

# Sumas First Nation: Resilience in Action- Managing Risk and Recovery



**CHASI**  
Community Health &  
Social Innovation Hub



UNIVERSITY  
OF THE FRASER VALLEY





## SEMÁ:TH FIRST NATION

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### DECLARATION

The Semá:th acknowledge that the Creator provided us with our territory and resources, S'ólh Téméxw. The Creator gave us laws that govern all our relationships to live in harmony with nature and mankind. The Creator gave us laws that define our rights and responsibilities.

The Creator gave us our spiritual beliefs, our languages, our culture and a place on Mother Earth which provided us with all our needs to sustain ourselves. The Creator has given us the right to govern ourselves and the right to self-determination. The rights and responsibilities given to us by the Creator cannot be altered or taken away by any other nation.

The Semá:th continue to exercise our rights and fulfill the responsibilities and obligations given to us by the Creator for the land upon which we were placed. The Semá:th have maintained our freedom, our languages and our traditions from time immemorial.

The Semá:th openly and publicly declare and affirm to the people and government of Canada, British Columbia and United States of America:

- That the Semá:th have held and still hold aboriginal title, and aboriginal rights to all land and resources within our Tribal territory.
- That the Semá:th have never reached any agreement or treaty with the governments of Canada and British Columbia concerning the occupation, settlement, sovereignty or jurisdiction over our land.
- That the Semá:th affirm our inalienable right of aboriginal title and aboriginal rights to the land, the mountains, the minerals, the trees, the lakes, the rivers, the streams, the sea, the air and other resources of our land.
- That our aboriginal title and aboriginal rights have existed from time immemorial, exists at the present time and shall exist for all future time and generations.
- The Semá:th declare that we shall do all in our power to see that the governments of Canada, British Columbia and the United States of America recognize in law and in practice, our aboriginal title and aboriginal rights.

### OUR VISION

Semá:th is prosperous and self-sufficient, reclaiming our Xwe'lmexw way of life and maintaining governance over S'ólh Téméxw.

### OUR MISSION

The Semá:th are committed to improving the quality of life for present and all future generations through encouraging healthy living and embracing responsibility to ensure a safe environment, while preserving and exercising our rights, language, culture and traditions.

### OUR VALUES

Balance. Respect. Culture, history & tradition. Caring for the land and for all living things. Giving back. Speaking for our people and speaking for the land, fish and all living things. A sense of community with the recognition that we are one – “Lets'cniq̓t̓”.

**Sumas First Nation:**  
Resilience in Action  
- Managing Risk and  
Recovery

Report by Semá:th &  
University of the Fraser  
Valley's Community Health  
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We would like to extend  
our heartfelt thanks  
and appreciation to the  
Sumas First Nations  
(Semá:th) Elders, staff and  
community members for  
taking time to contribute  
to this report and to  
acknowledge the important  
and impressive work  
that is being done in this  
community with respect to  
disaster risk and reduction.

November 2024

# Introduction

Climate-related disasters are increasing in frequency and severity internationally.<sup>1</sup> The increasing frequency and severity of disasters can be attributed to a variety of complex factors including a changing climate as well as social factors, such as populations growing in disaster-prone areas, inadequate infrastructure, and insufficient emergency management processes.<sup>2</sup> This report recognizes that those living in close relation to the land, which are often Indigenous Peoples, are frequently among the first to experience the direct consequences of poor ecological management.<sup>3</sup>

For example, the re-emergence of Sumas Lake (Semá:th Xó:tsa) in 2021 forced Sumas First Nations (Semá:th) to quickly mobilize in response to the needs of their community and to prevent further damage.<sup>4</sup> This event had a severe impact on Semá:th, as they are uniquely situated near to the flooded area. Additionally, Semá:th faces the risk of several other hazards that require preparedness and resilience as they get ready to respond to future disasters. Much work is required to address the four pillars of emergency management (mitigation, preparedness, response, and recovery) to protect Semá:th from the impacts of future hazard events.

As Semá:th looks ahead towards how to strengthen their response in ways that are culturally appropriate for their community, a clear theme emerged during the engagement sessions— it is critical that the Semá:th community lead any response to emergencies. Semá:th (and more broadly Indigenous Peoples) should be provided with appropriate support and resources and have autonomy to decide for themselves the best approach when responding to their community's unique needs. As will be discussed further, what is prioritized in response and recovery may look very different from one community to the next. This report collects the stories of the community's experiences of different climate related events and other community hazards to demonstrate how imperative it is that the community of Semá:th take the lead when responding to emergency events.<sup>5</sup>

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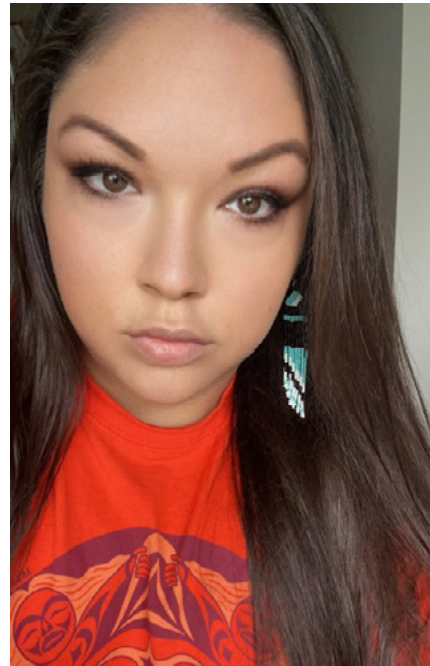
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# Preface

Following the devastating Atmospheric River Event (ARE), which profoundly impacted Sumas First Nation, Disaster Recovery Manager Jenna Noppen partnered with Clear Sky Consulting Ltd. to develop a Climate Adaptation Plan and Resilience Framework rooted in a community-centered approach, in collaboration with CHASI at UFV. The ARE affected not only the land but also disrupted the community's sense of safety, leaving Elders, Youth, and members feeling vulnerable. With a commitment to community engagement, Sumas First Nation's Disaster Recovery Manager ensured that each voice—from Elders to Youth—was represented in the engagement process. This inclusive approach aimed to foster open dialog, resilience, and readiness for future events. Leading Sumas First Nation's Emergency Department, Jenna integrates traditional Indigenous knowledge into all aspects of emergency management, setting a precedent for meaningful community involvement across the phases of mitigation, preparedness, response, and recovery. This project has been a powerful experience, bringing together the community to share stories, concerns, and hope for the future. These insights are beautifully represented by our artist, Ray Silver Jr. (Xeyteleq), capturing the spirit of resilience within Sumas First Nation.



Jenna Noppen  
Disaster Recovery Manager, Regional  
Director Emergency Support Services  
For Nations.

# Scope

This report was created in collaboration with the Semá:th community to support what resilience means and to provide documentation of the community's past experiences with recent climate-related disasters with the overall goal of disaster risk reduction. This report is intended to be used together with the Sumas First Nation Resiliency Plan to support mitigation and adaptation efforts with respect to the risks associated with climate change and ongoing development moving forward.



