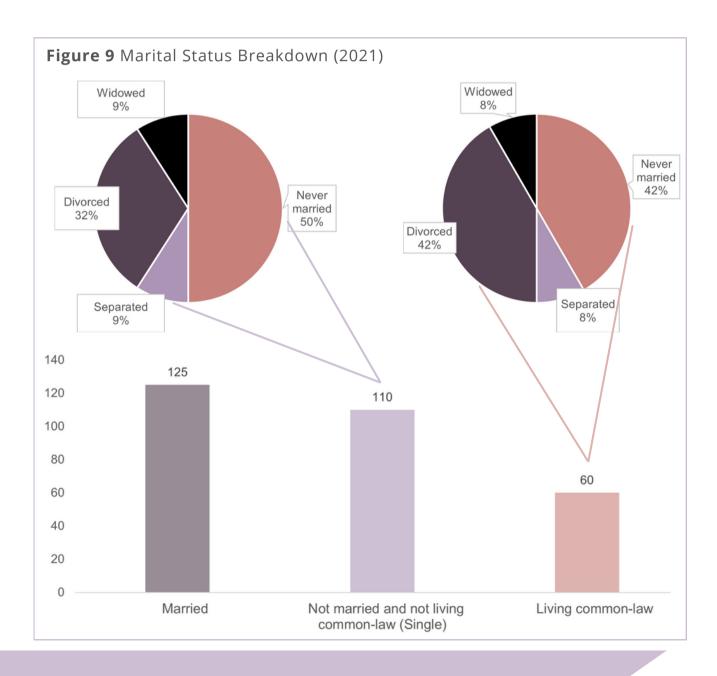
The trend in marital status over the last 20 years has seen a decline in the number of married people, a slight increase in the number of people living common law, and a significant increase in single people (Figure 8).

At first glance, there appears to be a huge increase in the number of divorced people between 2016 and 2021. A cynical observer might assume that the Covid-19 pandemic is to blame for this, as we know that isolation and quarantines strained many relationships. However, it is actually the structure of the census that is at least partially responsible.

Up to and including 2016, the categories were rather simplistic. It asked if one was married, living common law, or single. Then it offered the following categories, but only to those who answered single: never married, separated, divorced, widowed. In 2021 the categories became more complex, recognizing that someone in a common law relationship could also have a history of being divorced, separated, widowed or all three (Figure 9). However, those who answered "married" still are not asked for more detail on past relationship status.



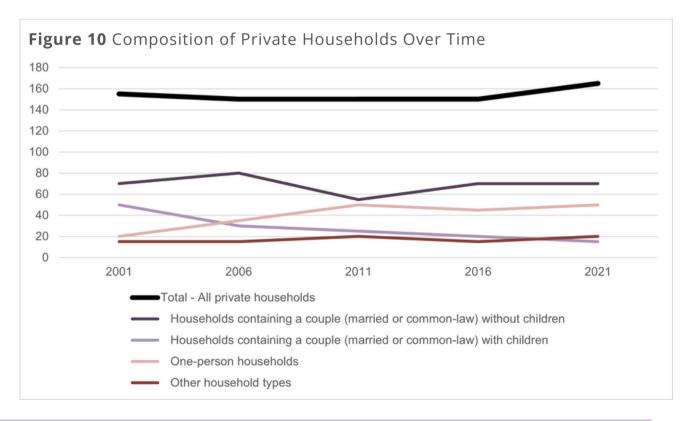
This reflects the changing nature of relationships in the 21st century partially due to changing social norms and longer life expectancies. It is possible that many of the respondents counted as "married" or "living common law" in previous censuses were also divorced, separated, or widowed but that trend is unfortunately not captured clearly. The 2021 categories represent a lot more nuance and have much more overlap. Note that this means one person can be counted in multiple categories for the calculation in Figure 8.

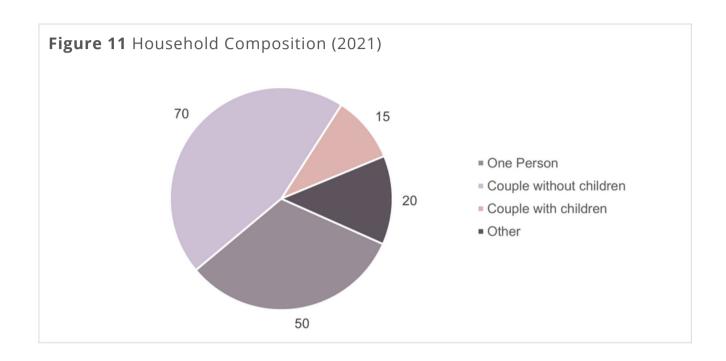


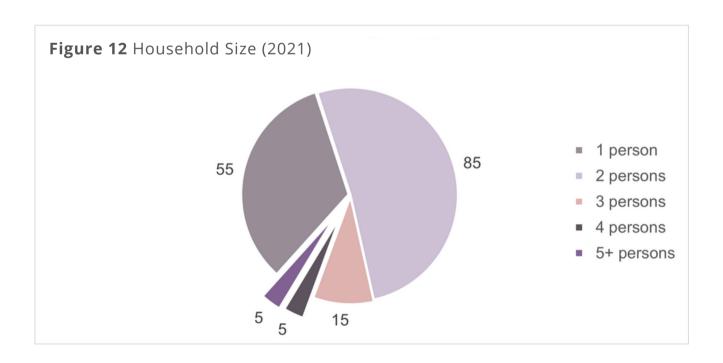
## **Household Composition**

Over the last 20 years, the number of households declined slightly to 150 and rose back up to 165 in 2021. Figure 10 charts the change in household composition since 2001. Figure 11 shows that the majority of households in Sayward are composed of a couple (married or common law) with no children (45%), though a significant number of households are composed of a single person (32%). Couple (married or common law) households with children have been on the decline and in 2021 represent 10% of Sayward households. Note that "Other" types of households could include single-parent households with children, households with family members other than parent-child, and households with multiple families or roommates.

Household size has also been declining overall in Sayward. The 2.0 person per household average is smaller than the provincial average of 2.4. Figure 12 shows there are relatively few households with 3 or more members. More than half (52%) of households in Sayward are composed of 2 people and a third (33%) are composed of one person.



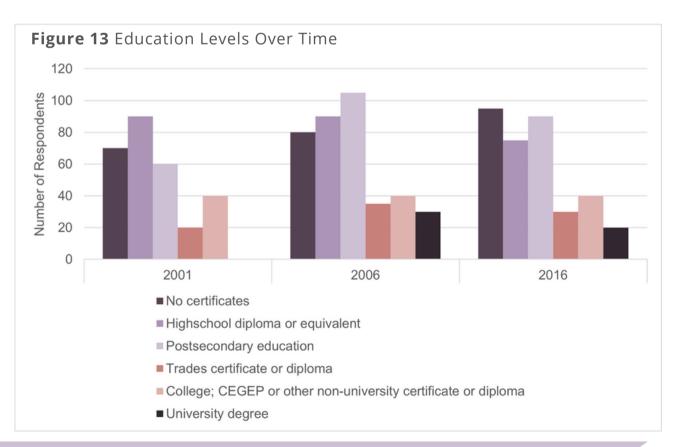




#### **Education**

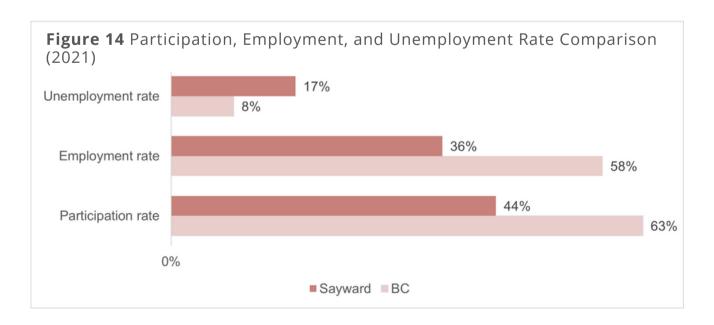
As with many of the categories examined before, the data on level of educational attainment has only gotten more complex over the years. In order to show a meaningful trend over time (Figure 13), the consistent categories have been simplified into the following: no certificates (no high school diploma), high school diploma (or equivalent), and postsecondary education. Then the category of postsecondary education has been split into three categories: trades certificate or diploma, CEGEP or other non-university certificate or diploma, and university certificate or degree (certificate, bachelor's degree, master's degree, doctorate).

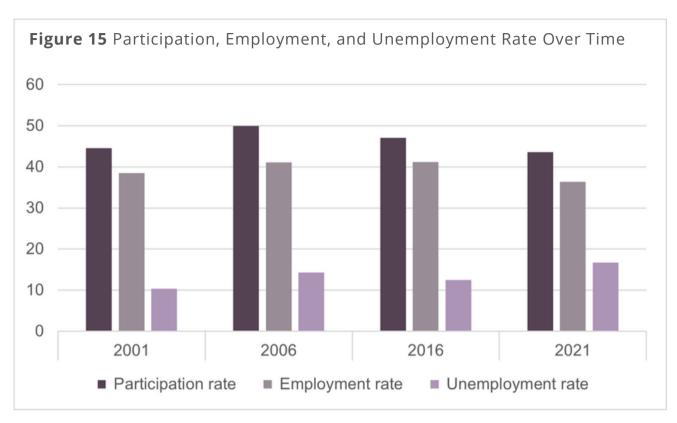
This is measured in the census for the entire population 15 years and older. Since this includes a few years of teenagehood, there is a small portion that would not be expected to have attained their high school diploma yet. Some censuses offer further detail on different age categories, but this metric provides the most consistent measure over time. The most noticeable trend over the last 20 years has been an increase in residents with some form of postsecondary education.

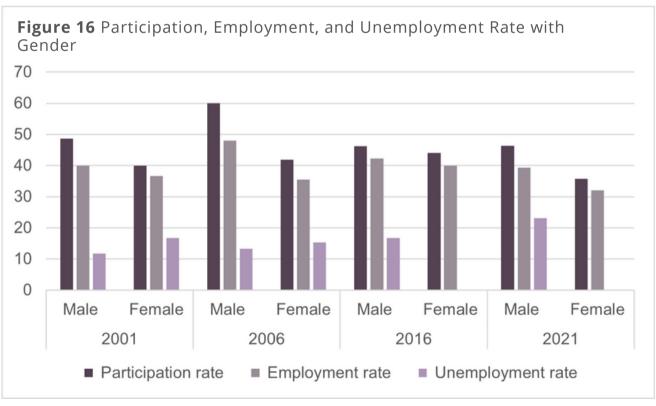


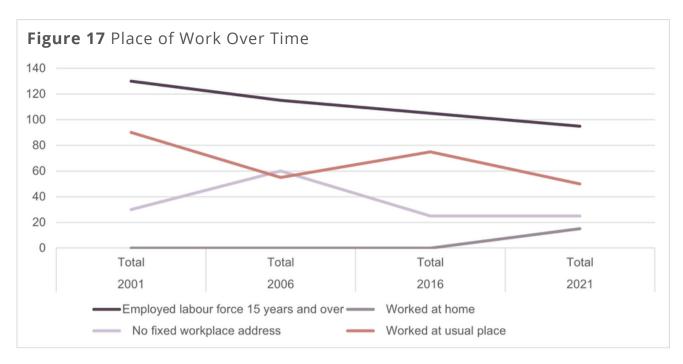
# **Employment**

Sayward has a lower participation rate and employment rate than the rest of British Columbia (Figure 14), to be expected in a community with an older population and more retirees. Participation rate refers to how many people are in the labour force (on the week the census was administered) divided by the total number of people 15 years and older. The labour force refers to both employed and unemployed residents. The employment rate refers to how many people are employed (on the week the census was administered) divided by the total number of people 15 years and older. In other words, it assumes that 15 years and older is "working age" and measures what percentage of working age residents are employed. Unemployment rate specifically measures the percentage of the labour force "who, during reference week, were without work, were available for work and were either on temporary layoff, had looked for work in the past four weeks or had a job to start within the next four weeks" (Statistics Canada, 2022). This excludes retirees and persons unable to work due to disabilities, as it only includes those available for work. Notably, the rate of 17% is still significantly higher than the BC average of 8% in 2021. This may be due to a lack of employment opportunities nearby, due to the remoteness of the Village. Figure 15 shows a slight decrease of participation and employment rate and slight increase to unemployment rate, since 2001.









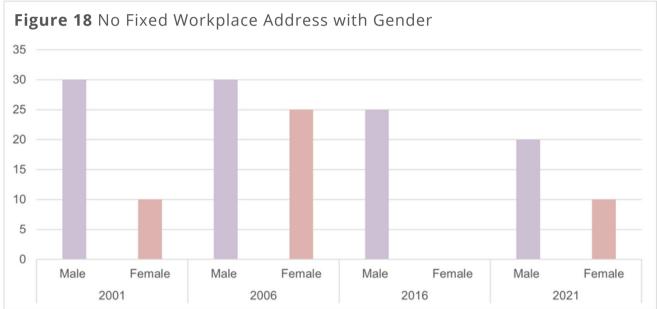


Figure 16 analyses the gendered component to employment, showing that women have a lower rate of participation and employment, but also (since 2016 at least) a significantly lower rate of unemployment.

Figure 17 shows that most employed persons work at a usual/fixed workplace address. The rise in working from home from 0 10 15 people in the 2021 census is likely related to the Covid-19 pandemic. There were no gender disparities in any category except for those working at "no fixed workplace address"; Figure 18 shows that men are much more likely to fall in this category.

There are two main measures of occupational trends on the census: occupation and industry. The categories of occupations over the last 20 years have remained fairly consistent. Shown in Table 1 and Figure 19, jobs unique to primary industries have been decreasing. Management occupations, sales and service occupations have also been on a downward trend. Business, finance and administration has been slowly rising. Trades, transport and equipment operation has generally been rising, despite a downturn between 2016 and 2021.

Over the last 20 years, resource based primary industries (forestry, agriculture, aquaculture) have remained the main industry in the Village (Table 2). There has been a gradual decline from 45 to 30 residents in this industry, from 2001 to 2021. In 2016 the category of accommodation and food services was added, showing 25 residents employed in 2016 and a significant decline to 10 residents in the 2021 census. It is undeniable that the Covid-19 pandemic has had a negative influence on tourism, accommodation and food services over the last three years. Many industry categories have changed between censuses and those that are not consistent between years are indicated by an "x".

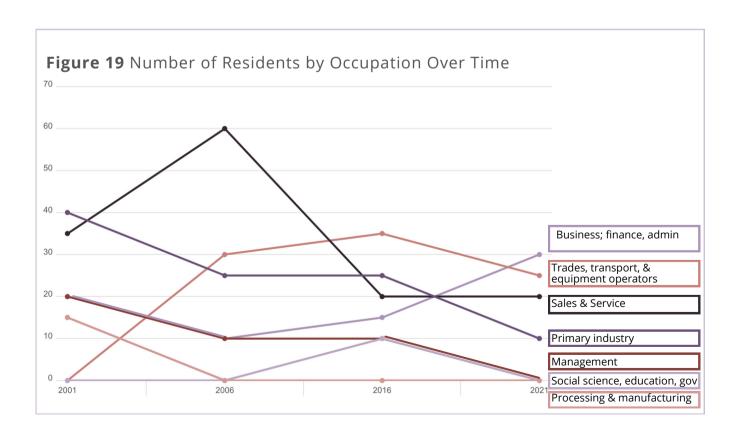


 Table 1 Occupation Categories Over Time Total, Male, and Female

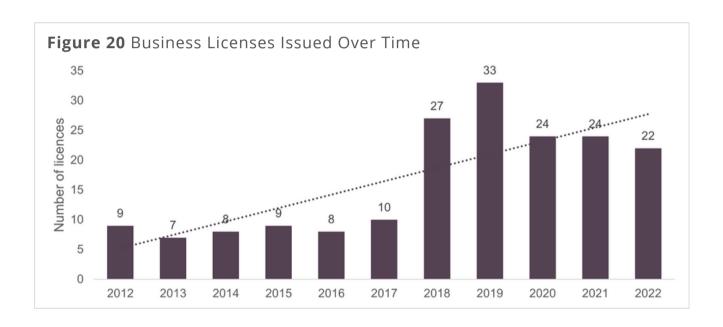
	2001		2006			2016			2021			
Total, Male (M) and Female (F)	Total	М	F	Total	М	F	Total	М	F	Total	М	F
# Experienced labour force	150	85	60	140	75	65	115	60	55	115	70	45
Business; finance and administration occupations	20	0	20	10	0	10	15	0	10	30	10	20
Trades; transport and equipment operators and related occupations	0	0	0	30	25	0	35	35	0	25	25	0
Sales and service occupations	35	10	25	60	20	35	20	0	25	20	0	15
Occupations unique to primary industry	40	40	0	25	25	10	25	20	10	10	0	10
Management occupations	20	15	10	10	0	10	10	0	10	0	0	0
Health occupations	15	10	15	0	0	0	10	0	0	0	0	0
Social science; education; government service and religion	0	0	0	0	0	0	10	0	0	0	0	0
Occupations unique to processing; manufacturing and utilities	15	15	0	0	0	0	0	0	0	0	0	0
Natural and applied sciences and related occupations	0	0	0	0	0	0	0	0	0	0	0	0
Art; culture; recreation and sport	0	0	0	0	0	0	0	0	0	0	0	0

 Table 2 Industry Categories Over Time Total, Male, and Female

	2001		2006			2016			2021			
Total, Male (M) and Female (F)	Total	М	F	Total	М	F	Total	М	F	Total	М	F
Total - Experienced labour force	145	85	60	140	75	65	120	60	55	115	70	45
Wholesale and retail trade	15	0	10	10	0	10	10	0	10	0	0	0
Finance and real estate	10	0	0	0	0	0	0	0	0	0	0	0
Accommodation and food services	х	х	x	х	X	x	25	0	25	10	0	0
Transportation and Warehousing	х	х	х	х	х	х	10	0	10	10	10	0
Arts, entertainment and recreation	х	х	х	х	Х	х	0	0	0	10	0	10
Public Administration	x	x	x	х	х	x	0	10	0	10	0	10
Manufacturing and construction industries	15	15	0	25	10	10	10	0	0	10	0	0
Agriculture and other resource- based industries	45	45	0	40	35	0	40	50	10	30	20	15
Business services	25	0	15	10	10	0	Х	х	х	Х	х	х
Health and education	10	0	10	10	0	0	x	х	х	х	х	х
Other services	30	10	25	50	15	35	0	0	0	0	0	0

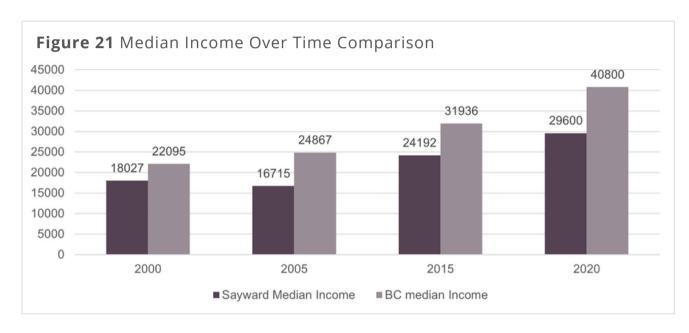
# **Business Ownership**

The last 10 years has seen a significant increase in businesses opened in the Village of Sayward. While the five years prior to 2017 saw less than 10 licenses issued each year, the 5 years since have seen an average of 26 licenses issued per year. While the peak was in 2019 at 33 licenses, the decrease after may have been related to the Covid-19 pandemic. This could see an increase as business rebounds, if commercial endeavours are encouraged.



