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# **FOREWORD**

The 2018 "Better Together: Northwest Food Security Forum" was hosted by the NorthWest Food Security Partnership to promote the development of a community-driven food security initiative and policy, as well as networking and knowledge-sharing.

Our motivation for this initiative is tied to the northwest BC lifestyle and food choices which include a higher proportion of wild foods. We are also very aware of our high dependence on imported items found in grocery stores, which leaves us very vulnerable in times of emergencies when highways can be closed and power outages are common. Lastly, we are convinced that a sustainable northwest economy is only possible through increased investment in producing and processing food, both wild and cultivated. All three of these factors are influenced by climate change and it is critical that we practice innovation, learn from each other, and prepare for some big changes in the global food supply system. It is also critical that we align ourselves with other initiatives with similar objectives, especially ones that are well-resourced.

According to the Province of BC, food supply means job security. There are over 2,400 processing businesses located around B.C. Approximately 57,000 jobs are generated by agrifood and seafood production and processing in B.C., with the entire agrifood and seafood value chain employing nearly 330,000 people. Reflecting the significance of food to BC's economy, a Strategic Growth Plan was released in 2015 with a goal of reaching annual revenues of \$15 billion per year by 2020. To do this, three key priorities were identified:

- increasing production;
- driving competitiveness; and,
- building markets.

What follows is a summary of the presentations given at the Forum, together with an Action Plan to get us moving in the right direction. Further information can be found on the website www.nwfoodsecure.org or through the resources listed at the back.

This event was only possible through the support of our sponsors and partners, our speakers, and the work of our Planning Team: Laurie Gallant, Denise Gagnon, Laurel Burton, John Stevenson, Josette Wier, Bryan Swansburg, and Claire Deboer.

We look forward to contributing to the development of food security in northwestern BC. Thank you for your interest, and we hope to work with you in the future!

Laurie Gallant Lead Facilitator for the Northwest Food Security Forum

# FOOD SECURITY VS FOOD SOVEREIGNTY

During and after the event, there were many discussions regarding definitions and the true work of this emerging organization. It is important to distinguish between *Household Food* Insecurity which is linked to economic power, Community Food Security which is how the Planning Team has been approaching our work and focuses more on a sustainable food system, and Food Sovereignty, which has been more closely linked to Indigenous rights but is equally valuable to non-indigenous people.

A consensus is emerging that our focus embraces both Community Food Security and Food Sovereignty and that both of these necessarily include Household Food Insecurity. As a result, it seems wise to use our resources to advocate at the community and regional level and support initiatives that address affordable access to food at the household level.

Some complex questions arise when working for greater community food security and food sovereignty, including land title, resource management policies, and economic development. For example, in the northwest where traditional food sources from the forest and the water have provided the necessities of life since the ice age for indigenous people, are we risking our right to define our food system by allowing access to these resources to people who live outside of the region? With declining salmon and moose populations, is it logical to allow people from outside the area to further deplete fragile populations when residents count on wild foods for a large percentage of their diet? These questions also highlight the link to household food insecurity.

Food Sovereignty: the right of peoples to define their own food systems. The right to safe, nutritious and culturally appropriate food and resources and the ability to respond to ones own needs for healthy foods

# Community Food Security

# Household Food Insecurity

A community is "food secure" when everyone obtains a safe, personally lacks the financial means to buy acceptable, nutritious diet through a sustainable food system that maximizes self-reliance and social justice.

(Hamm and Bellows, 2003)

When a household worries about or healthy, safe, and personally acceptable food.

Many food security initiatives increase community food security. but are unable to address the root cause of household food insecurity

# **FORUM SUMMARY**

#### FAST FACTS

- 45 + attendees
- 12 + communities represented: Masset, Prince Rupert, Kitimat, Terrace, Kitwanga, Hazelton, New Hazelton, Smithers, Telkwa, Burns Lake, Prince George, Fort St. James, 25 sessions over two days
- 18 + speakers from across BC representing value-added processors, producers, four levels of government, academia, non-profit research and advocacy groups, renewable energy sector, and First Nations interests
- 17 + sponsors and partners spanning individuals, small business, government and nonprofit groups
- May 17,18 Thursday and Friday in Smithers, BC
- 7 people on the Forum planning committee crossing sectors and communities
- the 2018 Forum is an outcome of the 2017 Bulkley Valley Food Security Forum

#### LEARNING OPPORTUNITIES

All sessions were offered as plenaries so that moving forward there would be a shared understanding of the current state of food security in northwest BC. Five key themes were used to develop our program, an outcome from the 2017 forum.