# The Approach

This report relies on Semá:th community members and staff experiences during different disaster events, with a particular focus given to the challenges the community faced during these times. Additionally, this report focuses on the community's definition of resiliency. These themes were explored through conversations with Elders and staff from Semá:th as well as two community engagement sessions. Two conversation sessions were held with staff and Elders in February 2024.

The first session included staff from Semá:th who are part of the emergency management team. The second session consisted of Elders from Semá:th who were invited to share their wisdom and experiences related to disasters and resilience. Both staff and Elders from Semá:th were asked to discuss disaster preparedness, their immediate needs during and after the 2021 flooding event, organizational concerns relating to communication and personnel, long term recovery, future responses, and resilience.

Community engagement sessions took place in November 2023 and May 2024. In November, community members were invited to a dinner organized by the Semá:th Emergency Management Department where community members could learn more about emergency preparedness. At this dinner, community members were encouraged to connect with different organizations working in the emergency management space, including the CHASI team writing this report.

This second community engagement session occurred at the Emergency Preparedness Fair that the Sumas First Nation Emergency Management Department hosted on May 10th, 2024. At this event, community members were invited to provide responses to four different prompts created by CHASI and the Semá:th Emergency Management Department which included the following:

*Resilience is...*

*Share one memory, word, or visual that summarizes your disaster experience or the experience of someone close to you.*

*What do you identify as the greatest need when recovering from disasters?*

*What brings you hope for the future?*

# Resiliency Capitals Framework

The Recovery Capitals Framework is a framework that highlights seven distinct aspects of recovery. This framework was developed out of the Community Capitals Framework and adapted to fit the context of disaster recovery.<sup>6</sup> This Capitals Framework was developed to account for the fact that Indigenous communities have long been overlooked, particularly in the space of disaster response, and their expertise when responding to such disasters has often been ignored.<sup>7</sup> This framework allows organizations and communities to assess their strengths and weaknesses related to recovery, based on their own priorities, so they are able to follow the path that makes the most sense for their community. Given the emphasis on resilience, this report will refer to the recovery capitals as the resiliency capitals. In the following section, you will find the resiliency capitals in the order of importance to Semá:th — natural, cultural, financial, social, built, political, and human.

The artwork accompanying these resiliency capitals was created by Raphael Silver (Xeyteleq).

## ABOUT THE ARTIST

Raphael Silver (Xeyteleq) is a proud member of the Sumas First Nation (Semá:th) and has been creating art in various forms for the past 30 years. His pieces are showcased in public venues throughout the community. Working with his dad Ray Silver (Xeyteleq) from a very young age, he was able to develop skills as a carver and painter. Around the same time, he was learning the basic skills of reading and writing. With a strong connection to the land, especially the river, he has been able to portray, through public art, the importance of keeping that connection alive and well. Raphael places a strong emphasis on the preservation of the traditional form of lines, style and techniques which are unique to Stó:lō people.



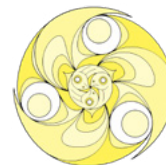
**NATURAL**



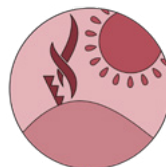
**CULTURAL**



**FINANCIAL**



**SOCIAL**



**BUILT**



**POLITICAL**



**HUMAN**

# 1. Natural

The first resiliency capital to be discussed is natural capital. Natural capital “refers to natural resources and beauty, and the overall health of ecosystems. This includes air, land, soil, water, minerals, energy, weather, geographic location, flora, fauna and biodiversity.”<sup>8</sup> It was clear throughout conversations with community members that this resiliency capital is severely affected by disasters and human created development, and at the same time this capital is an important source of resilience that community members could rely on after events had occurred. The areas near Semá:th have seen substantial development in recent years, which has deeply impacted both the natural capital itself as well as how the community interacts with it. Several Elders emphasized how important it is for the community to have the ability to rely on their own use of natural capital during a disaster. Elders also connected the historical and natural importance of Sumas Lake (Semá:th Xó:tša) to the response and recovery efforts. One interpretation of natural capital is made through Raphael Silver’s (Xeyteleq) artwork and words.

■ ■ *“I wanted to portray our connection to the earth and the importance the natural world has to our people. The leaves represent the earth, the heart represents everything that comes from the earth, the icon represents Mother Earth.”*

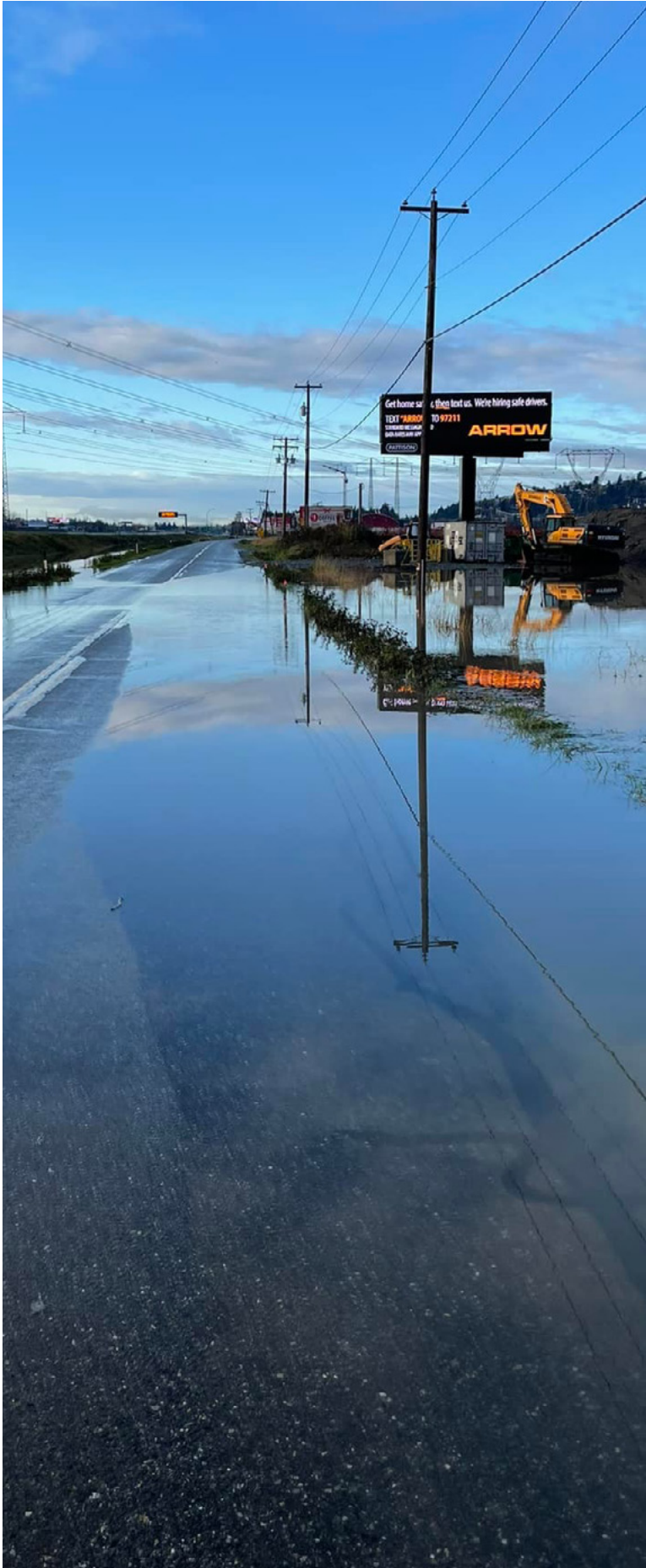


Below are some sentiments that were raised from the conversations with Semá:th Elders and staff which relate to natural capital. These ideas highlight the critical need to preserve natural capital. Further, they demonstrate the importance of understanding how the community uses natural capital and the essential role this capital plays in the resiliency of Semá:th overall. Additionally, natural capital emerged as being particularly important when the community is facing emergency events or disasters.