#### Income

Sayward has a lower median income (Figure 21) and average income (Figure 23) than the rest of BC. This is not surprising in the context of an older population where many people are retired, but bears consideration in municipal matters.



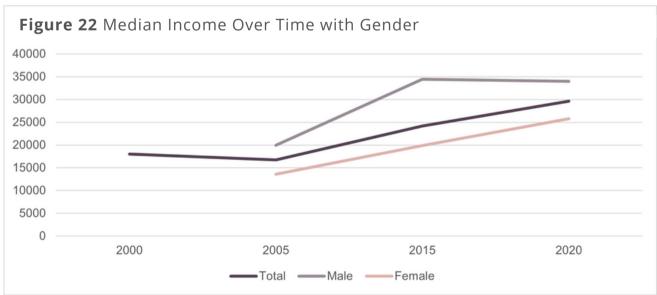


Figure 22 and Figure 24 show that women in Sayward earn significantly less than men, whether looking at median or average incomes. Notably, average incomes in Sayward have barely increased between 2015 and 2020, especially when compared to the rest of BC. Median incomes have risen, meaning there is greater income disparity on the low income side of the equation.





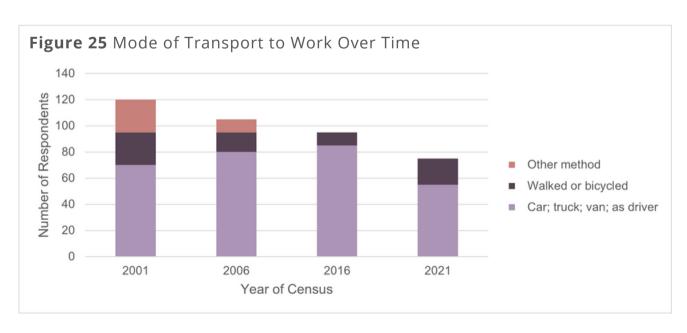
# **Commuting Habits**

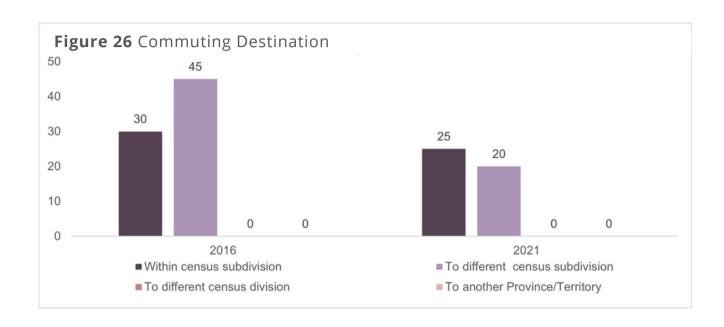
An important aspect of employment is the commute required to access gainful employment. Note that all commuting data uses 25% sample data, so there is a higher margin of error.

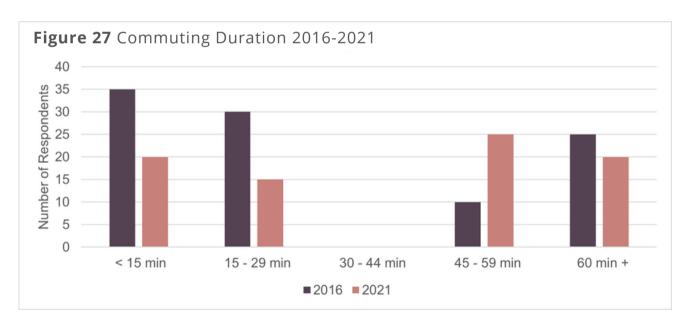
Further commutes can mean increased costs, especially for fuel, insurance and maintenance when travelling by private vehicle. Figure 25 shows that a private vehicle has been the main mode of transport to work for Sayward residents. However, the number of people walking or cycling to work seems to have doubled between 2016 and 2021.

Figure 26 shows that most residents commute within their census subdivision (the municipality) or to a different census subdivision (another municipality or rural electoral area) within the same census division (Strathcona Regional District). No one was counted as commuting to a different regional district or province in 2016 nor 2021, which may be due to rounding.

Figure 27 explores commuting duration and shows that there has been a decrease in commutes under 30 minutes between 2016 and 2021. In the same period, the number of residents commuting between 45-59 minutes has more than doubled.



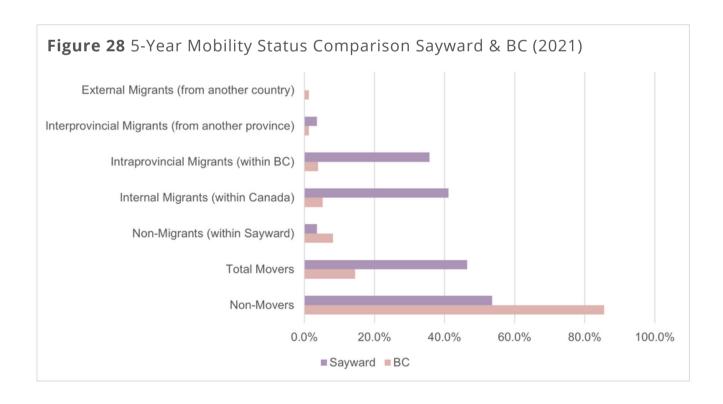


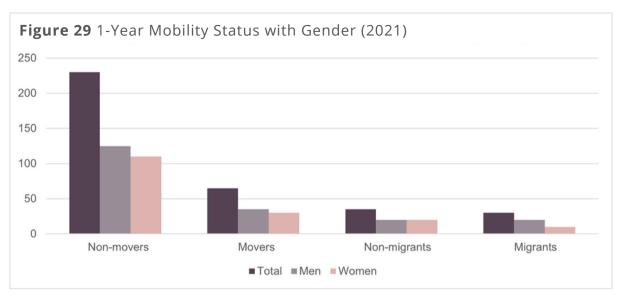


# **Mobility & Migration**

Mobility measures the level of movement for residents' primary addresses, asking where the respondent lived 1 year ago and 5 years ago. Residents of the Village of Sayward are significantly more mobile than the rest of the province. The 5-year mobility status in 2021 showed that 46% of residents had moved in the last 5 years, 3 times the provincial average (Figure 28). Notably, the majority of these movers are internal migrants, meaning they are coming from an address outside the Village but from within BC. Table 3 provides a detailed look at 5-year mobility trends over time, with definitions for each of the census categories.

The 1-year mobility status from 2021 shows that there were more non-migrants (residents moving to a different address within the Village) than internal migrants (Figure 29). Compared to the 5-year mobility status, where this is inverted, movers were much more likely to be migrants from outside the Village and men were more likely to have moved, while women were more likely to be non-movers (Figure 30).





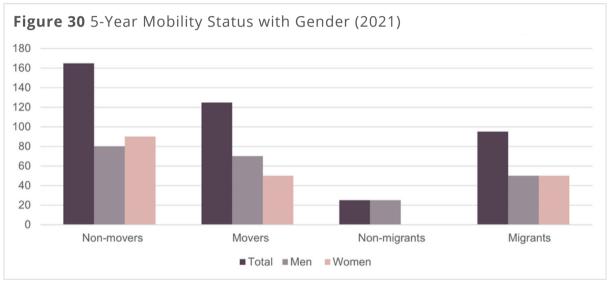


Table 3 5-Year Mobility Status Over Time

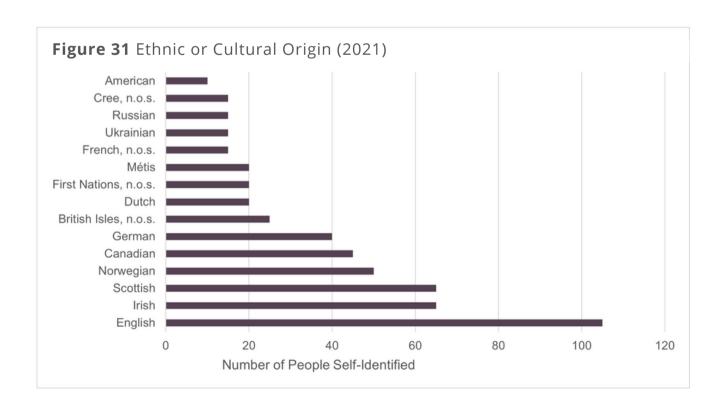
5-year Mobility			2006	2016	2021
		Non-Movers	150	165	150
	Total Movers				130
	N	on-Migrants (within Sayward)	15	25	10
Movers		Internal Migrants (same regional district)	165	95	115
		Intraprovincial Migrants (same Province)	135	95	100
Migrants		Interprovincial Migrants (another Province)	30	0	10
		External Migrants (from another Country)	0	0	0

# **Ethnic & Cultural Origins**

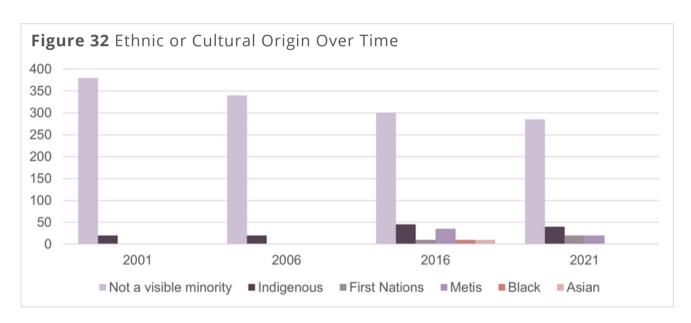
There have been many changes over the years in regard to how ethnic and cultural origin are defined and framed in the census. This is often due to changing awareness of how previous categories and framing were inaccurate, offensive, or downright racist. There will always be further improvements that can be made and this will likely be an ongoing process for Statistics Canada.

Figure 31 shows the ethnic and/or cultural origin of residents from the 2021 census. Western European origins are most commonly represented. There are many more categories in the census than those listed, but those categories with no numbers associated are not represented in the charts.

Between different census years, the categories under ethnic and cultural origins have varied greatly. This means a direct comparison across time is not always possible. Figure 32 instead show only those categories that are consistent across time, while using the 2021 category names.

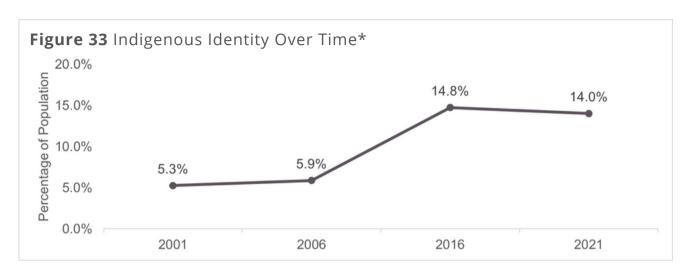


What can be seen is that the majority of residents have been mostly classified as "not a visible minority" (Figure 32). This term can be seen as problematic in itself, since it refers to racialized people as minorities regardless of the community composition. "'Visible minority' refers to whether a person is a visible minority or not as defined by the Employment Equity Act. The Employment Equity Act defines visible minorities as "persons other than Aboriginal peoples who are non-Caucasian in race or non-white in colour"" (Statistics Canada, 2022). First Nations and Métis were added as categories in the 2016 census, and both are counted within the Indigenous category, which is itself counted in the "not a visible minority" category.

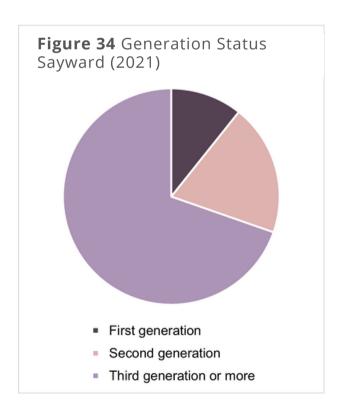


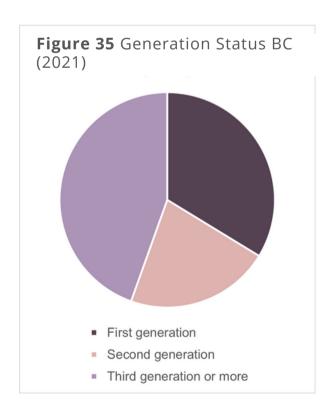
Terminology has also changed in regard to Indigenous Peoples and the census. The 2021 definition replaced the legal but outdated term 'Aboriginal' with the preferred term 'Indigenous'. Figure 33 shows a significant increase in Indigenous individuals living in Sayward over time. It should be noted that the cultural existence of Indigenous Peoples pre-dates the forming of Canada, so it is more appropriate to say Indigenous Peoples in Canada than "of Canada" as used in the definition by Statistics Canada.

Finally, Figures 34 & 35 compare the "generation status" of Sayward residents to BC overall. Sayward has significantly less first generation Canadian residents.



\*"Indigenous ancestry' refers to whether a person has ancestry associated with the Indigenous peoples of Canada that is First Nations (North American Indian) Métis and/or Inuit. Aboriginal peoples (referred to here as Indigenous peoples) of Canada are defined in the Constitution Act 1982 Section 35 (2) as including the Indian Inuit and Métis peoples of Canada. The term 'Aboriginal' has been replaced with the updated term of 'Indigenous' when referring to individuals who identify themselves as First Nations people Métis and/or Inuit." (Statistics Canada, 2022).





# Part II: Land Base

# **Physical Geography**

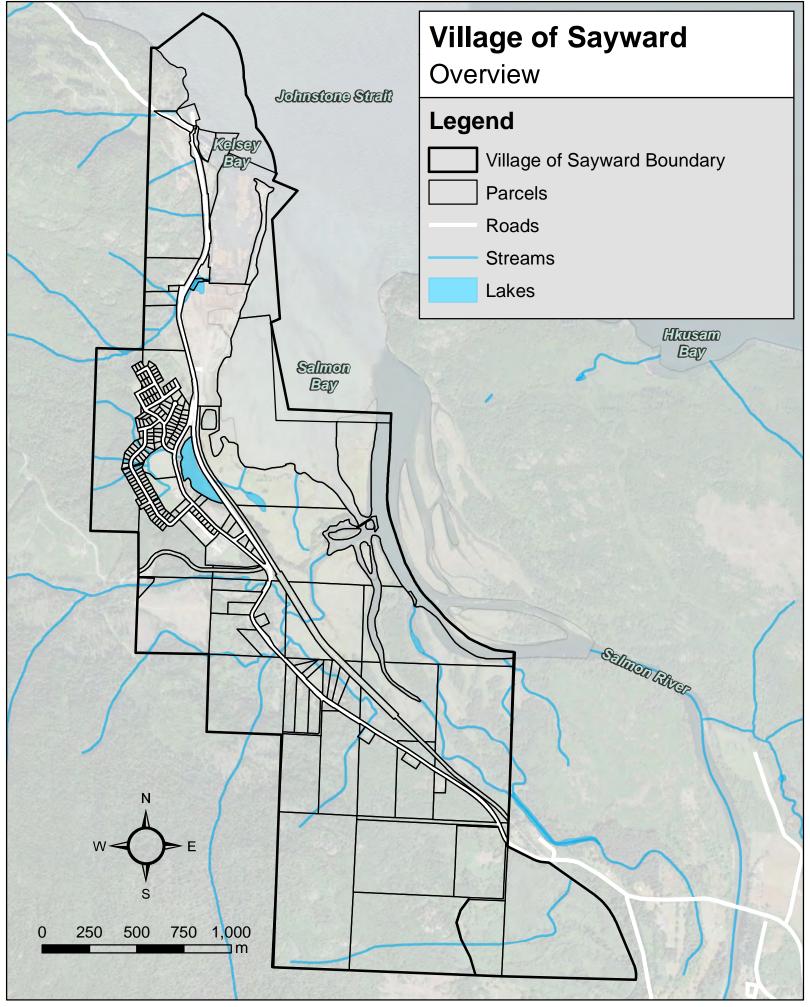
The main purpose of these maps is to identify lands that are subject to hazards and environmentally sensitive areas that should be considered when determining appropriate land uses. Water features and elevation (including bathymetric data) are also represented.