- 1. Policy Municipal bylaws, Regional District Agricultural Plans; Gitanyow Wildlife and food Security Management Strategy; Community Health; Skeena Salmon, Climate Change and Food Security: Adapting to an Uncertain Future
- 2. Infrastructure Mapping Our Assets; Root Cellars; Got Meat? Bulkley Valley Custom Slaughter; Lunchtime tours
- 3. Education Local Food to Schools in Hazelton, Local Foods Pantry Program in Haida Gwaii; Indigenous Food Sovereignty; Strength in Numbers: Smithers Farmers Institute
- 4. Energy/Emergency Preparedness Options for Handling Power Outages, Emergency Support Services
- 5. Capacity building Origins of the NW Food Security Partnership, Food Security 101, Community Economic Development, Crafting a Vision Statement, Priority Setting Framework, Game Plan/Organizational Structure

There were also two field trips that doubled as our lunch hosts - Grendel Group and IKitchen of High Roads Services. Both are local non-profits specializing in food and training for adults with special abilities.

## FEEDBACK FROM PARTICIPANTS

"I liked the mix of how to plan and build consensus with case studies of projects taking place. I also liked the Mapping our Food Assets activity."

"So happy to see you included what is happening individual FN Communities, showing the contrast between more urbanized areas like Prince Rupert and more rural areas like Gitanyow and Hazelton."

"Lunches were Fantastic. It was a highlight of the Forum. The food was perfect and the 2 venues welcoming and super interesting."

"This is a wonderful way for all communities of Northern BC to come up with a collaborative idea for food security."

"The program was set up with an eclectic and diverse range of speakers and subject matter, which provided for a robust learning opportunity. Great discussions!"

"Nice mix of sponsors from Terrace and Smithers, with many different sectors represented. Also liked the local coffee and local baking at coffee breaks."

"I feel like this forum brought a diverse group of stakeholders together and established connections and relationships that will facilitate positive opportunities for food security in the Northwest."

"Really enjoyed all the diversity - it was awesome to see so many valuable stakeholders and government representation. Loved how open the sessions were to help develop and define the Partnership. I thought the emphasis on developing a plan with Janine and having her as a keynote was a wonderful way to keep the forum moving in a forward, action-oriented way."







"Check out watershed based planning - it's the best way! We live in the Skeena watershed and so many possibilities to collaborate and be inclusive. All communities/peoples live in a watershed, this connect to healthy waters, lands, cumulative impacts, resource development, climate change etc."

"The diversity of sponsors is amazing. Love that you're thinking about stakeholders from all backgrounds and strengths. Especially happy to see Northern Health Authority on there since they can have so much influence and pull in helping small organizations. Interested to see more sponsors from other communities around the NW in the future."

## **OUTCOMES**

- 1. Agreement to investigate forming a legal organization that is autonomous and with a paid position(s) to ensure that projects are adequately resourced.
- Seven people volunteered to sit on an Interim Board of Directors.
- Two of the planning team members agree to do a job share and hire contractors as needed.
- A Terms of Reference document is being drafted for circulation.
- 2. Agreement to proceed with a Commercial Root Cellar Pilot Project
- · two willing hosts on farms in Kitwanga and New Hazelton
- \$1000 in seed money from Northern Innovation Challenge contest in May
- will extend selling season for growers, provide backup cold storage for local grocers, and provide space for a food cache in case of emergency
- · need to work out details of a model for these kinds of demonstration projects
- opportunity to promote community root cellars and residential root cellars in partnership with other agencies
- 3. Heavy support for an annual Forum in rotating communities
- Terrace will likely host 2019 event