- There has been tremendous change in the landscapes over the lifetimes of the Elders.
- Previously there was a greater variety of wildlife abundant on the land.
- The loss of Sumas Lake (Semá:th Xó:tša) fundamentally changed their community, and required the community to adapt to this change which has strengthened and shaped their resiliency. It has also forced the community to respond.
- Over time, Elders observed that there has been a decrease in fish sizes and an increase in fish with ulcers and sea lice.
- There is a fear that on Sumas Mountain (Kw'ekw'e'i:qw), mining and deforestation are impacting the movement of wildlife (for example, cougars and bears have been more present in areas where they typically were not). This creates new human-animal interactions, and impacts traditionally available food sources.



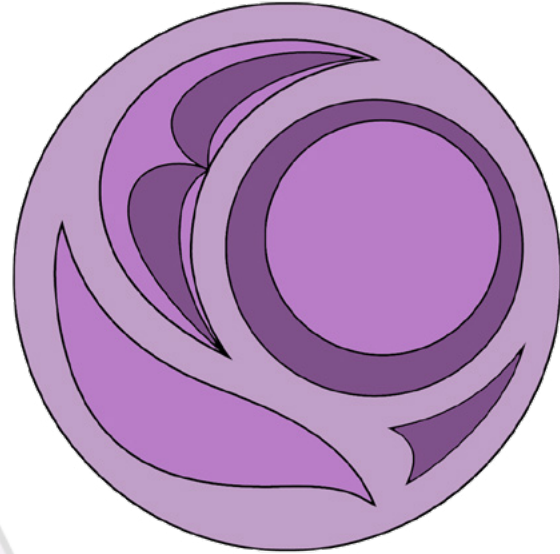
Of note, Elders connected social capital and natural capital together when discussing the importance of community response. For example, during the flooding event of 2021, community members responded by sharing their stocks of natural goods (for example, frozen hunted or fished meats) which ensured community members had access to their traditional foods. Additionally, Elders emphasized the need to share the understanding of how natural capital could be used by future generations. For example, the importance of the skills of identifying, storing, and cooking with different natural foods was clearly pointed out by the Elders as a priority area for skill sharing. Staff members also emphasized that these needs are very important, and perhaps even more so during a disaster response time. By supporting the growth and development of these skills, community members can ensure their traditional practices are protected and not lost. Data collected by Clear Sky Consulting further highlighted the importance of natural resiliency capital. Clear Sky Consulting asked community members to highlight the most important aspects of recovery and resilience and Semá:th community members overwhelmingly highlighted the natural environment as their highest priority in terms of recovery.



## 2. Cultural

The second resiliency capital to be discussed is cultural capital. This capital “refers to the way people understand and know the world, and how they act within it. It includes ethnicity, habits, language, stories, traditions, spirituality, heritage, symbols, mannerisms, preferences, attitudes, orientations, identities, norms, values, and the process and end products of cultural and artistic pursuits.”<sup>9</sup> An interpretation of cultural capital is made through Raphael Silver’s (Xeyteleq) artwork and words.

“Our traditions and beliefs are what keep us strong and resilient. Our past and future are deeply connected to the Fraser River. By depicting a salmon egg, I wanted to show our connection to the river and maintaining our traditional ways which involves a period of growth and learning. Like a salmon egg, we are born with a connection to our past. But as an individual, that egg must be strong and resilient to keep these traditions alive.”



Below are some key takeaways from the conversations with Semá:th community members which relate to this second resiliency capital.

- Family is a source of strength, community, and interconnectedness.
- There has been a loss of culturally relevant resources over time.
- There have been challenges associated with hunting and trapping over time.
- Cultural considerations should not be an afterthought during a response, but rather should be elemental in the design and execution of any recovery and resiliency plan.



“You don’t know how much knowledge you collectively have until you collaborate... but it’s ingrained in our DNA to know what to do from past events... They knew to build homes on high ground.”

Cultural capital was clearly identified as one of the key capitals for Semá:th and was understood to be inextricably linked with natural capital. Throughout the conversations, it was abundantly clear that responses to and processes for emergency and disaster events must centre on and incorporate cultural practices. This can be challenging, and often systems and structures (particularly external ones) are not centred on this type of approach. Data collected by Clear Sky Consulting further highlighted the importance of the cultural resiliency capital. When asked to identify the most important aspects of recovery and resilience, Semá:th community members overwhelmingly agreed that cultural resiliency capital is the second greatest priority after natural resiliency capital.



### 3. Financial

The third resiliency capital to be discussed is financial capital. This capital “refers to the availability of and access to resources including savings, income, assets, investments, credit, insurance, grants, donations, loans, consumption and distribution of goods and services, employment and economic activity.”<sup>10</sup> One interpretation of financial capital is made through Raphael Silver’s (Xeyteleq) artwork and words.

“Our wealth was not measured in a monetary way. Although we were incredibly wealthy people. Our wealth was held through our gifts given to us (traditional knowledge, canoe building, trade, travel).”

Below are some key takeaways from the conversations with Semá:th Elders which relate to this third resiliency capital.

- Government fees can act as a barrier.
- There has been a decrease in forestry and fishing industries.
- The financial support received after the flooding could have been more effectively administered.



During the engagement sessions, the importance of timely, respectful, and culturally appropriate financial support was emphasized. During or after a disaster event, obtaining appropriate financial support, particularly for more vulnerable populations like elderly adults, is essential. Additionally, accounting for administrative burden and how this disproportionately affects staff is incredibly important. Developing the most effective ways to administer these financial components is extremely important to a timely and effective response. Data collected by Clear Sky Consulting further highlighted the importance of the financial resiliency capital. Clear Sky asked community members to highlight the most important aspects of recovery and resilience and Semá:th community members overwhelmingly highlighted this as the third priority in terms of recovery, after natural and cultural.