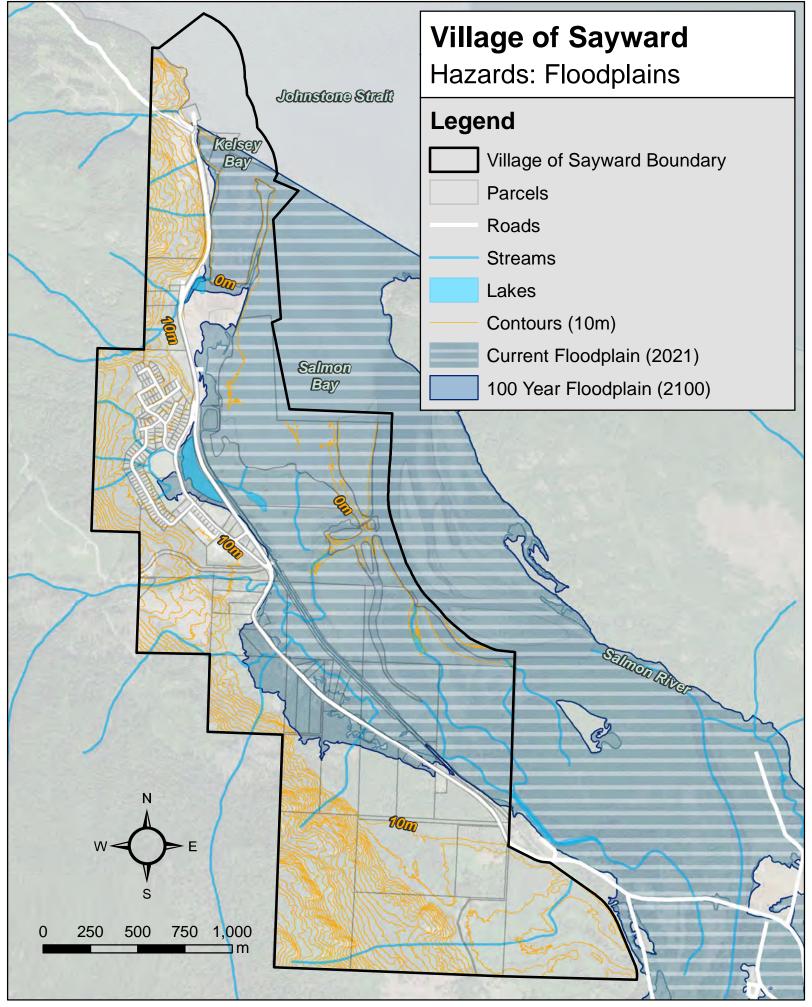
There are no known sand and gravel deposits that are suitable for future sand and gravel extraction within the Village boundaries.

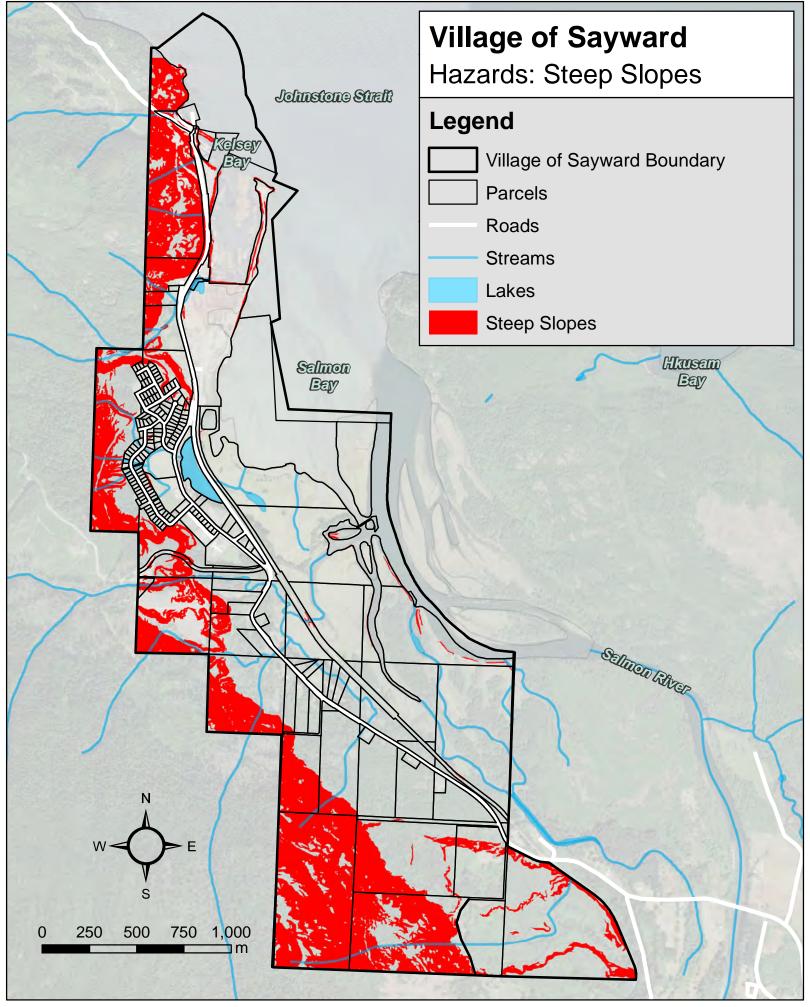
The only Biogeoclimatic Ecosystem Classification (BEC) zone prevalent in the Village of Sayward is the Coastal Western Hemlock (CWH) zone. Within the CWH zone, the Village of Sayward falls under two subzones called the Western Very Dry Maritime subzone (CWH xm 2) and the Submontane Very Wet Maritime subzone (CWH vm 1).

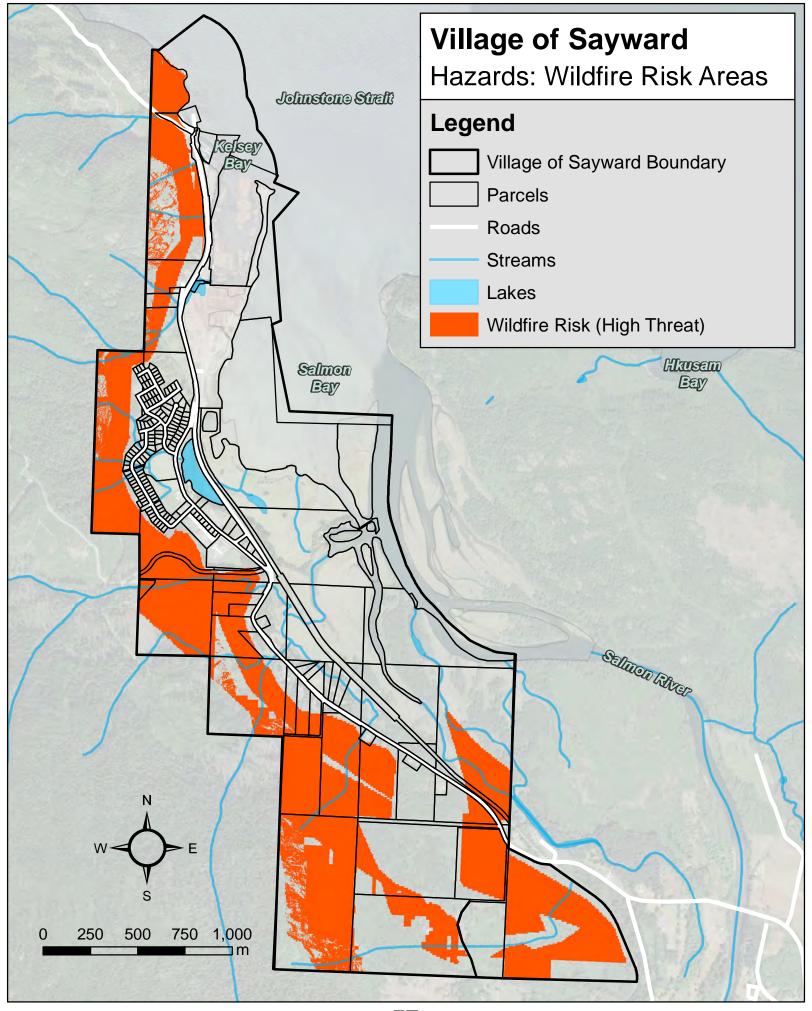
Overall, the CWH zone is classified as an ecosystem found along the lower elevations of coastal mountains on the west coast from Oregon to Alaska (BC Ministry of Forests, 1991, p.96). Areas within this zone experience on average large amounts of rainfall, cool summers, and mild winters compared to other zones in BC (BC Ministry of Forests, 1991, p.96). Tree species found in this zone are dependent on the elevation of the area, but can include western hemlock, western redcedar, douglas-fir, amabilis fir, yellow-cedar, grand fir, western white pine, bigleaf maple, red alder, black cottonwood, and sitka spruce (BC Ministry of Forests, 1991, p.96).

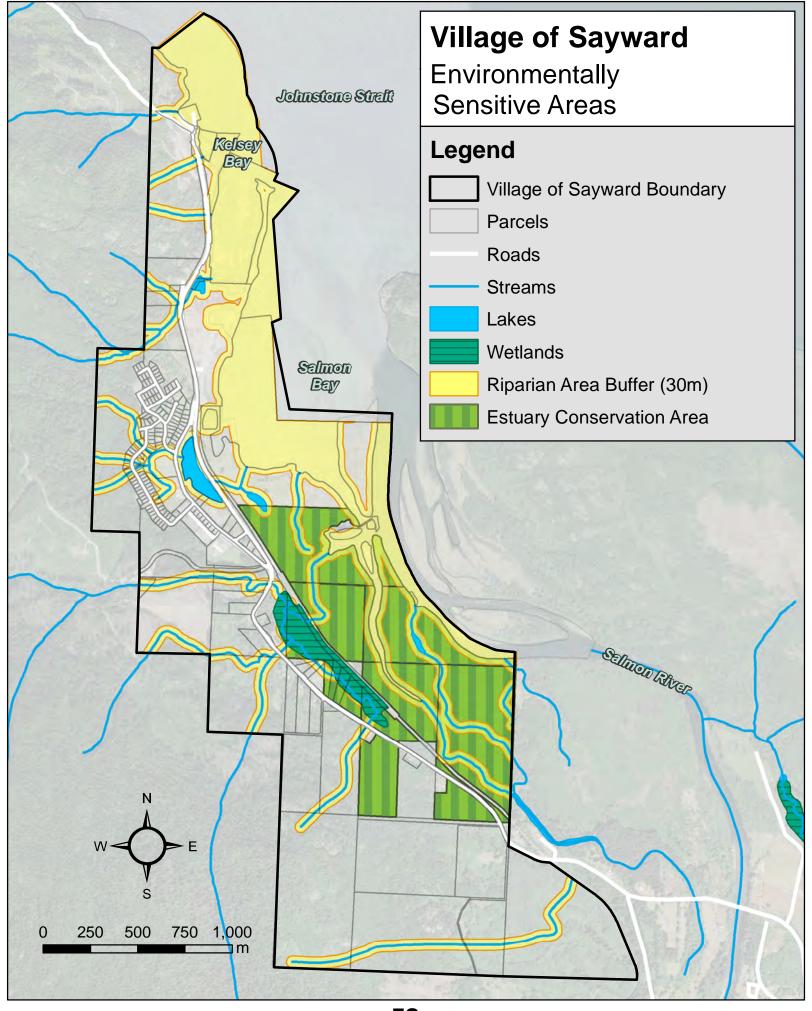
For wildlife, the CWH zone is home to species such as black bears, grizzly bears, black-tailed deer, cougars, gray wolves, Spotted Owls, Marbled Murrelet, the Pacific giant salamander, tailed frog, and anadromous salmon among others (BC Ministry of Forests, 1994, p.237).