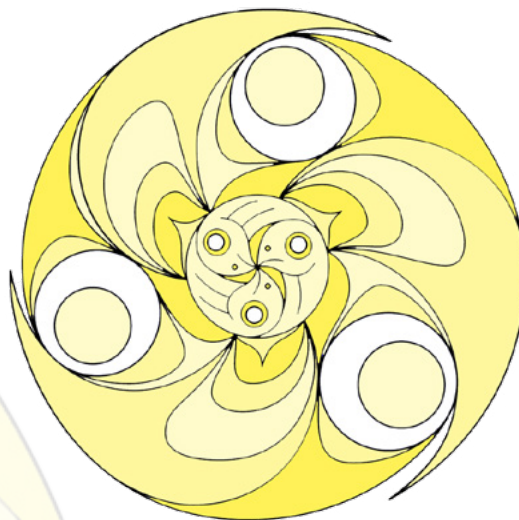


## 4. Social

The fourth resiliency capital identified is social capital. This capital “refers to the connections, reciprocity and trust among people and groups. There are three types of social capital: bonding (strong ties between similar people e.g. family and friends), bridging (looser ties between a broader range of people, often cutting across race, gender and class) and linking (ties connecting people with those in power, such as decision-makers).”<sup>11</sup>

An artistic translation of social capital is made through Raphael Silver’s (Xeyteleq) artwork and words.

“There are three birds (swallows) forming a circle, they are working together to protect the inner circle which is made of three baby birds. I wanted to depict the importance of community and how as a community we all rely on each other.”



Below are some key takeaways from the conversations with the Semá:th community which related to social capital.

- Family is a source of strength and community.
- Family lineages and histories are integral to understanding the community, and thus, any responses.
- There were challenges with communication amidst the 2021 flooding event.
- Empathy is an integral aspect of community building.

*“The strength [one gets] from sitting in a room with these people is incomparable to anything.”*



Social capital was highlighted as of particular importance throughout conversations with community members. The ability to rely on community when responding to emergency events and disasters was celebrated during these conversations. Much of Semá:th's strength derives from the strong community and social bonds which played a significant role in the response. Additionally, the isolation community members experienced during the flooding event is likely to have played a role in further reinforcing the importance of those bonds to strengthen future responses.

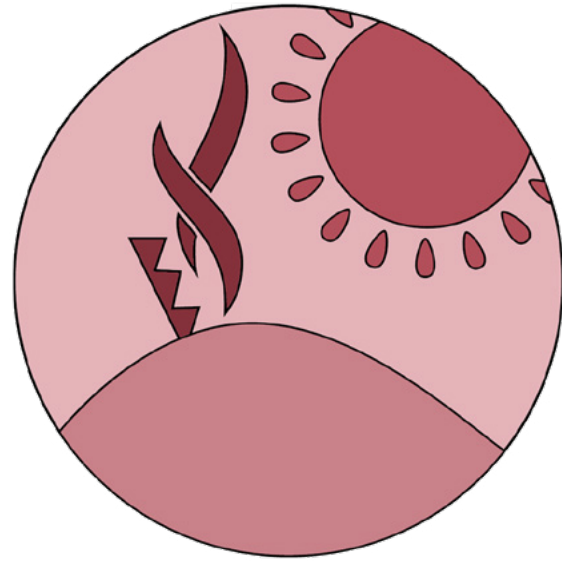


## 5. Built

Built capital is the next resiliency capital to be discussed. This capital “refers to the design, building and maintenance of physical infrastructure, including its functional and aesthetic value. This includes critical facilities and services, housing, vehicles, equipment, information technology, communications, water and energy infrastructure.”<sup>12</sup>

Raphael Silver interprets the built capital through his artwork which he describes as follows.

“*Sto:lo people had various forms of dwellings – longhouses, stilt houses and pit houses. The pit house showcases our resiliency and ability to utilize our surroundings in a way that provided not only shelter but comfort as well.*”

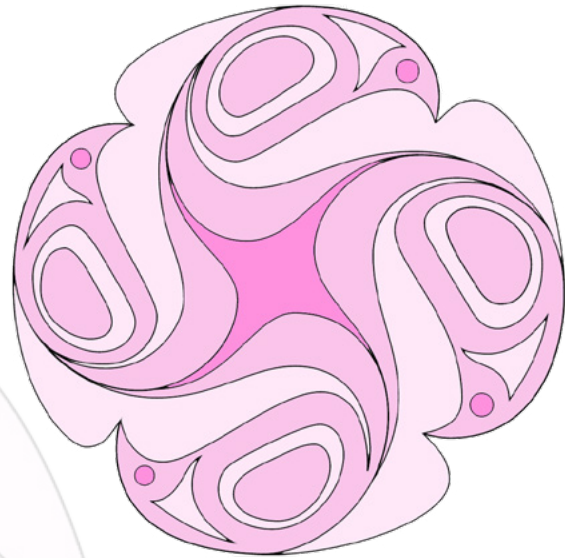


Built capital is one of the most challenging capitals, given that built capital and infrastructure often require alignment and collaboration between different levels of government in addition to a large amount of financial capital. Unfortunately, there were members of the Semá:th community that had their homes impacted by the 2021 flooding event. Persistent concerns with built capital center on drainage systems and roads in the community as traditionally, Semá:th members built their homes higher up and away from potential flooding risks. Trying to get government at various levels to understand, prioritize, and work together in a good way to strengthen built capital is critical to ensuring Semá:th is better protected against future disasters. Below are some key takeaways from the conversations with Semá:th community members which related to built capital.

- The increase in deforestation and development on Sumas Mountain (Kw'ekw'e'i:qw) is a key concern.
- The damage that occurred in homes due to the 2021 flooding event was concerning.

## 6. Political

The sixth resiliency capital discussed is political capital. This capital “refers to the power to influence decision-making in relation to resource access and distribution, and the ability to engage external entities to achieve local goals. It includes agency, voice, justice, equity, inclusion, legislation, regulation, governance, leadership and policy. It applies within and between groups and exists both formally and informally.”<sup>13</sup>



*“We are much larger than we used to be, and we’re getting more attention because of that.”*

One interpretation of political capital is made through Raphael Silver’s (Xeyteleq) artwork and words.

| *“The political icon*  
 ■■ *depicts four sentinel*  
 | *beings coming together*  
   *to create one unit.*  
   *The four creating the*  
   *silhouette of a flower*  
   *are a symbol of calm*  
   *and peace. The beings*  
   *are neither human nor*  
   *animal, the image is a*  
   *portrayal of an idea –*  
   *cohesiveness.”*

Below are some key takeaways from the conversations with Semá:th Elders related to political capital.

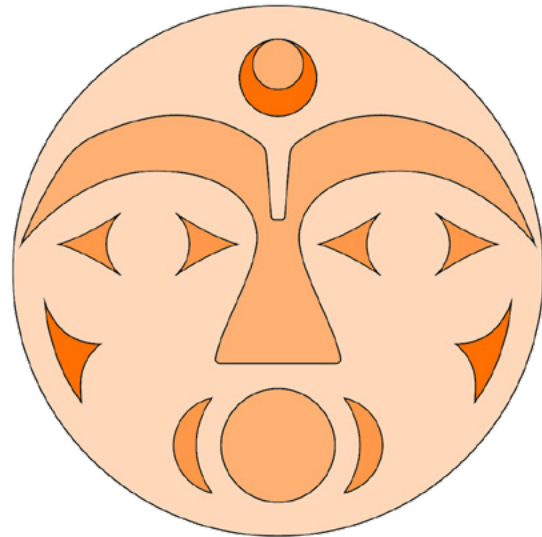
- There were historical government regulations around farming.
- There have been contemporary changes in “new land laws.”
- “[Political] promise of house being fixed, but not yet.”