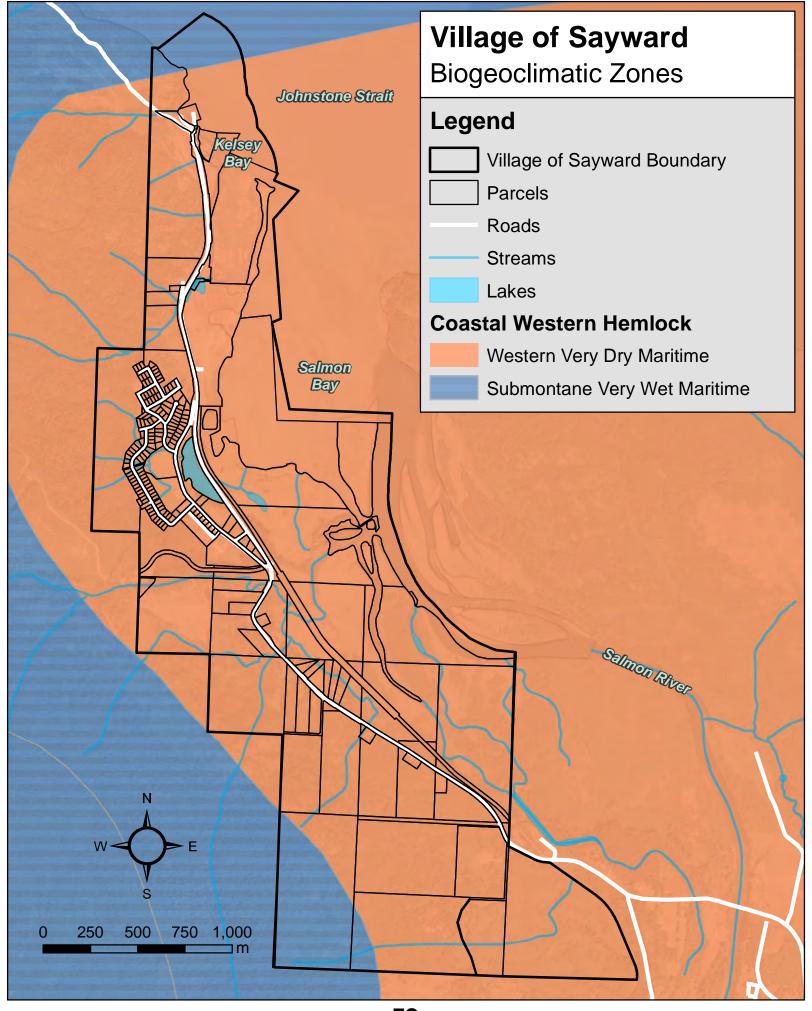


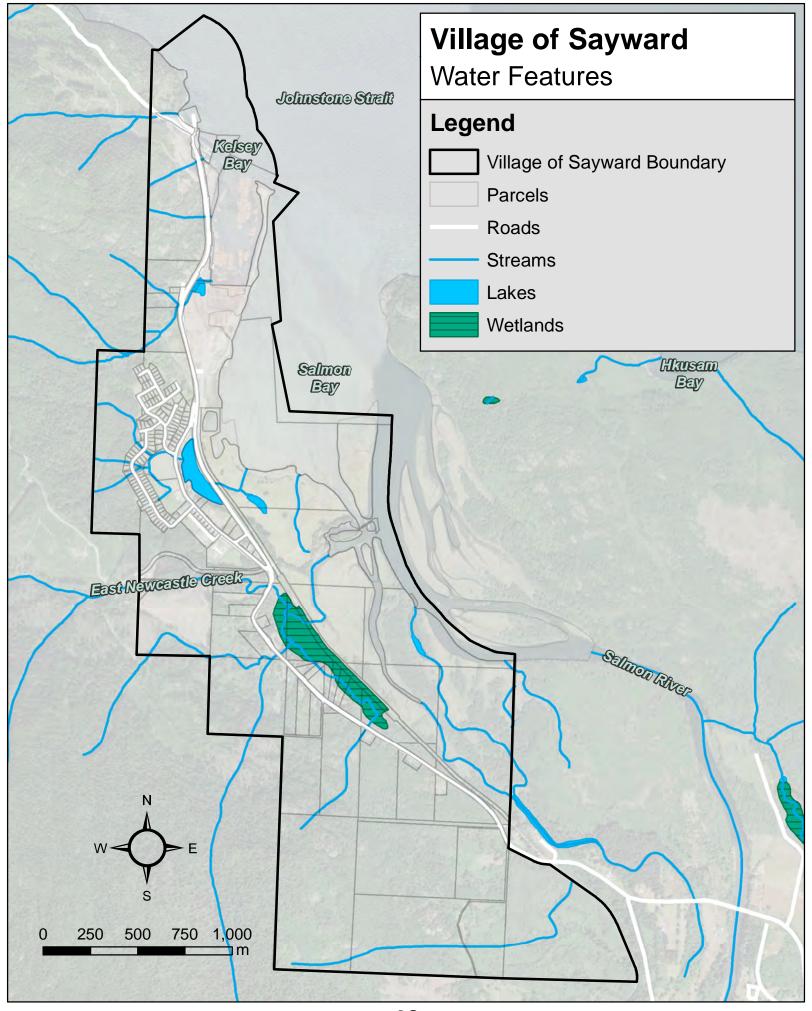


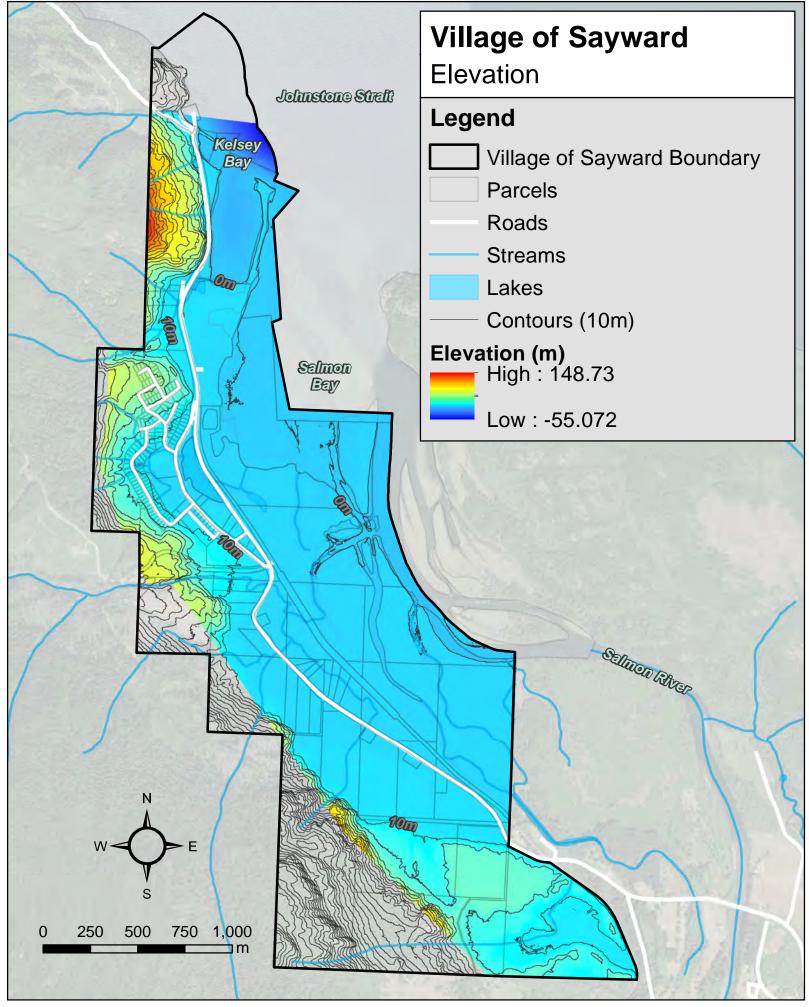












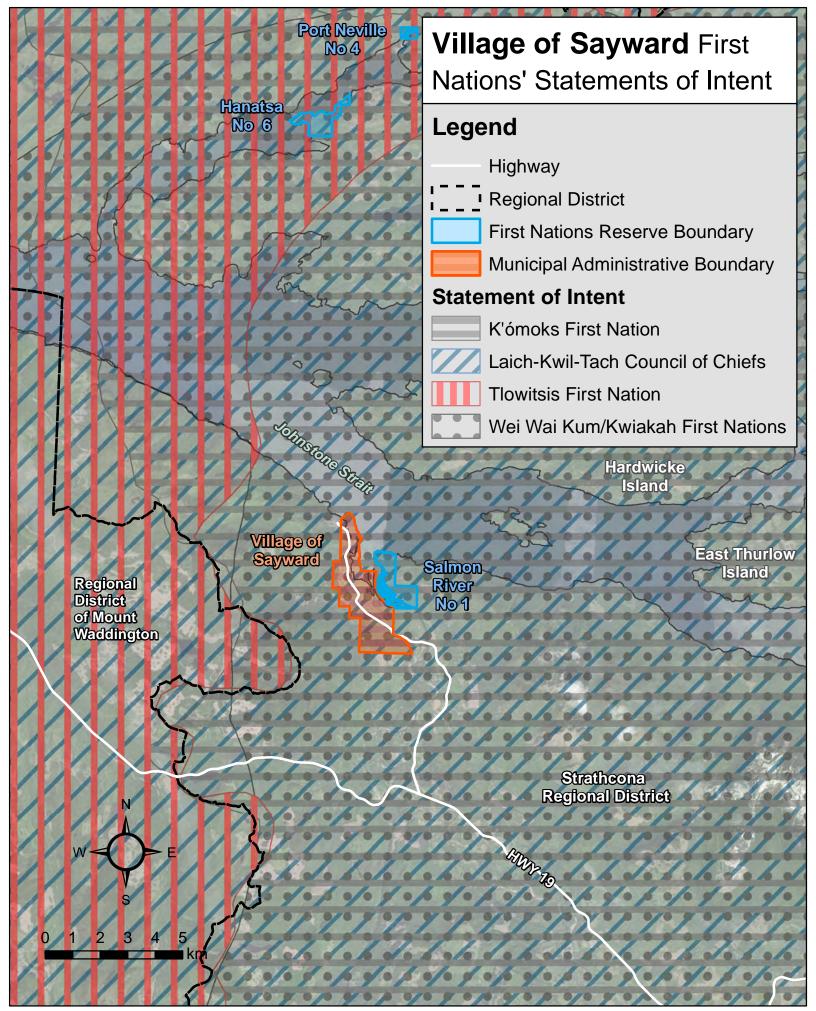
# **Human Geography**

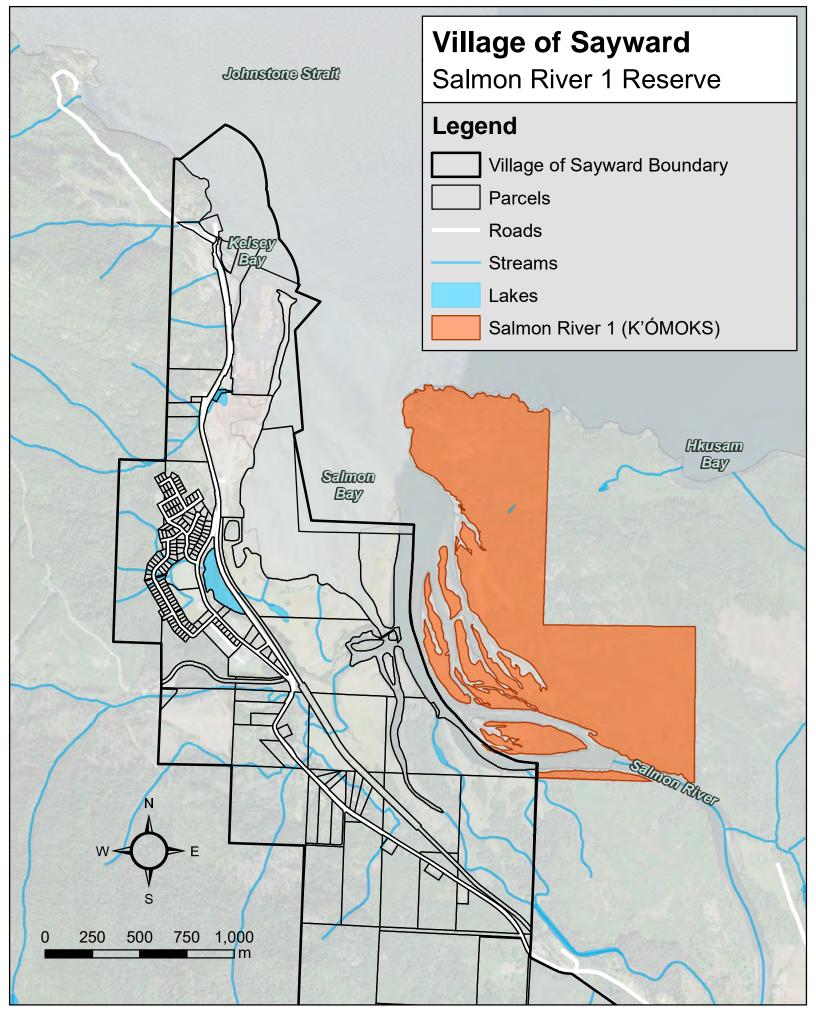
The purpose of these maps is to show the relation of human populations to land use in the immediate and surrounding area. This includes the present location and type of commercial, industrial, institutional, agricultural, recreational and public utility land uses. It also includes the present location and type of public facilities, including schools, parks and waste treatment and disposal sites. And finally, it includes utilities, including the present location of major road, water, sewer and stormwater systems.

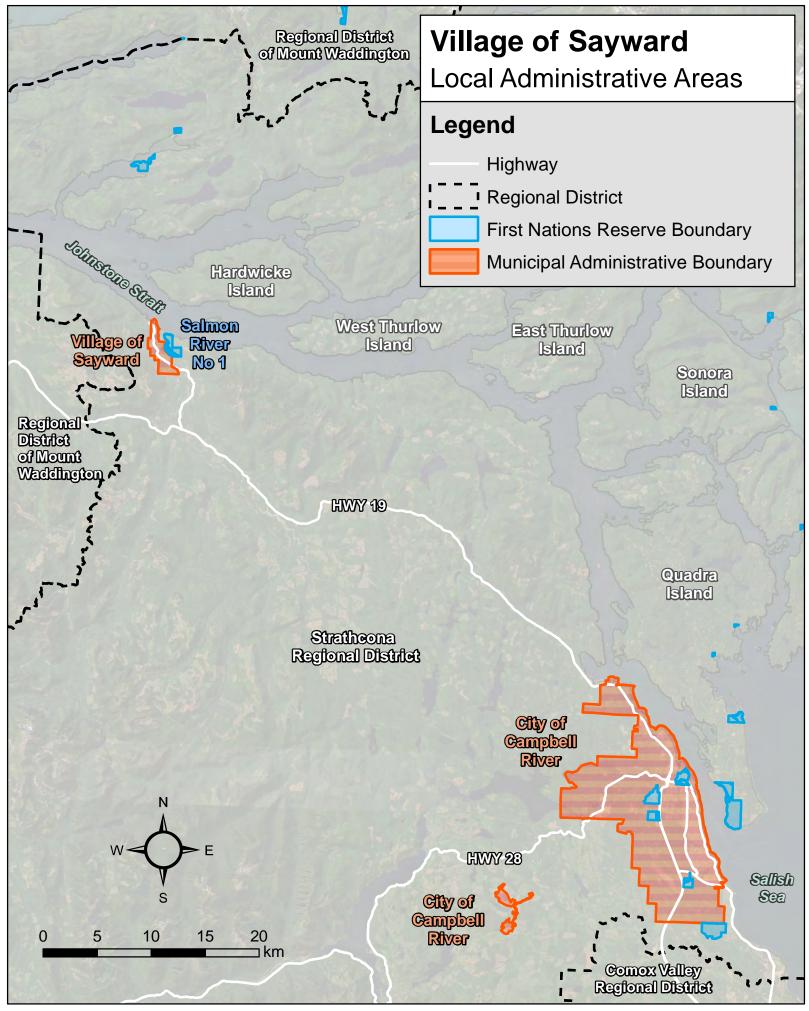
A First Nations' Statement of Intent (SOI) is the first step in the BC Treaty negotiation process. "The SOI must identify the First Nation's governing body for treaty purposes and the people that body represents and show that the governing body has a mandate from those people to enter the process. The SOI must describe the geographic area of the First Nation's distinct traditional territory and identify any overlaps with other First Nations." (BC Treaty Commission, 2022). The Village of Sayward is covered by three current SOIs: K'ómoks First Nation, Wei Wai Kum/Kwaiakah First Nations, and Laich-Kwil-Tach Council of Chiefs. Contact information (Table 4) was provided by the provincial GIS database along with the SOI map (page 43).

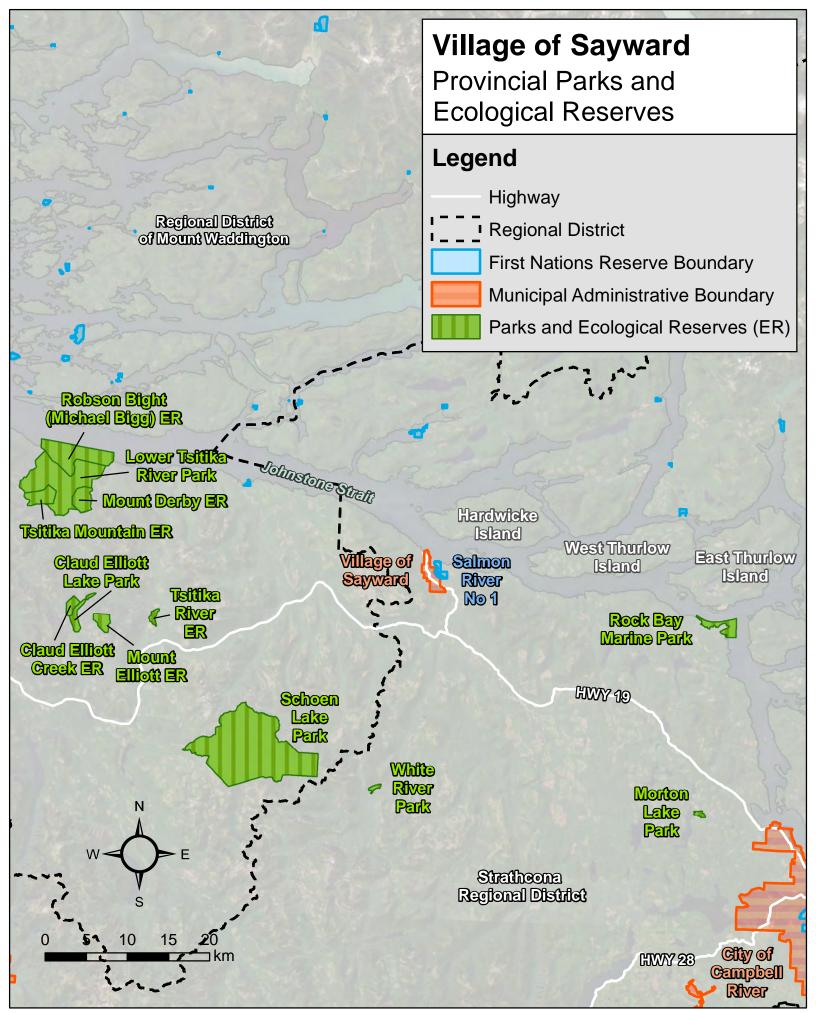
Table 4 Contact Information for First Nations with Treaty SOIs

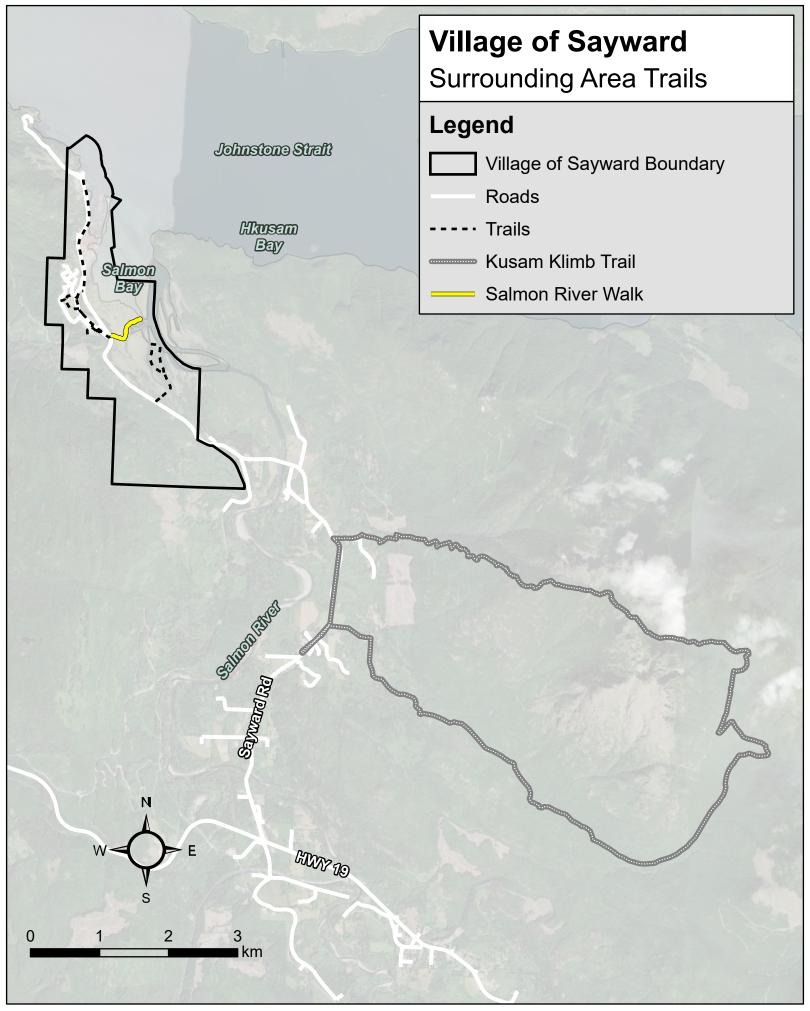
Contact Name	K'omoks First Nation	Wei Wai Kum Nation	We Wai Kai Nation	Nanwakolas Council
Contact Title	Chief and Council	Chief and Council	Main Office	
Contact Address	3330 Comox Road, Courtenay, BC V9N 3P8	1650 Old Spit Road, Campbell River, BC V9W 3E8	690 Headstart Crescent, Campbell River, BC V9H 1P9	1441 16th Avenue, Campbell River, BC V9H 1V8
Contact Phone	2503394545	2502866949	2509141890	2502867200
Contact Fax	2503397053	2502878838	2509141891	
Contact Email	reception@komoks.ca	referrals@weiwaikum.ca	referrals@weiwaikum.ca	referrals@nanwakolas.com