## 7. Human

The seventh resiliency capital to be discussed is human capital. This capital “refers to people’s skills and capabilities, including the ability to access resources and knowledge. It includes education, physical and mental health, physical ability, knowledge from lived experience and leadership capabilities.”<sup>14</sup> One interpretation of human capital is made through Raphael Silver’s (Xeyteleq) artwork and words.

“The human icon is simply a Salish depiction of a human face, neither male nor female. I wanted to portray the simplicity of who we are not faceless but also unlike each other.”



Human capital was identified as a key resiliency capital for Semá:th and is strongly connected to cultural capital. Community members stressed the importance of utilizing community members who have the skills required to support with resiliency and recovery efforts, and it is imperative in any recovery efforts that the community prioritize sourcing skills from within their own community. Additionally, building up this resiliency capital through training and skill sharing within Semá:th should be prioritized.

# Conversation

## Findings

### CONVERSATIONS - ELDERS

Semá:th Elders were asked to share their experiences during the 2021 flooding event, the challenges they faced, and their community's definition of resiliency. First and foremost, many Elders reflected on the historical changes that have occurred in the region since colonization. Elders noted the significant loss of culturally relevant resources that has occurred over the last century. For example, Elders discussed the loss of Sumas Lake (Semá:th Xó:tsa) due to the draining of the lake that occurred in 1924.<sup>15</sup> They also discussed the complexities around the government regulations regarding farming in the Sumas Prairies as they needed property to farm but did not have the economic resources to purchase land. Some Elders recalled having to sell land because they could not afford the government fees to keep the land.

Elders reflected on the changes they have witnessed over their lifetime in the climate and wildlife in the region. In particular, Elders noted the change in the salmon population over the last 50 years. For example, there are not only significantly less salmon, but the salmon

are also smaller and have ulcers and sea lice, making them inedible. Additionally, Elders noted there have been changes in the muskrat and beaver population as farming practices have been poisoning them.

Moving forward, Elders from Semá:th shared their experiences of the lake returning in 2021, as well as their concerns following this event. Many Elders reflected on how suddenly the water rose and identified the added complexities this caused. Some Elders commented on the infrastructural damages that ensued when the water came. Further, some commented on the difficulties they experienced navigating home insurance. Others reflected on the loss of food such as canned goods that occurred when their homes flooded. From a financial perspective, many Elders reflected on how the support that was provided from governmental and community organizations was insufficient compared to their needs. In terms of response efforts, the major challenge that was discussed amongst Elders was the communication throughout the event. Elders commented on the anxiety and fear they were left with after the event as they feared a similar event would occur again in the future.

These aspects of life continue to be interconnected, and some of the concerns Elders discussed did not directly relate to the flooding event of 2021 but were more general challenges they experienced. For example, during this session, Elders noted some of the impacts of ongoing developments on Sumas Mountain such as the increase of cougars and bears in their community. Elders also commented on the need for more food-related education in the community such as canning, gardening, smoking and hunting. They noted how an increase in population of people over time has affected the hunting season. Lastly, Elders also reflected on the loss of opportunities they are currently witnessing in the forestry and fishing industries.





### *Resilience and Hope*

Elders were asked to reflect on what resiliency meant to their community. Interestingly, Elders commented on how the word resilience has become a buzzword and likened it to the word reconciliation. Overall, they defined resilience as the ability to bounce back and discussed how Semá:th is quite resilient. To conclude the engagement session Elders were asked to reflect on what brings them hope. The majority of Elders reflected on the strength, community, and interconnectedness that is brought about through kinship connections.

“We learn how to deal with certain events as they come just from sitting amongst one another.”

### **STAFF CONVERSATIONS**

The first conversation that occurred in February 2024 was held with emergency management staff from Semá:th. Staff were asked to provide their insights on questions related to the community’s immediate needs during the flood, communication, long term recovery, future response strategies, resilience, and hope for the future.

#### *Immediate Needs*

The emergency management staff at Semá:th were asked to describe what types of supports community members needed most when the flood occurred in November 2021. First, some staff reflected on the lack of culturally appropriate food resources available, such as fish and meat, and how, for example, the

flood impacted their reserve stocks of food. In a similar manner, other staff discussed the need for cultural events during and after emergencies. These practices need to be supported during and after emergencies, emphasizing the importance of recognizing and responding to significant events in a culturally thoughtful way. Staff mentioned how there are needs amidst disasters to come together to discuss and debrief the traumatic events that happened. Unfortunately, there were challenges with making this debriefing event happen. Several staff shared a desire to come together “in a more ceremonial way.” When future events occur, this practice should be something the community considers incorporating in their response and recovery.

Additionally, staff reflected on the challenges faced during their response efforts, highlighting the common situation that arose where individuals took up roles, out of necessity, that they did not have adequate training for. This highlighted the importance of proactive training and communication measures that account for these situations.

#### *Communication*

There was resounding agreement that the lack of a clear communication channel to check in with, inside or outside of the floodplain, proved to be a significant barrier for community members attempting to access social supports. Most staff simply relied on their existing relationships, which did have the effect of circumventing the usual communication channels. Communication was likely also impacted by the fact that the main location to obtain support and access resources after the 2021 flooding event was the Tradex centre, which is located about a 20-minute drive from the Semá:th main offices.

Staff were also asked what social support related improvements could be made to ensure a better response to future climate events. Overwhelmingly, staff commented on the importance of improving communication. The flooding event made it evident that communication was a concern, both between Semá:th and other organizations and levels of government, as well as within Semá:th.

Semá:th staff shared the importance of the community having a place at the table from the start of the response. Semá:th leadership was inundated with calls and response efforts. Following the event, it was suggested that a more streamlined approach to communication during the response would be beneficial so that leadership could attend to the community's needs at a higher level. This would allow for a more on-the-ground response from other community staff and members, which is truly what drove to the creation of the Emergency Management Department. This will also increase the likelihood that the response is culturally appropriate and best suited to support the community's needs. Staff also reflected on the importance of making, and maintaining, connections ahead of time with relevant outside agencies and businesses as preexisting connections will improve the timeliness of response efforts in future climate events. Further, staff overwhelmingly commented on the importance of improving communication to community members. They discussed how much of the information being spread during the 2021 flooding event occurred through social media channels. Although social media channels can be the fastest way of spreading information, with this dissemination modality also comes a risk of the spread of disinformation. Based on these experiences, it is good to hear that Semá:th has invested in an emergency alert system that will work to reduce the amount of misinformation that is spread amidst future disasters. Additionally, evaluating (particularly as disasters arise) how to best ensure

appropriate and timely communication happens within the community would be worthwhile in the future to ensure continuous improvement.

Other staff commented on the importance of improving communication within the community, particularly to Elders. Some of the information that must be communicated includes the work that the Semá:th staff have been doing related to emergency management, in an effort to ease anxiety and improve individual and collective senses of security.