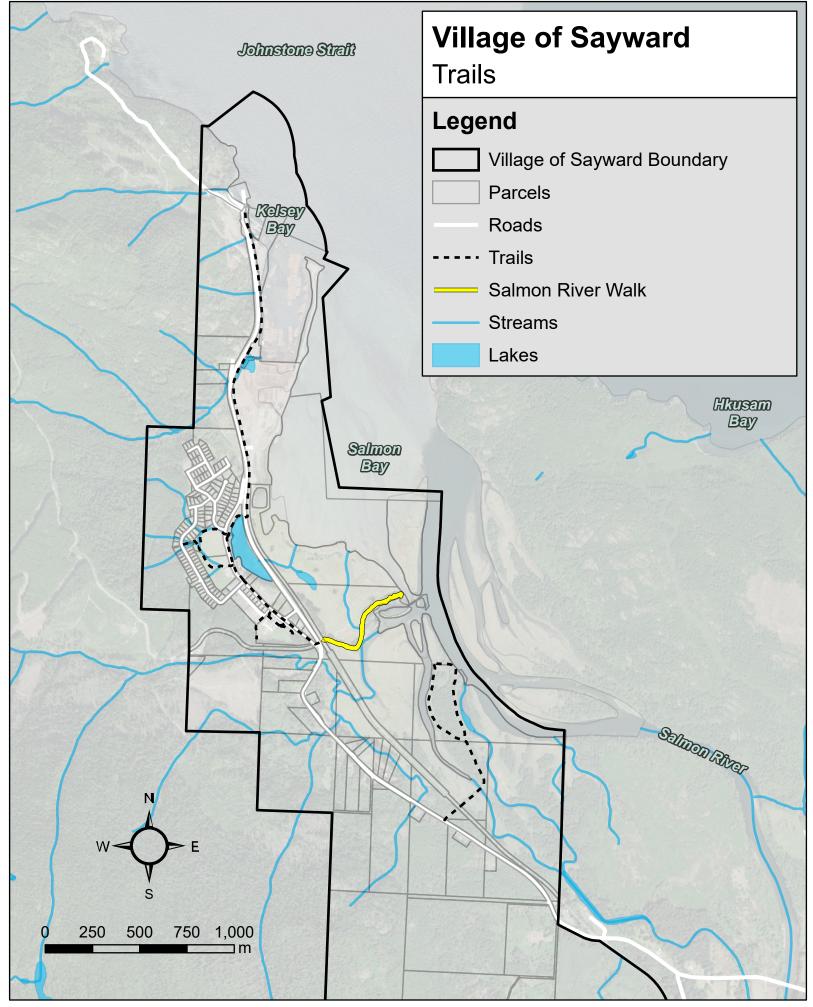


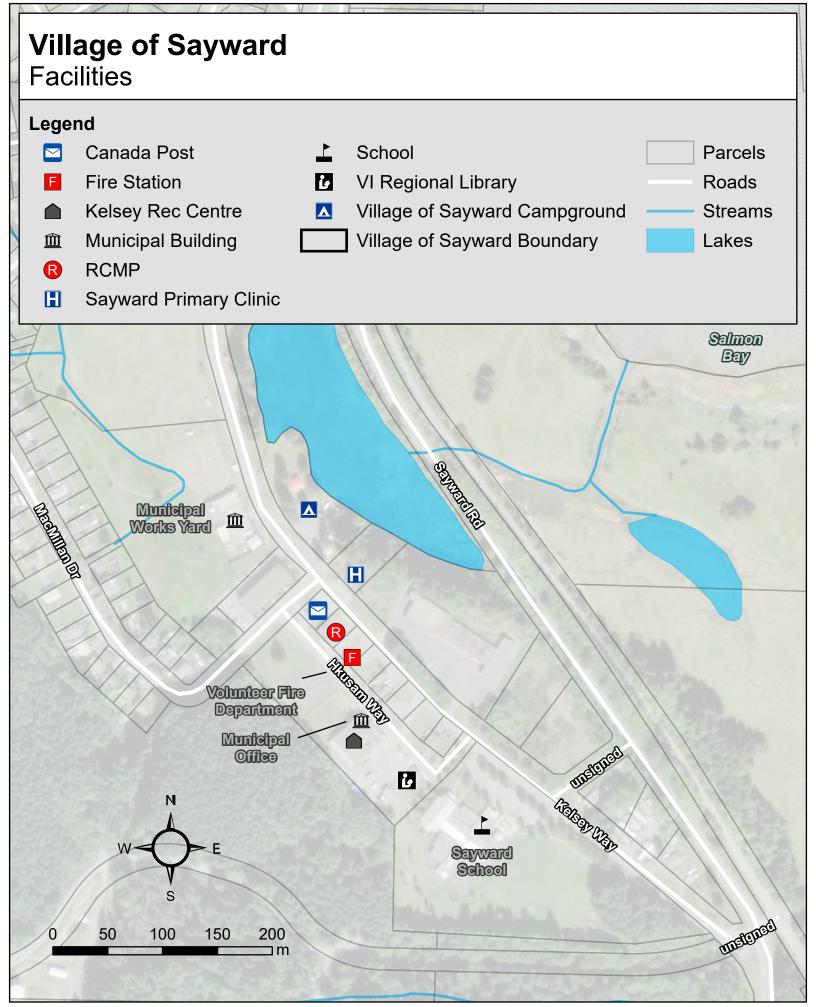


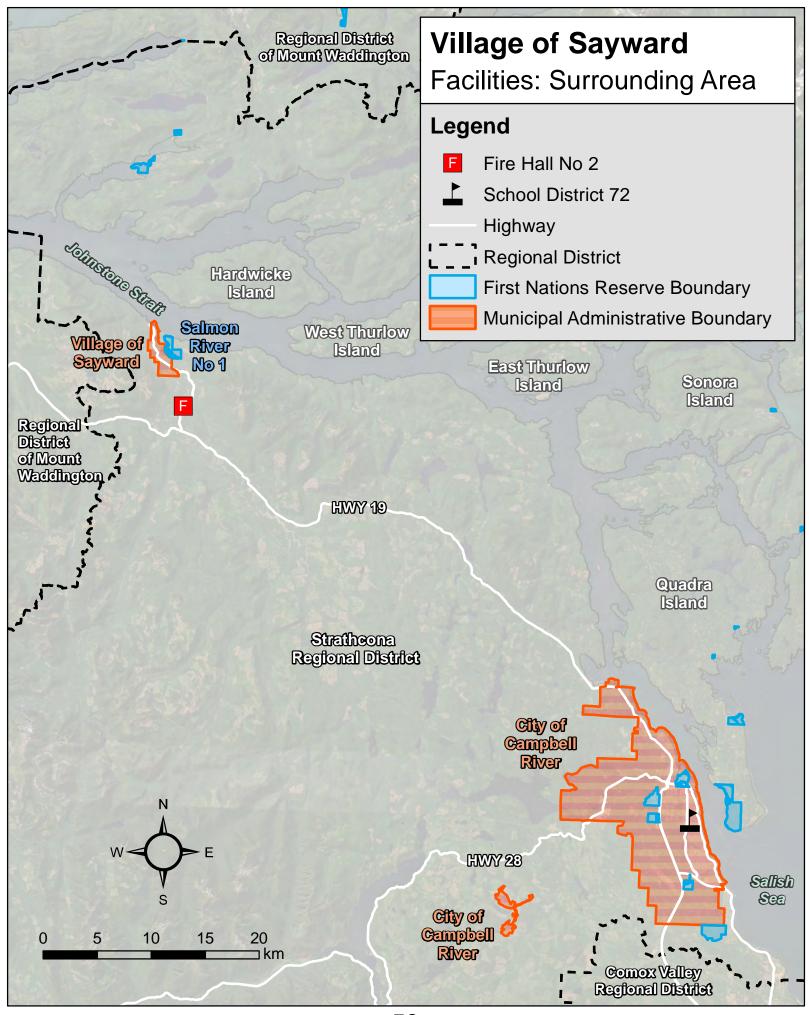


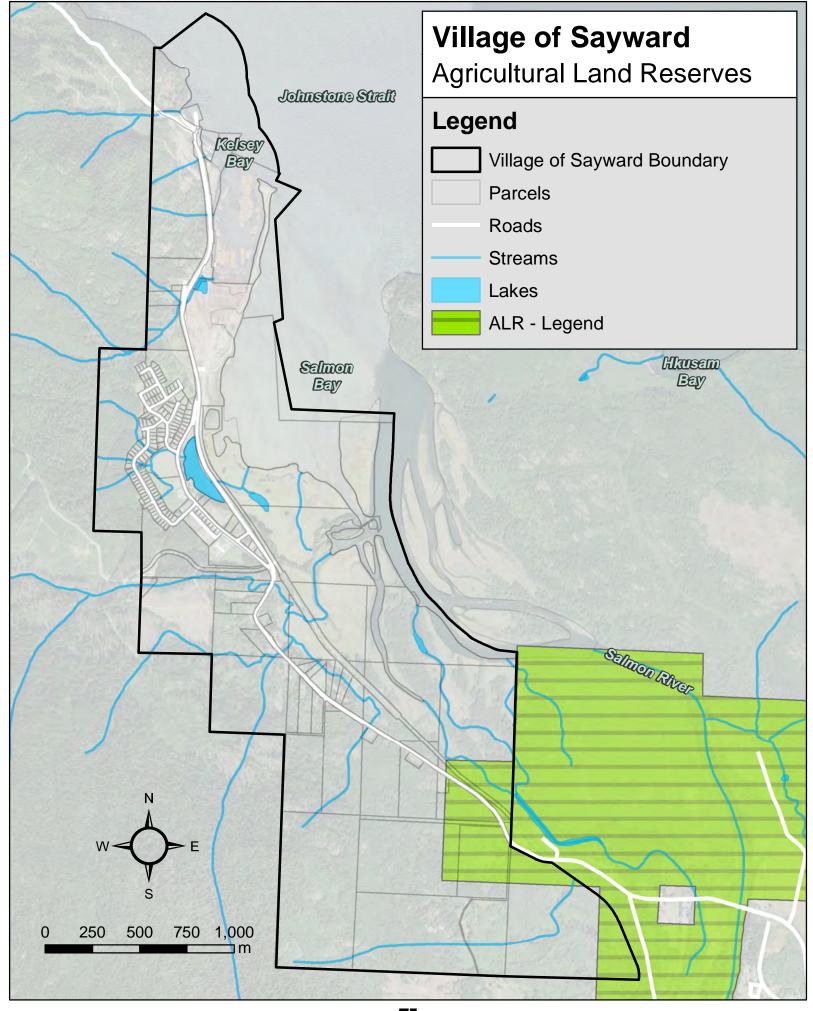


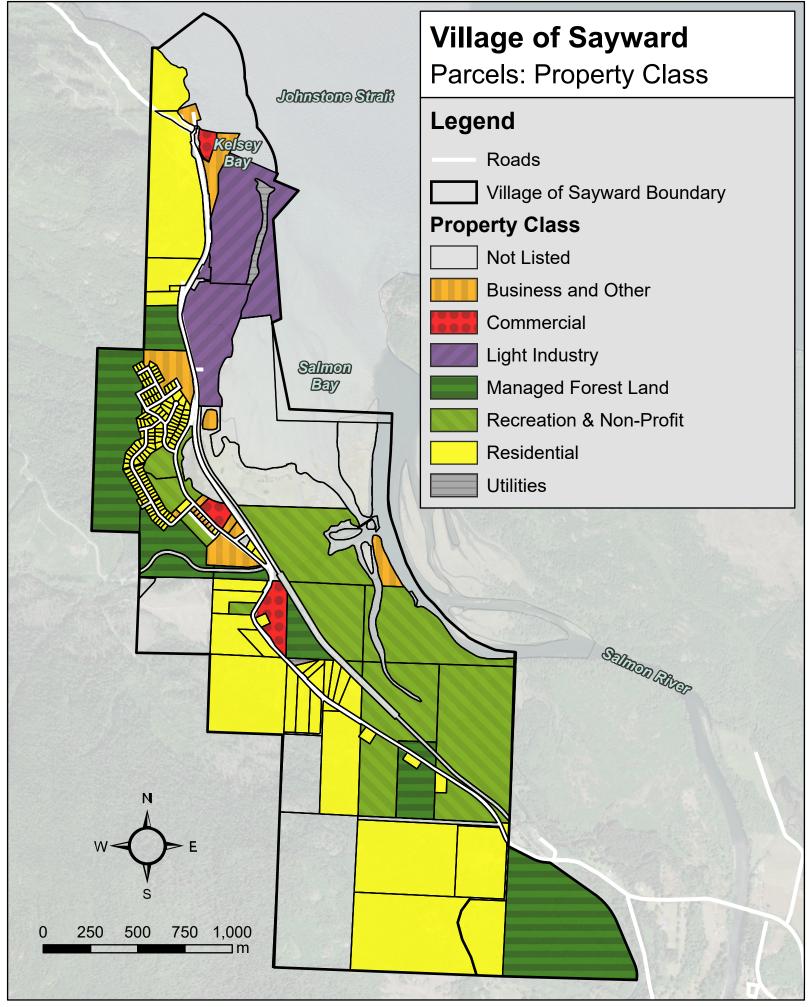


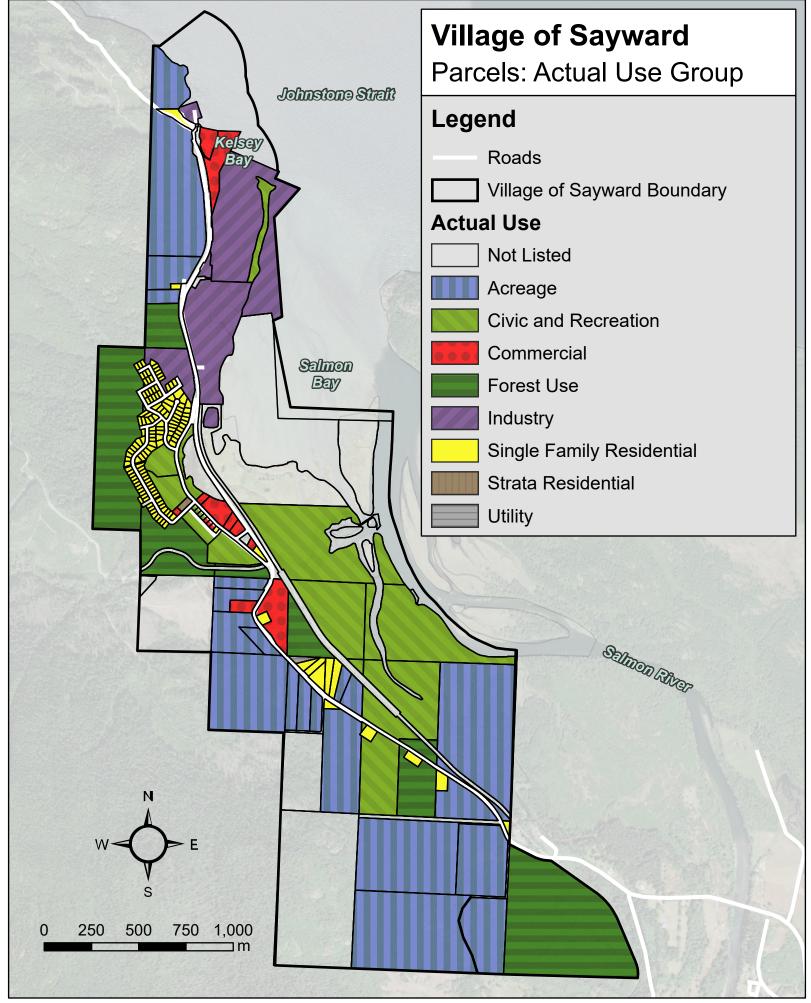


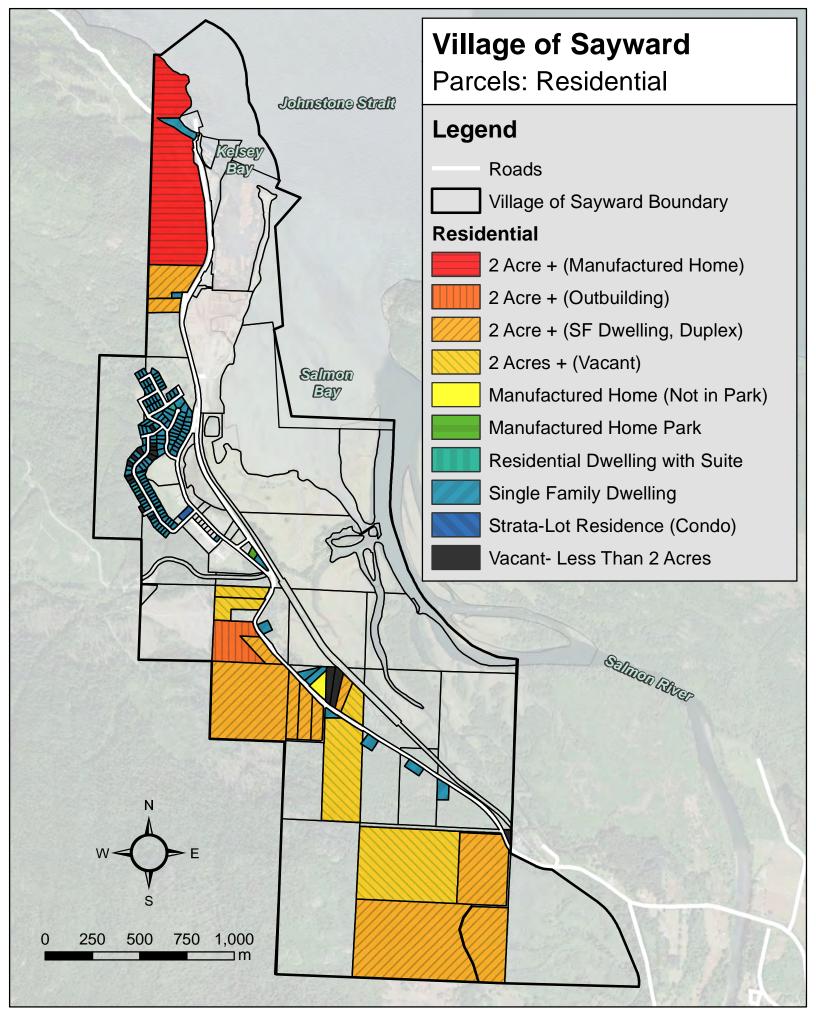


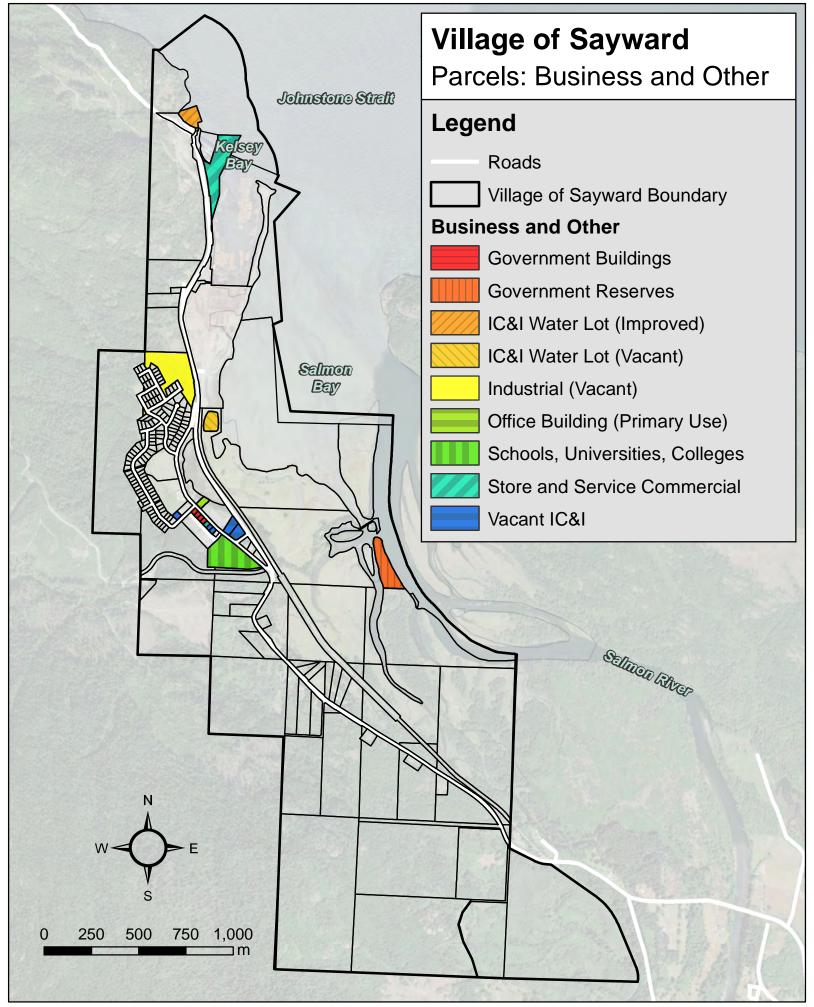