When speaking to other community members, it was clear that social capital was a resource to be relied upon, but also that understanding the appropriate channels through which communication should flow, particularly in a disaster, came up as an important component of response. What became apparent was that putting communication channels in place and having community leadership understand these channels is a critical part of a strong response. Since it is important to respond quickly to community member's needs, having these roles and responses planned well in advance can play a large role in mitigating any issues once disaster actually arises. Some community members expressed a strong need for timely, relevant information that is communicated in a clear, direct, yet gentle manner.

#### *Long-term recovery*

When asked to identify the greatest needs for Semá:th community members throughout long term recovery, the most apparent, immediate, and frustrating needs were related to infrastructure and physical repairs. For example, some staff mentioned the need for more effective water pumps. One staff member made the comment that it felt as though the City of Abbotsford does not prioritize their needs because of the lack of a proper storm water management system at Semá:th, despite them being located at the bottom of a mountain.

Furthermore, another comment regarding the community’s infrastructural needs highlighted the importance of establishing an alternative exit route out of the community. The staff mentioned how this is in progress and a part of their ongoing evacuation route project. Access and drainage were also raised as key issues that need to be addressed. This appears to be a more complex issue, given it requires collaboration with government organizations and the private sector.

A secondary issue related to this is the importance of people working in the insurance industry, contractors, and first responders understanding how to navigate their work in a culturally sensitive way. On a number of occasions, it was mentioned that community members faced challenges working with individuals in these sectors as they did not understand the unique needs of the Semá:th community. This is a critical focus of Semá:th’s ongoing Cultural Safety and Humility Project. Semá:th is currently developing an external training program aimed at all partners and levels of government to ensure culturally respectful engagement before, during, and after an emergency. The goal is to help make this working relationship easier for the parties involved (see resources in endnotes for examples of such guides).<sup>15</sup> Additionally, of particular importance were the following items- streetlights, guardrails, and sidewalks- all of which contribute to making the community safer.

#### **Future Response**

When asked to reflect on what could be done to help community members when a similar event occurs in the future, an overwhelming majority of staff discussed the importance of preparedness and ongoing training. Fortunately, Semá:th has learned from this event and implemented monthly training events in an effort to be better prepared for the next disaster. Further, staff discussed the importance of having strong support from those in leadership positions.

#### **Resilience**

Semá:th staff were asked to reflect on the meaning of resilience within their community. While staff recognized that any community’s definition of resilience must come from not only the staff but also the community, staff still had many insightful comments and reflections to share. One prominent theme that arose multiple times is that resilience should be a short-term situation, not a long-term condition.

“Resilience is a short-term condition where one stretches themselves until problems can be resolved. The idea that resilience is a permanent state is a myth... Failing to address structural problems while labeling the people enduring such problems as resilient is gas-lighting. Government, at all levels, must respond differently. They must absorb the lessons that have been offered time and time again. Recovery must center communities that have been left behind in previous efforts.” —Ashley Shelton, Executive Director of the Power Coalition

Resilience should allow an individual or community to get through the day when a crisis hits. Despite this, staff felt as though resilience has become a defining part of who they are as a nation. One staff member stated that, “resilience is a part of their community’s DNA.” Many staff reflected on the trauma that the Semá:th community endures as they are asked to continuously be resilient. In the context of climate-related disasters, staff comments on how triggering certain events (such as heavy rainfall) or language (such as atmospheric river) can be. Yet, in the same breath, staff also reflected on connections and activities that build and strengthen their sense of resiliency, such as kinship ties to other communities.

### *Hope*

The Semá:th staff were asked to reflect on what brings them hope for the future. Unfortunately, when younger staff were asked to reflect on what brings them hope for the future, many staff honestly reflected on how difficult it is to feel hopeful for the future in the context of the increasing number of climate-related concerns. However, some staff spoke of the ways that community members can bring a sense of hope to one another. When this question was asked of older staff, there was an overwhelming response that hope is brought about to the community through their children and youth. It was encouraging to hear how the community is prioritizing the needs of the youth in a holistic way, for example, by expanding culturally appropriate economic and educational opportunities for their youth.

### *Other Conversation Findings*

Community members expressed concern regarding the distance from Semá:th to Tradex, where much of the response to the 2021 flooding event was centralized. This distance further exacerbated the challenges community members faced when trying to access funding

and supports provided by different responding organizations. This was particularly apparent when it came to funding stipulations which created complex challenges for community members when they were trying to receive this funding. Additionally, the need for a better emergency funding process and more adequate timeliness of funding is imperative to recovery and resiliency efforts that are as efficient and effective as possible.

Understanding the effects of the administrative burden is also important, and in particular, the systemic issues that affect Indigenous communities and create additional barriers to receiving the support they are entitled to. Cross departmental expenses, for example, were identified as creating unnecessary administrative burden on staff members who did not have capacity. Other community members discussed the importance of utilizing the skills of the community members who can support resilience, such as first going to the relevant skilled community members to begin any kind of recovery activities. Along with housing safety, utilizing, sharing and reproducing the skills of Semá:th community members in the recovery process should be prioritized. Integrating these elements as a community is very important, and can lead to a more resilient and robust response. Community engagement sessions, and in particular, prioritizing this community time to debrief and discuss when an event has occurred is of particular importance. Concerns around burnout potential were also expressed, as emergency management teams are often in a state of response which, over the long term, can affect both individual and collective health.

# Preparedness Fair Responses

In May 2024, the Semá:th emergency management team hosted an emergency preparedness fair. At this community event emergency management-related organizations were invited to engage with community members through informational booths. Some of the organizations that were present at this event included Emergency Management and Climate Readiness, First Nation Health Authority, BC Ambulance Service, and Central Fraser Valley Search and Rescue, among others.

The Community Health and Social Innovation (CHASI) Hub was also invited to this community event to engage with members of Semá:th and continue learning from community members about their concerns and priorities related to disasters.

Community members were asked to reflect on how they define resiliency. Some of the themes that were reflected in community members responses included not giving up, pushing through setbacks, and coming together. The following quotes outline how individuals define resilience.

“Getting through all the hard time. “

“Standing strong again, again, again, [and] not giving up.”

“Pushing through setbacks.”

“Coming together in emergencies.”

“Resilience is bouncing back after loss, or a disaster.”

“Surviving”

“Rise above”

“Access and adapt”

Community members were also asked to share a memory, word, or visual that summarized their disaster experience or the experience of someone close to them. Many community members reflected on the 2021 flooding event. In specific, some recalled feelings of fear and uncertainty. Many other community members recalled their experiences being trapped and disconnected from outside resources. A few community members reflected on the ways their community came together and supported one another during disasters by responding to this question with words such as “caring” and “sharing.” The following quotes outline some of the memories community members shared related to disaster experiences.

“During my disaster experience, how different things were, disconnected due to flood and transport took longer.”

“I wasn't yet living on ... drive but the flood trapped many family members for a few days.”

“I just got out of the hospital when the flood hit. I had surgery and was afraid. We didn't know if the Fraser River would breach.”



Next, community members were asked what they identified as the greatest need when recovering from disasters. Community members overwhelmingly highlighted the need for support from family and community. Further, there were multiple individuals who highlighted the importance of accessing basic necessities such as housing, food, water, and medications. One community member also reported the need for “baseline data” amidst disaster recovery.