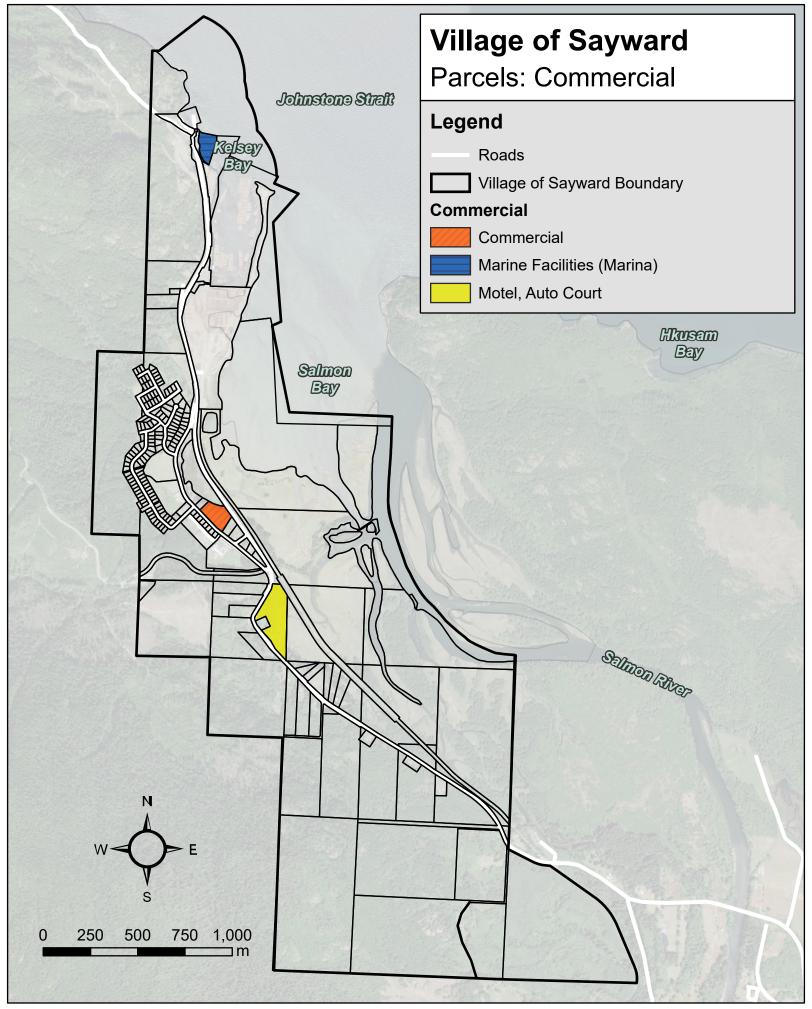


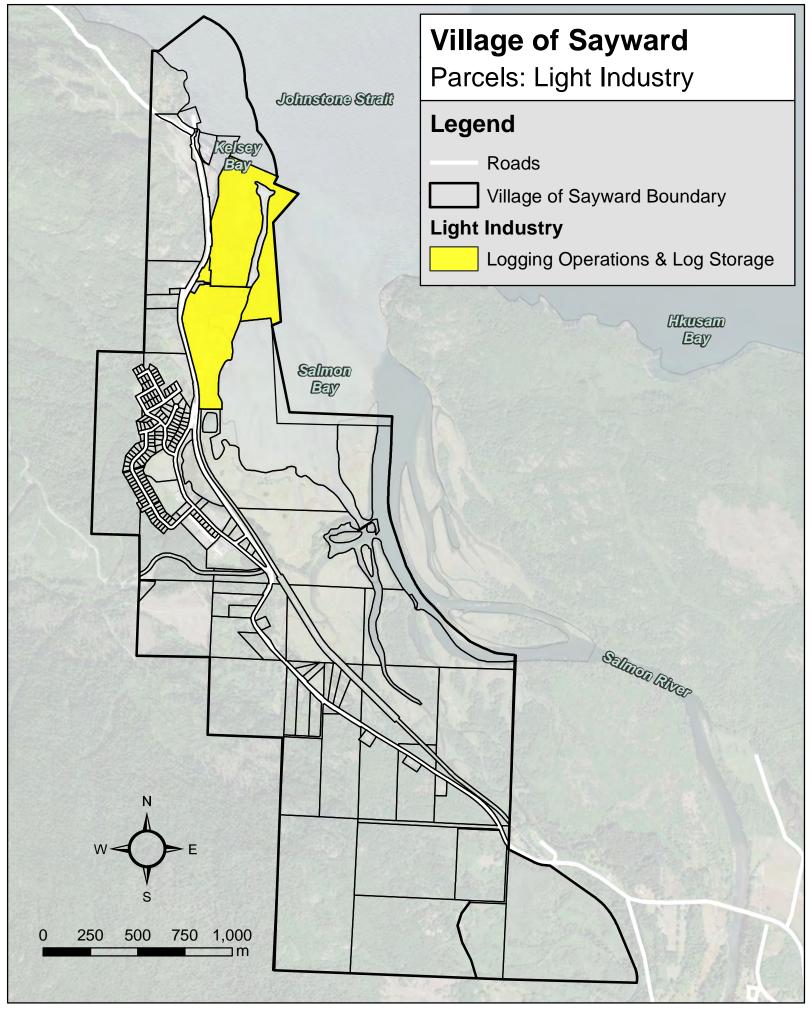


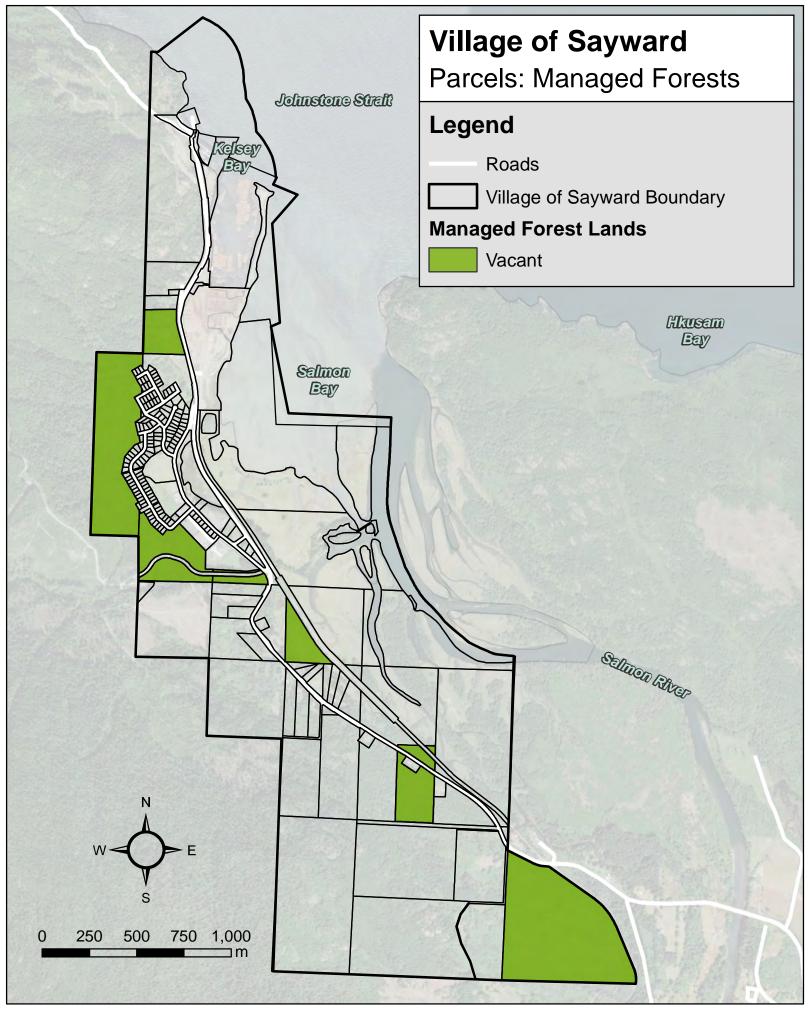


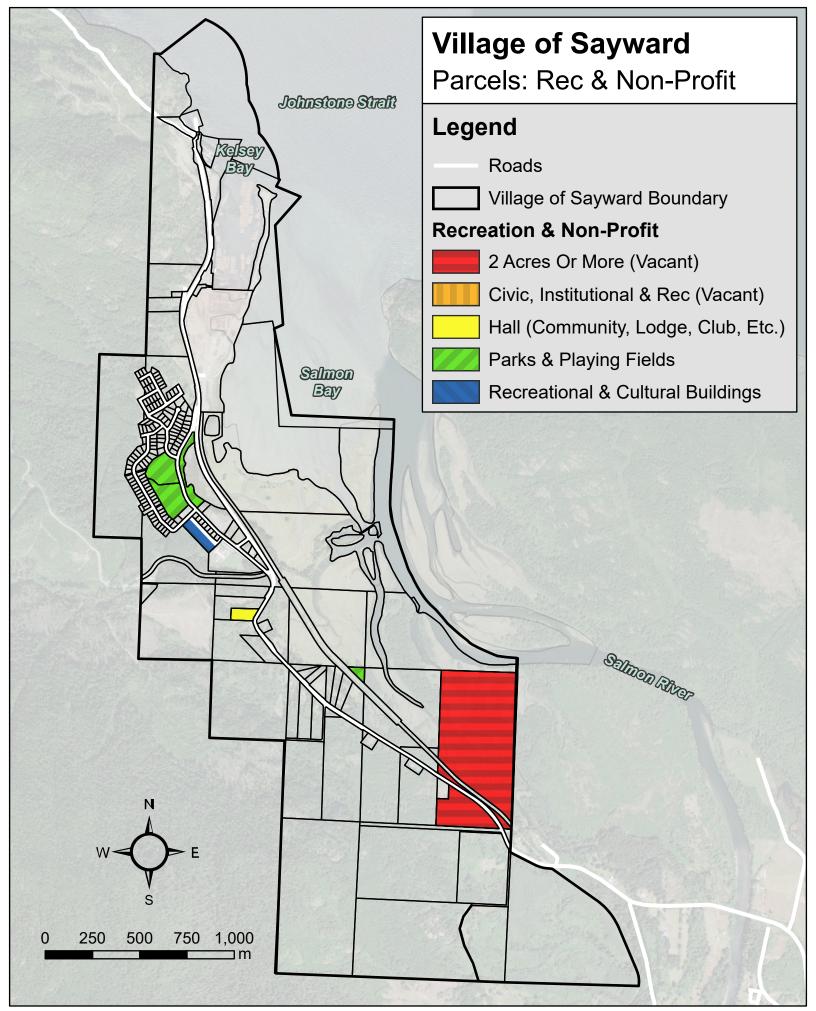


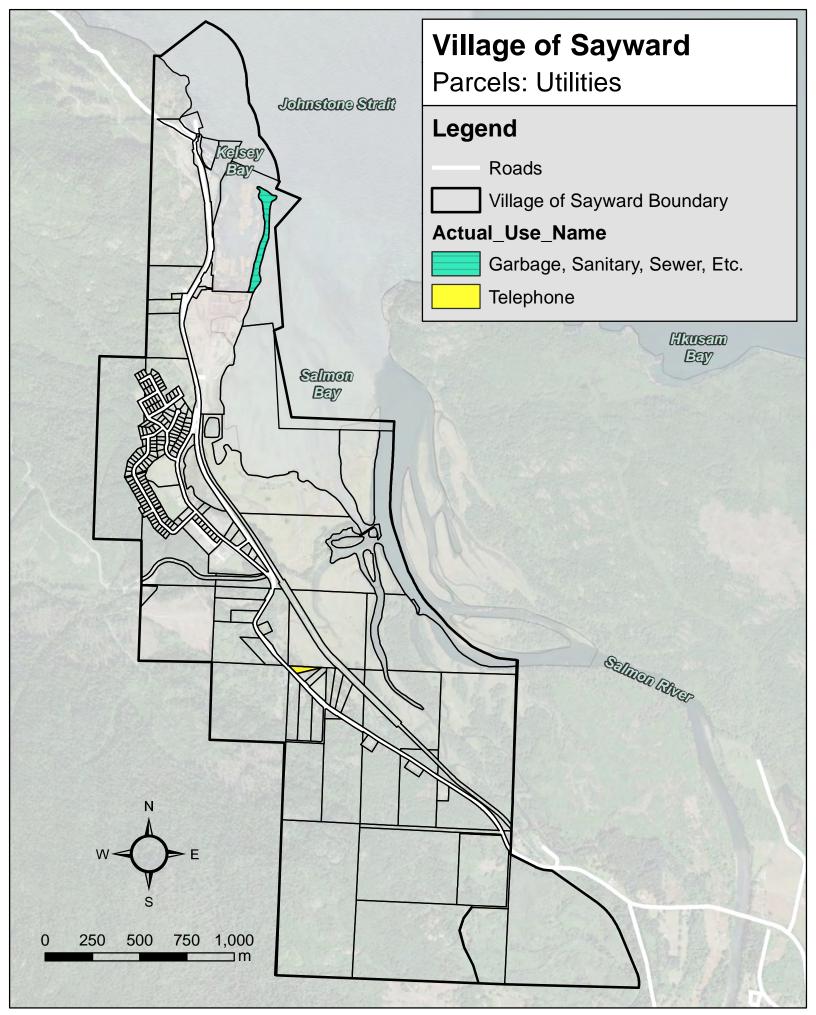


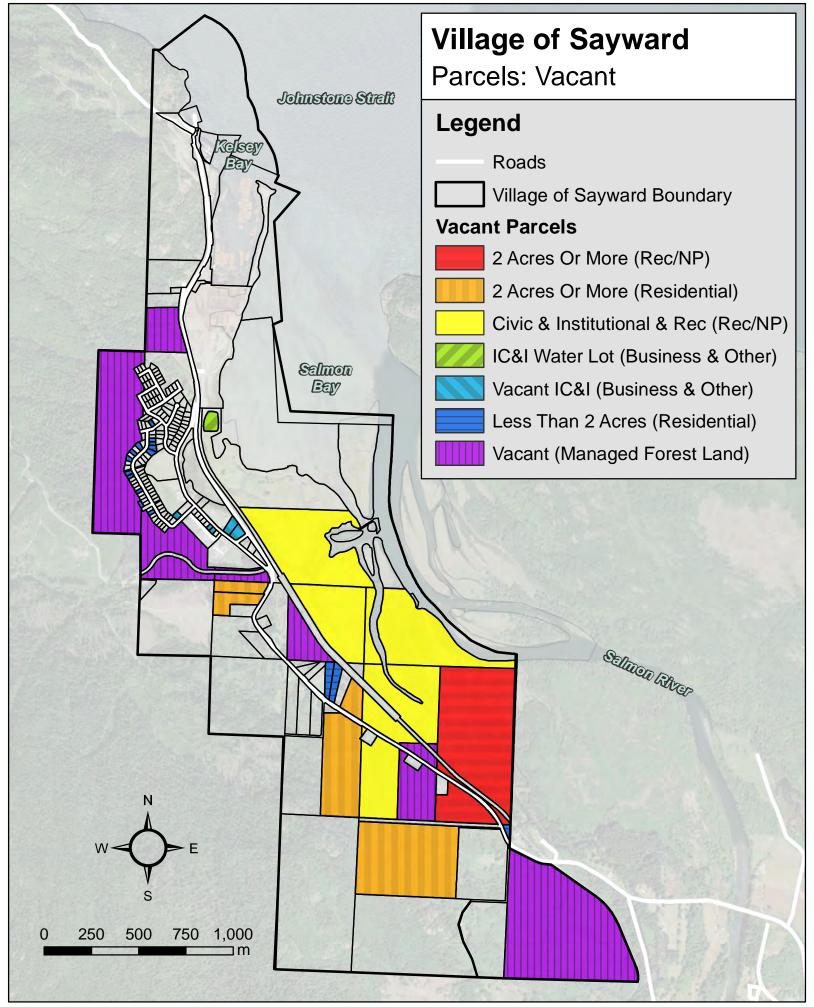


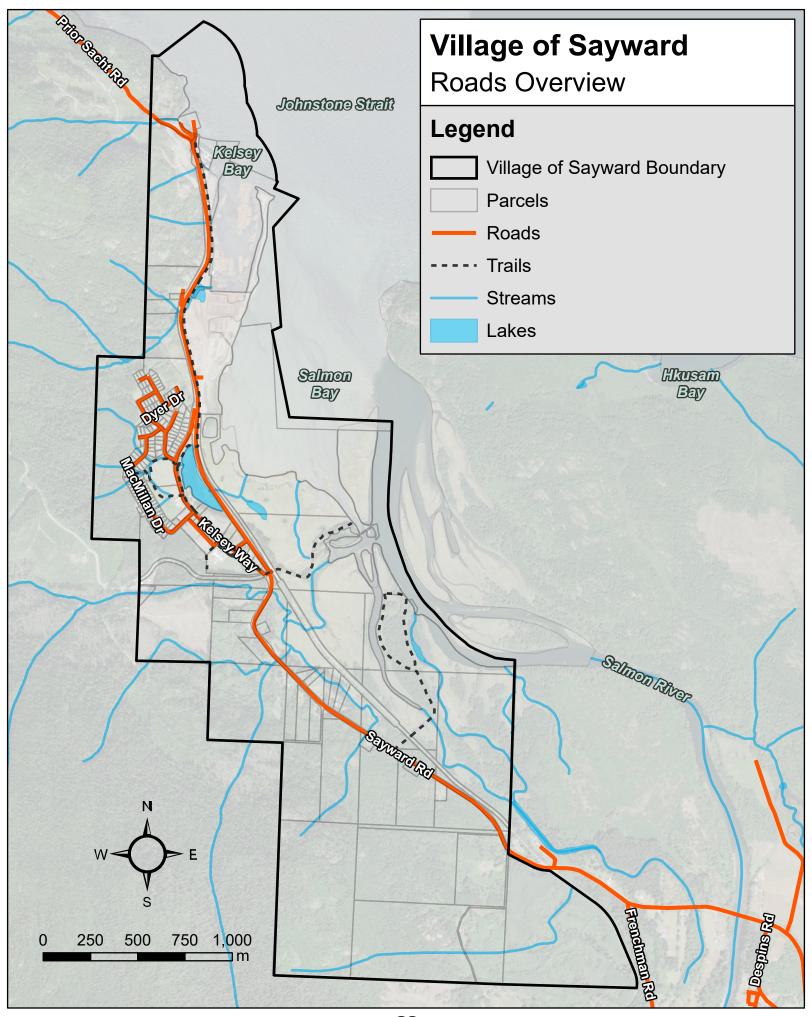


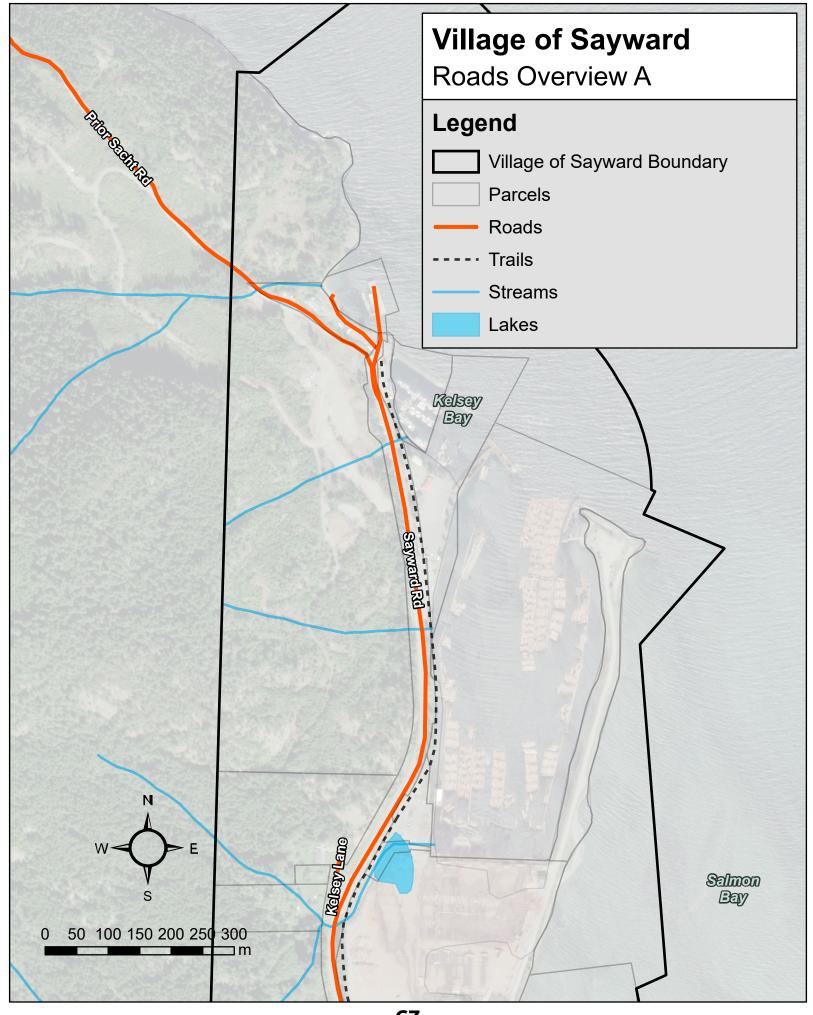