Lastly, community members were also asked to reflect on the question, “what brings you hope for the future.” Two community members shared how community gatherings related to emergency management (such as the event in May 2024) brought them hope for the future. Similarly, one other individual shared that efforts towards further disaster planning brings them hope for the future. Many other individuals shared how children and youth bring them hope for the future.

“Children learning from experiences [brings me home for the future.]”

“All our youth joining the workforce in the environmental sector [brings me hope for the future.]”

“Saving humanity for others [brings me hope for the future.]”

“Supporting each other [brings me hope for the future.]”

# Twelve Greatest Hazards Identified by Semá:th



## 1. OIL OR GAS PIPELINE SPILL

The most prominent hazard identified for Semá:th was the risk of pipelines spilling. The Trans Mountain pipeline most directly impacts Semá:th as it is situated in the surrounding area. Currently, there is one major pipeline in the area which enters Abbotsford from the east before running both southwest through Sumas Prairies as well as northwest up Sumas Mountain and through Abbotsford. Further, there is another pipeline that is planned to be built in the coming years and will run up Sumas Mountain and through Abbotsford.<sup>16</sup> These pipelines pose a significant threat to Semá:th as Trans Mountain “has a long history of oil spills and other incidents.”<sup>17</sup> Pipeline spills can result in a plethora of negative impacts. For example, they result in the contamination of waterways and soils which impact everything in the surrounding areas including human and non-human life.<sup>18</sup>



## 2. WILDFIRE

The second most prominent hazard identified by Semá:th was wildfires. This hazard has been an increasingly relevant concern and connects to the Bush Fire Act of 1874, an act that banned cultural burning for over a century in British Columbia and resulted in the loss of traditional fire keeping practices and has contributed to the current state of wildfires we experience today.<sup>19</sup> Unfortunately, in 2023 British Columbia witnessed the most destructive wildfire season to date with 2,245 separate fires and approximately 2,850,000 hectares burned.<sup>20</sup>



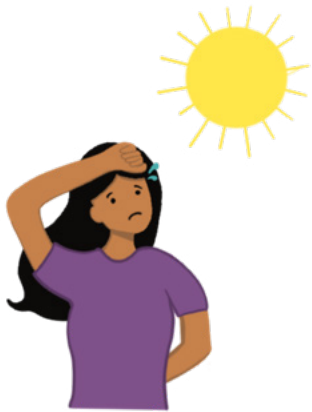
## 3. STORM WATER FLOODING

Semá:th identified storm water flooding as a third prominent hazard that they face as a community. This is a key concern given the community’s geographical location at the bottom of Sumas Mountain. As forested grounds retain water and debris amidst and after storms, this hazard is exacerbated as deforestation and infrastructural developments continue on Sumas Mountain.<sup>21</sup>



#### 4. LAKE, RIVER, AND STREAM FLOODING

Semá:th identified lake, river, and stream flooding as the fourth prominent hazard that they face as a community. The risk of lake, river, or stream flooding has increased significantly since colonization as settlers have made significant efforts throughout the surrounding regions to control various waterways.<sup>22</sup> Some local examples of man-made changes to waterways that have occurred include the draining of Sumas Lake (Semá:th Xó:tsa) and the redirecting of Chilliwack River (Sts'elxwíqw' Stó:lō).<sup>23</sup>



#### 5. EXTREME HEAT

The fifth prominent hazard identified at Semá:th was extreme heat. In recent years, the average monthly temperatures have increased significantly, with July 2023 being the hottest recorded month in history.<sup>24</sup> Further, in the summer of 2023 the number of days over 30 degrees Celsius more than doubled in British Columbia.<sup>25</sup> Unfortunately, without adequate cooling systems, many lower income individuals and families, and particularly at-risk populations (such as older adults), are left in life threatening situations. Semá:th was saddened to see the loss of a community member in 2021 due to extreme heat.



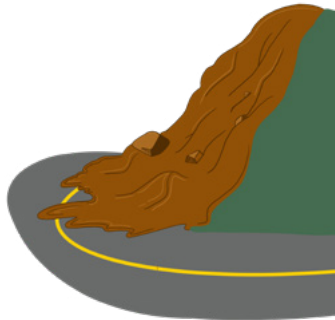
#### 6. AIR QUALITY

Semá:th identified poor air quality as the sixth prominent hazard they face as a community. Air quality plays a significant role in overall health, particularly respiratory health, as poor air quality can worsen or lead to the development of various health conditions.<sup>25</sup> Air quality in British Columbia is heavily influenced by wildfires both in Canada as well as the United States. Accordingly, as wildfire seasons worsen so does air quality throughout British Columbia. The most recent Annual BC State of the Air Report reveals an upward trend in the average fine particle matter in the air throughout British Columbia, with the air quality not meeting British Columbia's objectives many times over the last decade.<sup>26</sup>



## 7. STRUCTURE FIRE

Semá:th identified structural fires as a seventh hazard that their community faces. Structural fires pose a significant threat to human life as they can start quickly and burn intensely.<sup>27</sup> In an effort to reduce the risk of structural fires, Semá:th has taken significant steps to encourage fire education and safety amongst community members and strengthen their community's relationship with emergency response agencies.



## 8. LANDSLIDE/DEBRIS FLOW

The eighth prominent hazard identified at Semá:th was landslides and debris flow. This hazard has been exacerbated in recent years due to increasingly unstable soil conditions which are caused by a variety of factors including unpredictable and extreme weather patterns.



## 9. OPIOID CRISIS

Semá:th identified the ongoing opioid crisis as the ninth prominent hazard they face as a community. According to the B.C. Coroners Service, "drug toxicity continues to be the leading cause of death in British Columbia for people aged 10-59".<sup>29</sup> Further, there has been a consistent reporting of over 2,000 unregulated drug deaths per year for the last three years (2021 to 2023).<sup>30</sup>



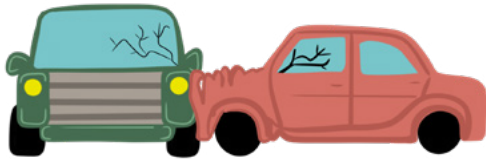
## 10. EARTHQUAKE

The tenth prominent hazard identified at Semá:th was earthquakes. As Semá:th is situated close to the coastline of Southwestern British Columbia, the risk of earthquake exposure is high. Accordingly, "Southwestern British Columbia is one of the most seismically active regions in Canada."<sup>31</sup> Although hundreds of earthquakes occur each year in the region, earthquakes that are capable of causing structural damage only occur every decade or so.<sup>32</sup>



### 11. HUMAN DISEASE (INCLUDING PANDEMIC AND EPIDEMIC)

Semá:th identified diseases, including pandemics and epidemics, as the eleventh hazard that their community faces. The recent COVID-19 pandemic is a clear example of the extreme impacts that pandemics can have on human health and social functioning. Semá:th is particularly attentive to the risks associated with pandemics and epidemics as many of their community members are at-risk populations (i.e., children and older adults).



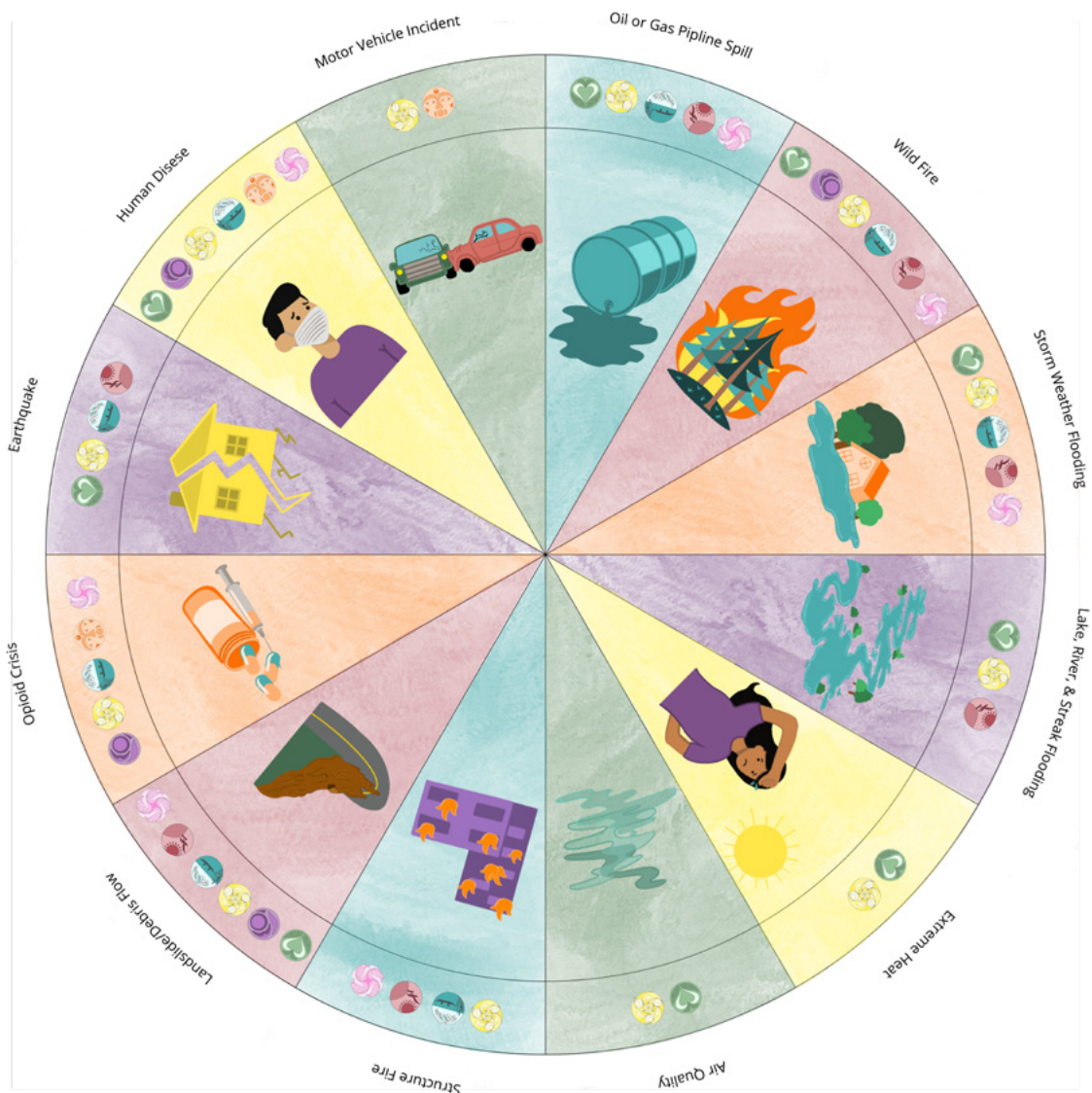
### 12. MOTOR VEHICLE INCIDENT

Lastly, Semá:th identified motor vehicle incidents as a final hazard that their community faces. Presently, there are limited vehicular entrance and exit points from the Semá:th community. This could become a significant problem in the situation where a motor vehicle accident blocks the access into or out of the community. More widely, motor vehicle incidents continue to be a key cause of injury and death as it remains the third leading cause of death (after unregulated drugs and suicides) in British Columbia.<sup>33</sup>



# Connections between resiliency capitals and hazards

While it is true that all these hazards have some kind of relationship with the various resiliency capitals, the visuals below aim to capture which capitals are most connected with the top 12 hazards identified by Semá:th. Leaning on and understanding the relevant capitals is crucial. By understanding how these capitals are connected to these hazards, communities can be better prepared to respond accordingly to the needs of their members, and lean on or preserve the different capitals based on the situation at hand.



# Questions to Ask

The following questions offer a starting point for Semá:th to consider as they move forward in their recovery and resilience efforts.

*How are the response and recovery efforts accounting for natural capital and how the community wants to live in balance with natural capital?*

*How is the community utilizing the existing social capital to strengthen present and future recovery efforts?*

*How are systems and structures supporting community members with receiving and stewarding financial capital in a way that is timely and provides autonomy to the community?*

*How is cultural capital being reproduced in all elements of the response and recovery efforts?*

*How is the built capital being designed and retrofitted to meet the current needs of the community, while accounting for the mitigation and adaptation in preparation of future events?*

*How is emergency management being utilized as an opportunity for the community to strengthen their political power and build strategic relationships?*

*How can human flourishing be ensured through leveraging human capital?*



# Looking forward

“It is essential that recovery efforts be community-led and holistic, grounded in the values, vision, and mission of the community. This approach must address long-term challenges that extend beyond merely restoring what was damaged, aiming instead to create more resilient systems.

However, there are often contrasting views on what constitutes necessary recovery efforts. While communities may view holistic approaches as fundamental to their recovery, government agencies might see those elements as outside the scope of funding. From an Indigenous worldview, however, these aspects are considered vital for true recovery.

Over the past year, significant changes in recovery funding have further highlighted the need for this alignment between community priorities and funding frameworks.”

— *Jenna Noppen*

Disaster Recovery Manager, Regional Director  
Emergency Support Services For Nations.



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# Appendix

## CONNECTIONS BETWEEN RESILIENCY CAPITALS AND HAZARDS

**Oil or gas pipeline spill** – Natural, Social,  
Financial, Built, Political

**Wildfire** – Natural, Cultural, Social, Financial,  
Built, Political

**Storm water flooding** – Natural, Social,  
Financial, Built, Political

**Lake, river, and streak flooding** – Natural,  
Social, Built

**Extreme heat** – Natural, Social

**Air quality** – Natural, Social

**Structure fire** – Social, Financial, Built, Political,

**Landslide/debris flow** – Natural, Social,  
Financial, Cultural, Built, Political

**Opioid crisis** – Social, Cultural, Human, Political

**Earthquake** – Natural, Social, Financial, Cultural,  
Built

**Human disease** (including pandemic and  
epidemic) – Social, Financial, Cultural, Human,  
Political

**Motor vehicle incident** – Social, Human