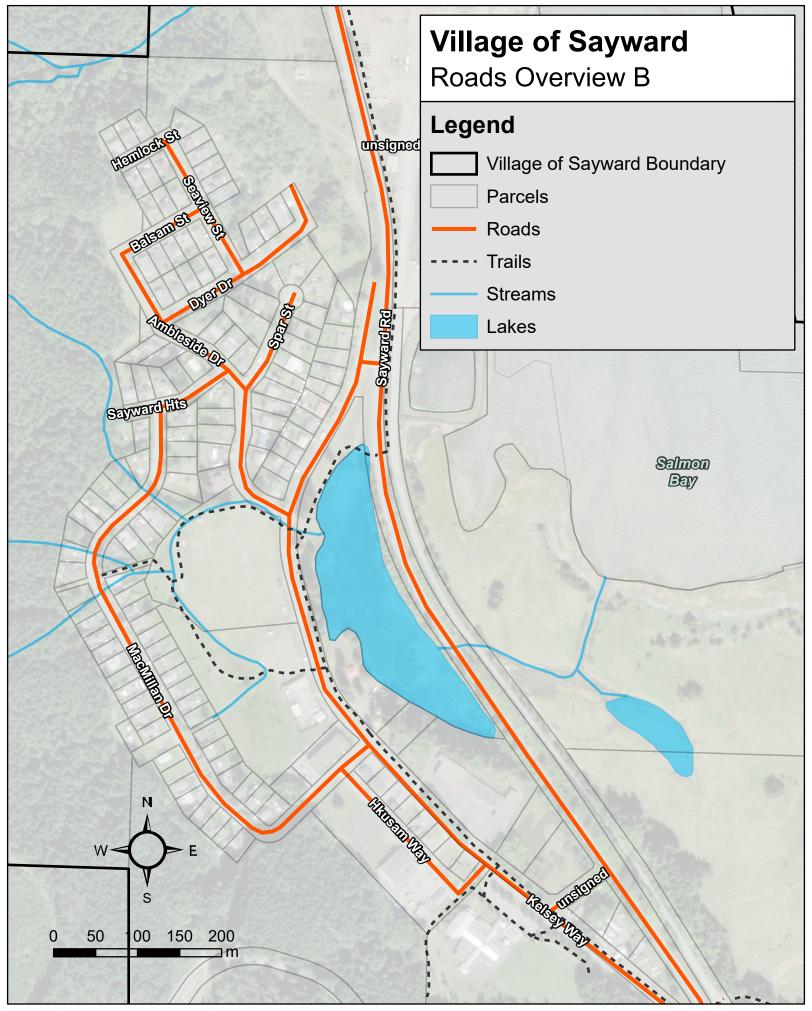


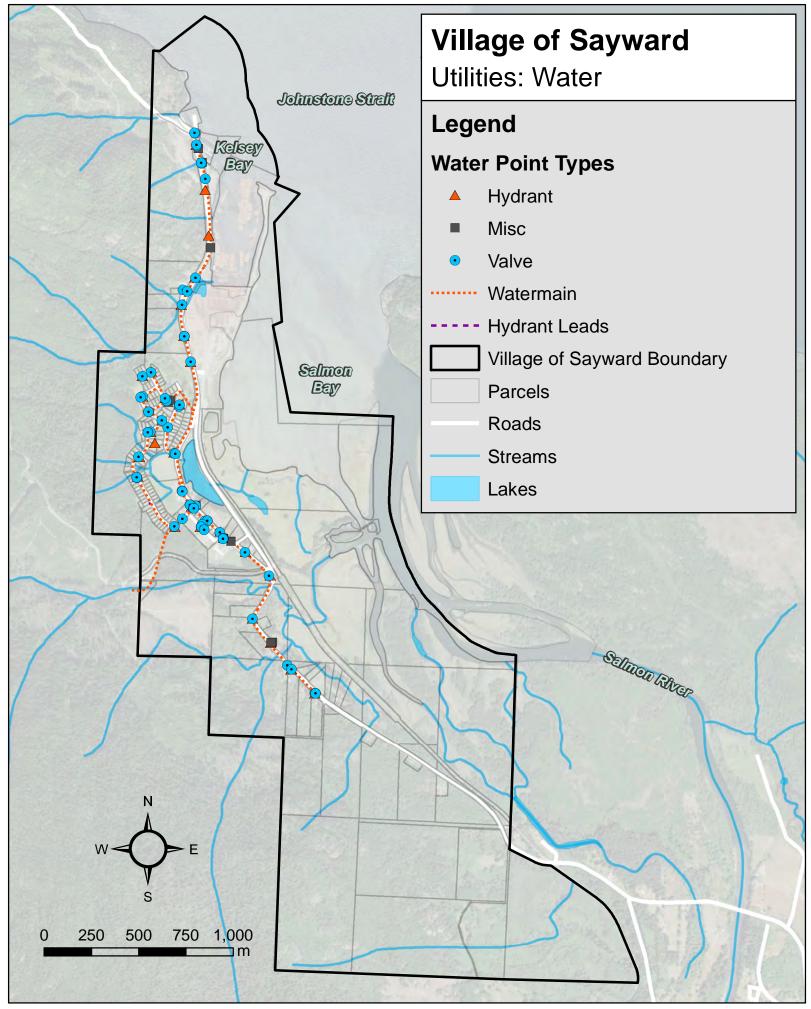


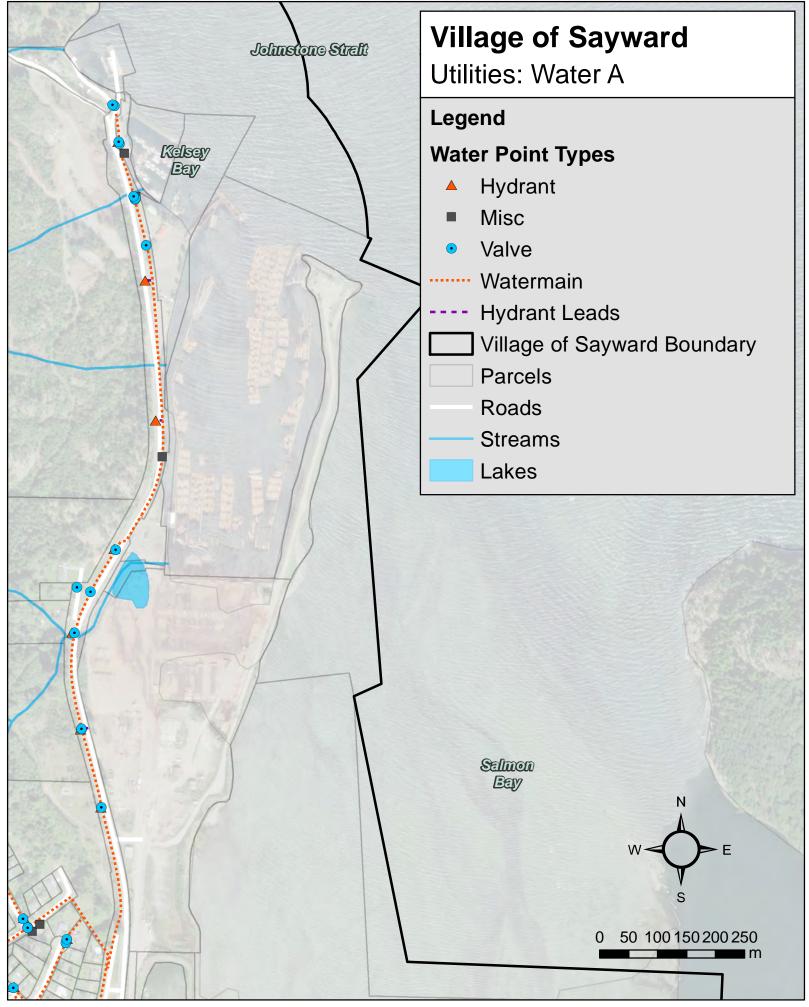


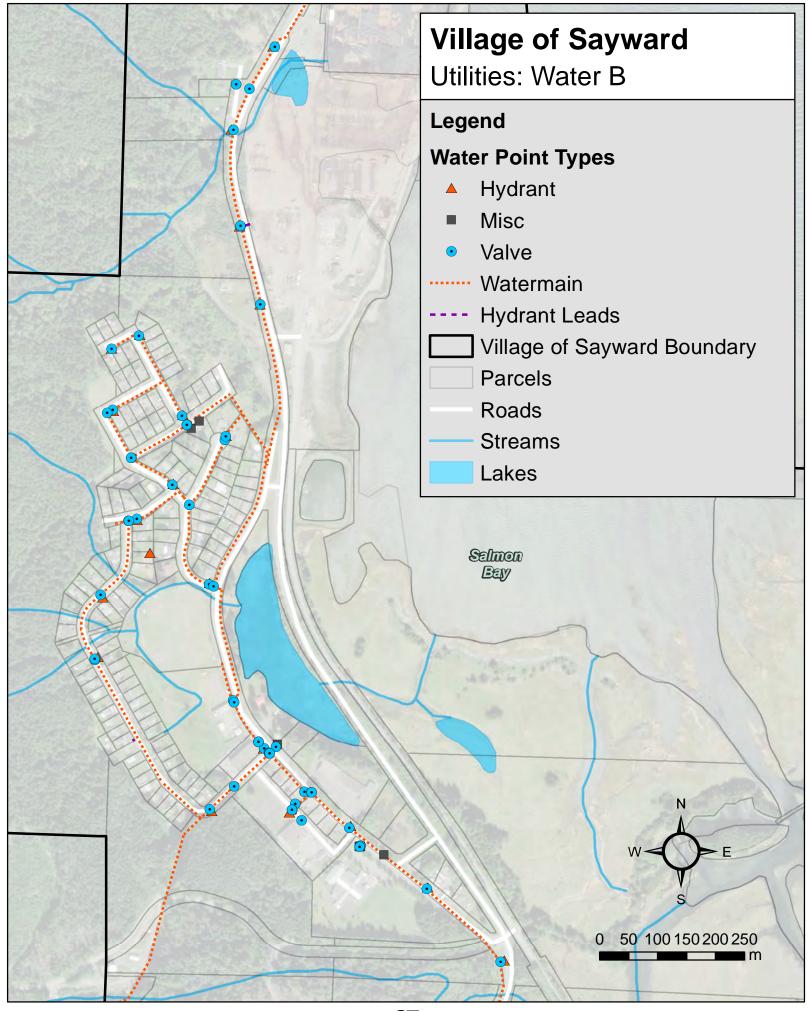


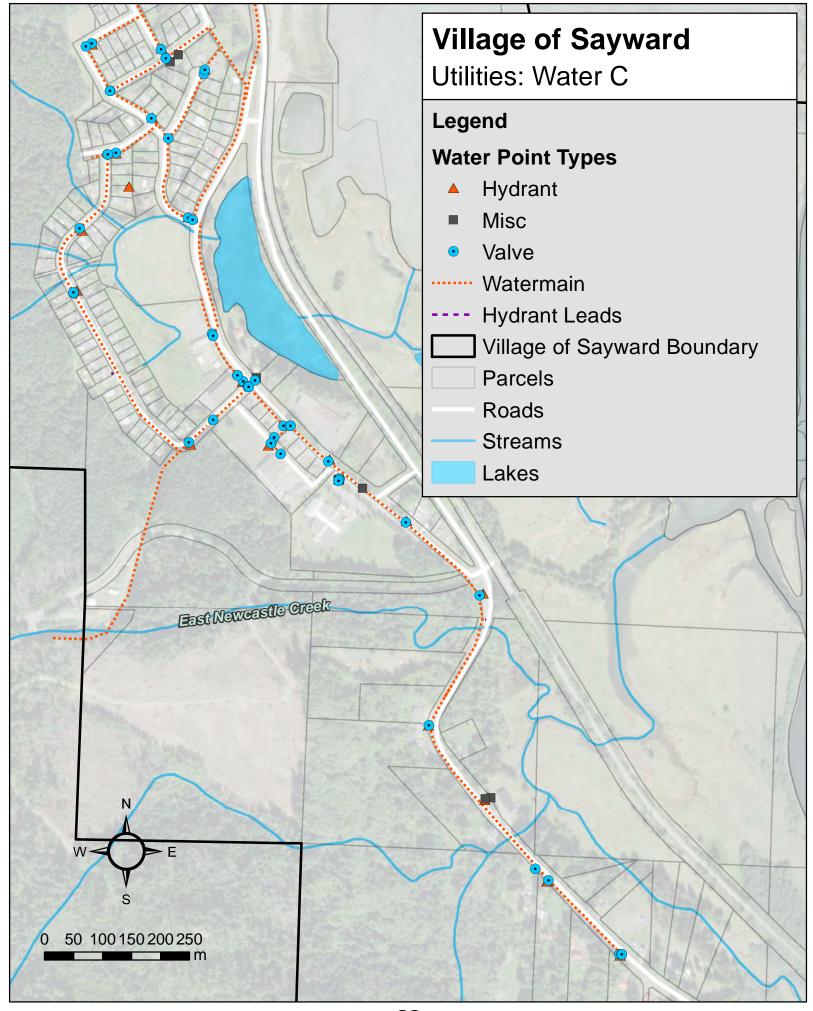


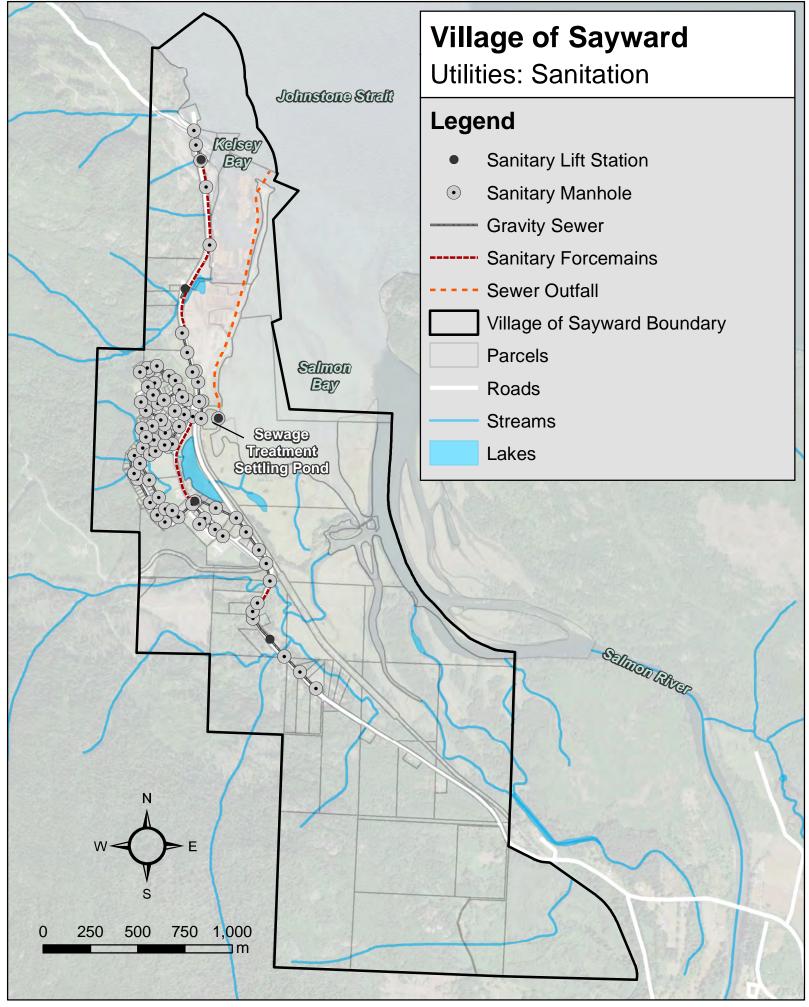


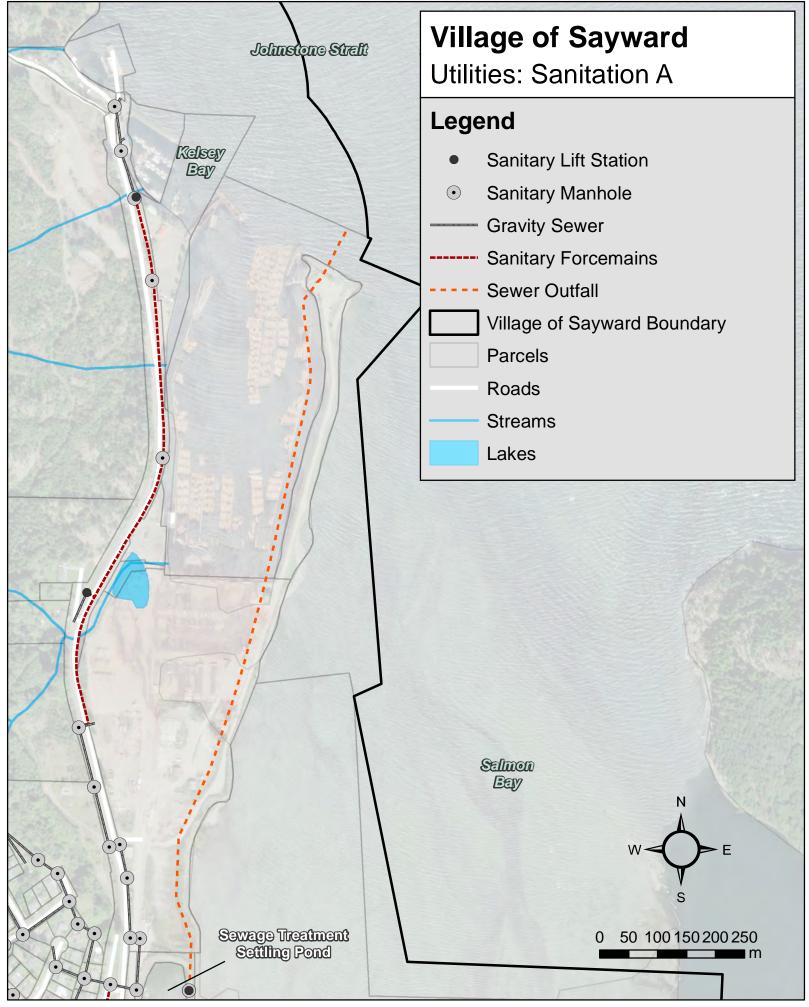


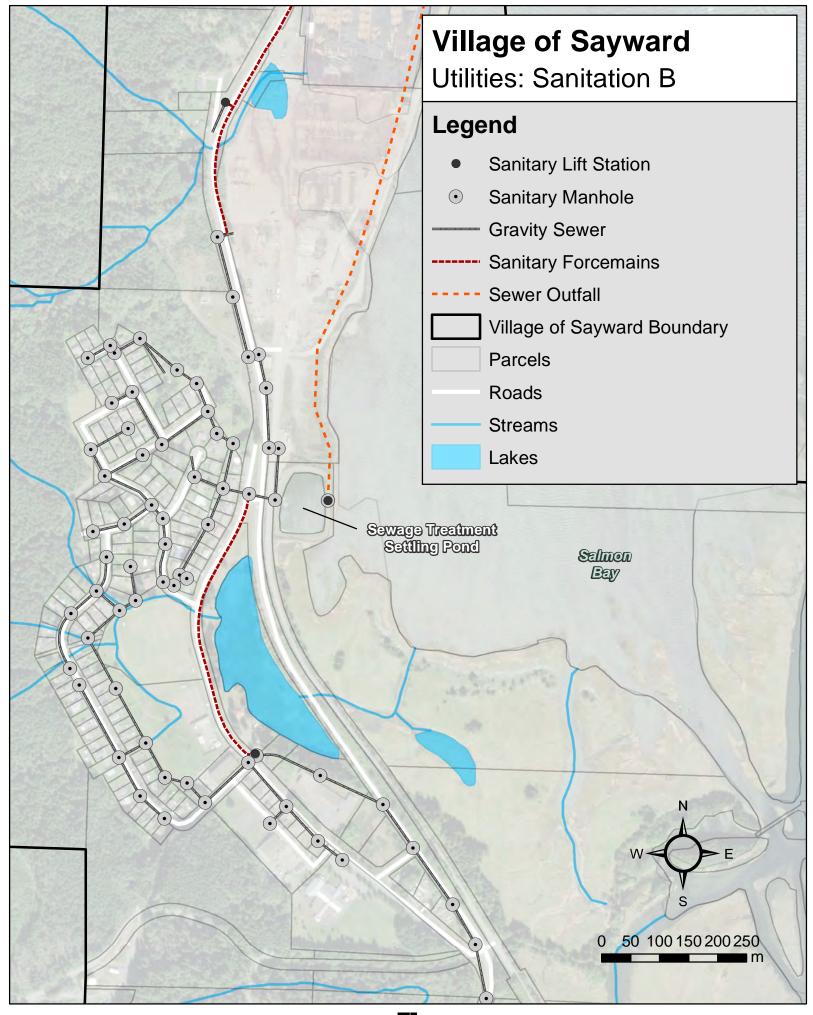


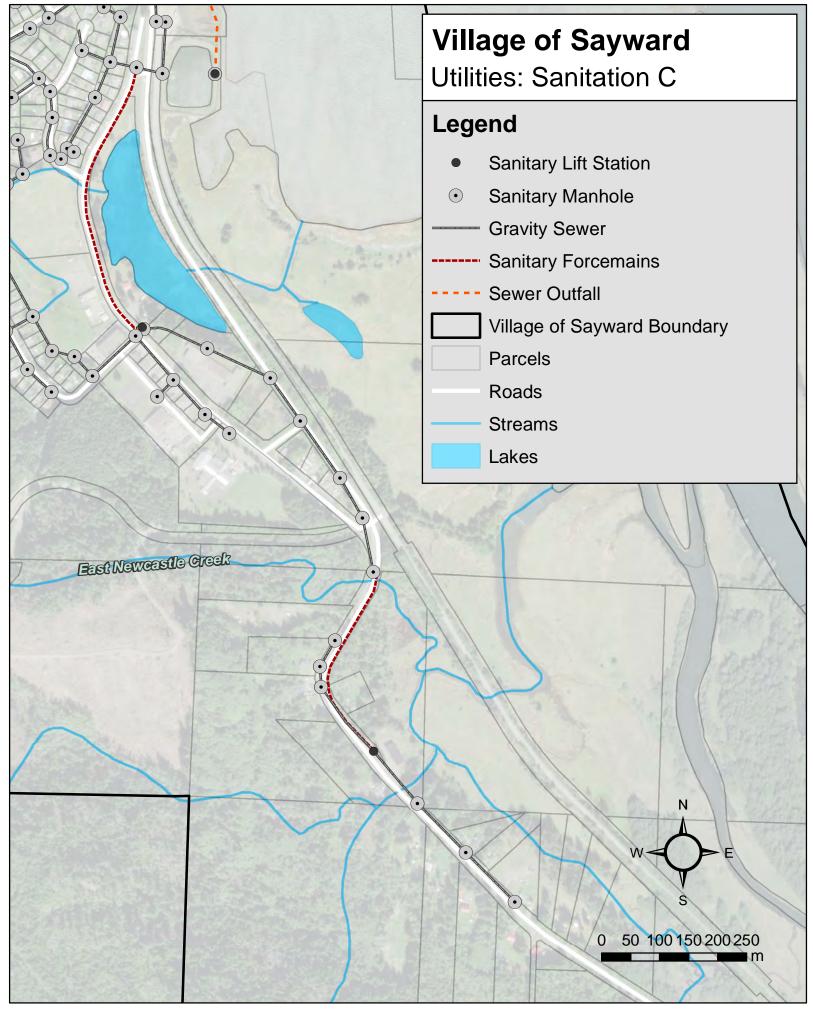


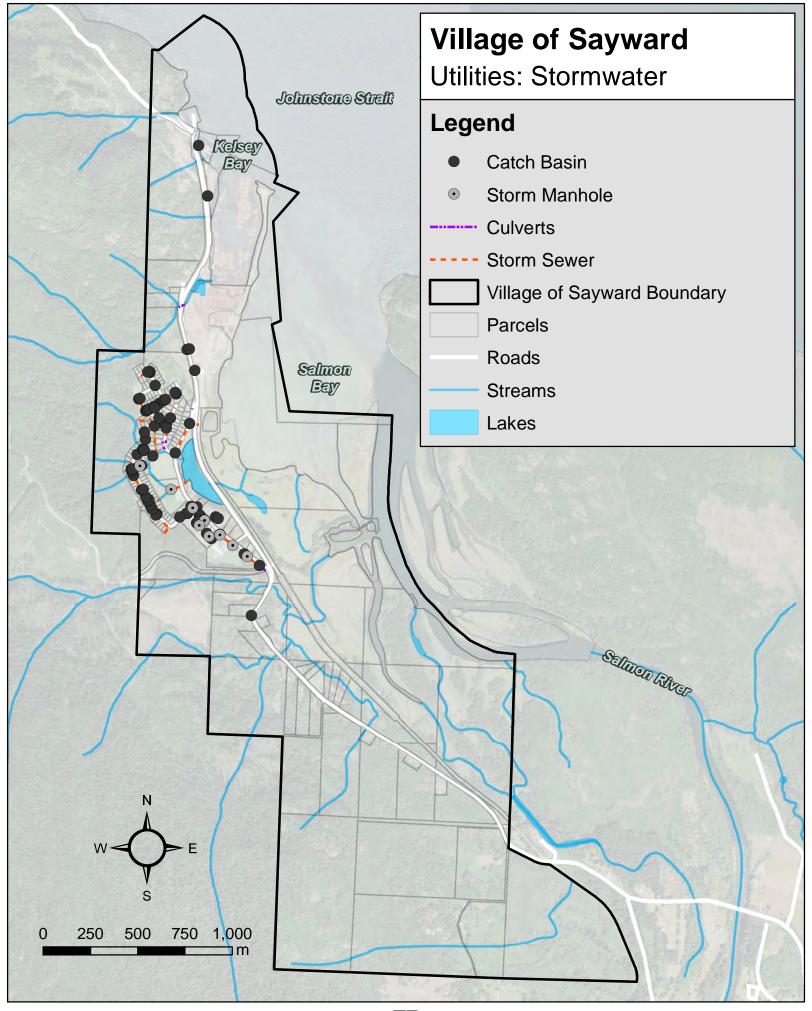


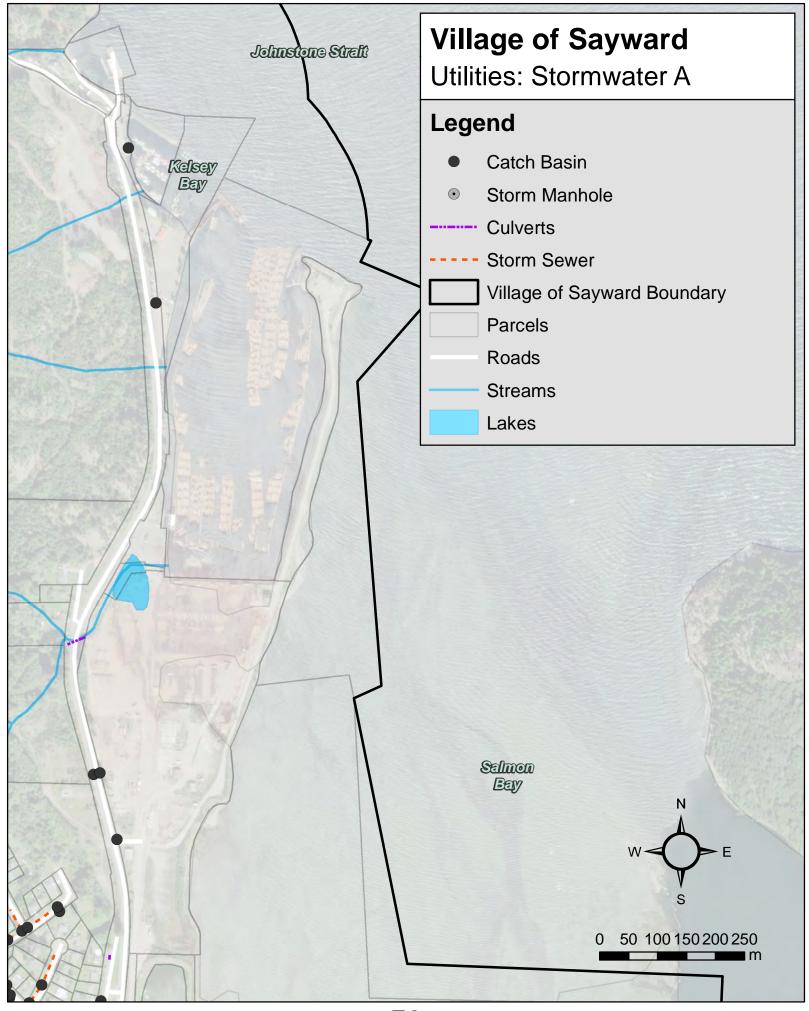


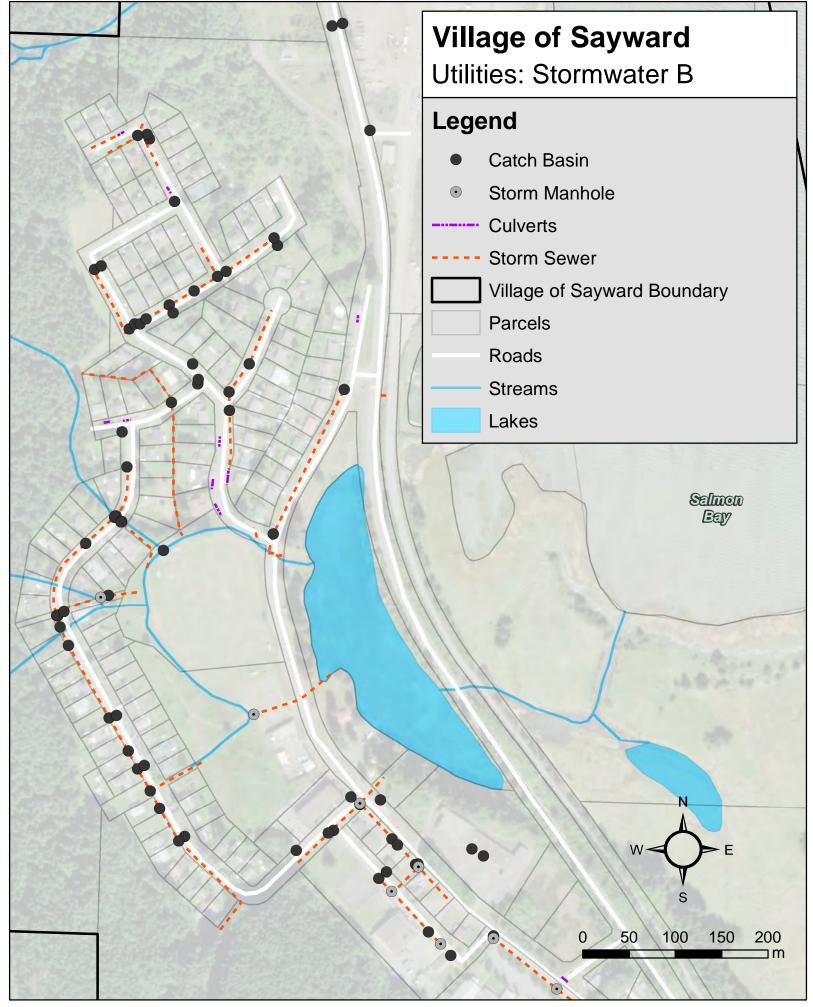


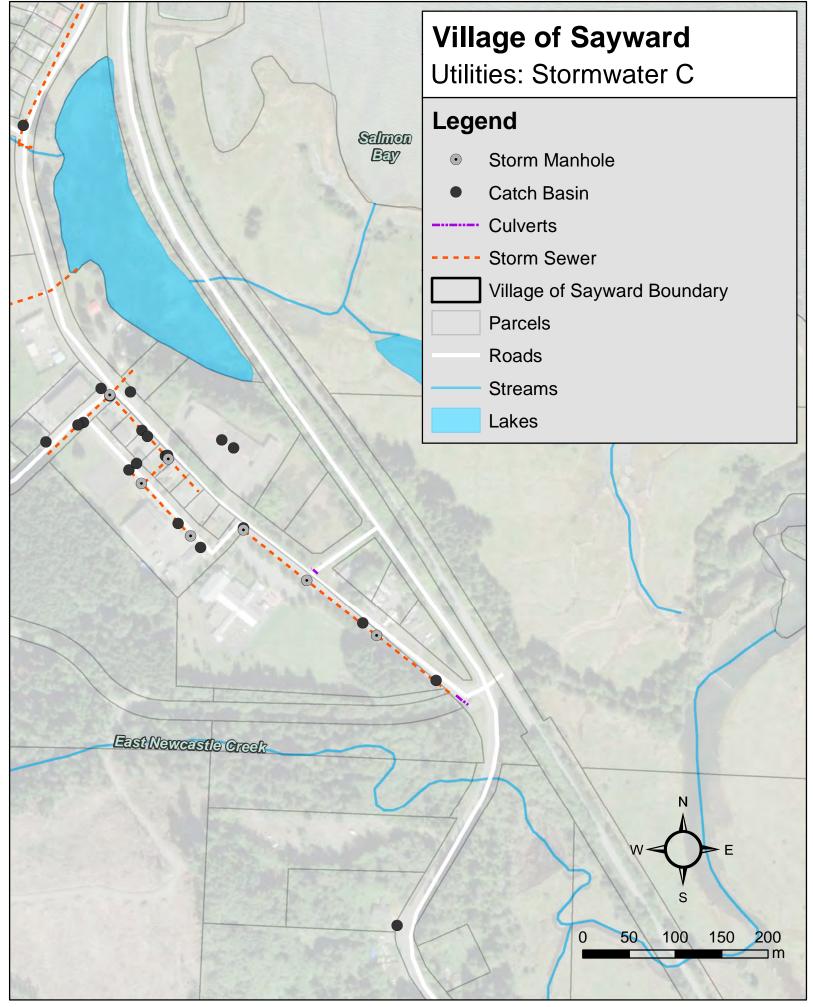












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## **Spatial Data Reference**

#### **Mapping Credit**

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