- topics requested included:
  - extending the growing season
  - reporting out on projects covered at 2018 event
  - · tales from the trenches of growers
  - funding sources
  - updates from lead policy makers (Min. of Aq.)
  - other Food Security strategies (BC Emergency Management Program, Northern Health, BC Ministry of Agriculture, KPU Institute for Sustainable Food Systems -Report on the Southwest BC Bioregion)
- 4. Agreement to develop a strategic plan for increasing food security
- identify specific targets such as 10 and 25% increase in consumption of local food within 5 and 10 years
- partner with economic development, health authorities, and emergency preparedness teams to dovetail with other plans
- recognition that it may take 18 months to develop a plan that has input from all stakeholders - put together a framework and proposal to get financing
- 5. Recognition that this organization will support other initiatives as capacity allows with a particular focus on action items identified during the 2017 and 2018 events and in partnership with organizations demonstrating readiness; emphasis on public education and market development.
- 6. Recognition that relationships formed with sponsors and partners are one of our biggest assets and we need to continue these relationships as we move forward.
- 7. Agreement that we have a wonderful opportunity to follow up with First Nations Health Authority (at their invitation) and explore development of Indigenous Food Sovereignty oriented initiatives with forum participants Jeannie Parnell, Sandra Harris, Janet Melanson, Kevin Koch, Sarah Stevenson and Anissa Watson.

# FORUM PARTNERS AND SPONSORS

# \*\*\*PARTNERS\*\*\*









# \*\*\*GOLD SPONSORS\*\*\*





# \*\*\*SILVER SPONSORS\*\*\*









# \*\*\*BRONSE SPONSORS\*\*\*













Smithers Farmers' Institute

# **FORUM SESSIONS**

# Day 1 Welcome

### Laurie Gallant - Organizer:

Welcome to participants and speakers, and thanks to everyone for coming, as well as to the sponsors for supporting this event.

# Mabel Forsythe - Wing Chief Timberwolf:

Acknowledgment of Wet'su'weten Nation territories, and a blessing on the event.

### Shelley Brown - Councillor for the Town of Smithers:

The town considers sustainability to be a key value, and it has influenced the development of our Official Community Plan (OCP). Further, this community also has a great focus on local food. This is reflected in the collaborative plan and bylaws such as the backyard chicken bylaw (2016). The town is looking forward to the outcomes of this Forum.

#### Questions from the audience:

Q: Is the community garden by the railway sponsored by the Town of Smithers? A: No, it's a citizen-driven initiative, with Town support. The garden in Telkwa is also citizen-driven; the town encourages these.

Comment from Laurie: Smithers Town Council has been very welcoming; it is important to engage and approach the members of your Town Council and influence the political sphere. Shelley notes: Think big, be empowered.

# ORIGINS OF THE NORTHWEST FOOD SECURITY PARTNERSHIP Laurie Gallant

The purpose of this forum is to build consensus on the path forward - we want to produce a food security strategy for Northwest BC. To do this, we have assembled a wide variety of speakers covering topics that must be considered in the development of our strategy.

But how did we get here? This project started when Laurie spoke with the Province after the 2017 road closures and food was disappearing from the shelves of local grocery stores. The Province said that they wouldn't get involved if roads were closed for 3 days, and people in remote communities would be on their own. Local emergency personnel recommend that people should be prepared for at least 7 days. Laurie lives on an off-grid permaculture farm in New Hazelton and figures she is about 75% self-sufficient for food (dairy is a challenge), power and water but worries about those not in this position. She also acknowledges that sometimes political boundaries differ wildly from natural "trading" routes and just because there is an imaginary line on the highway doesn't mean that dollars don't

cross it to buy food and other consumer goods. Interdependence between communities is key.

After the Bulkley Valley Food Security Forum a year ago, where she met Denise Gagnon from Terrace, Denise said that what we really need is a Highway 16 Food Security Network. This idea got floated around and agreement was there for expanding the scope but that Highway 16 still excluded too many communities that we trade with for food, like Kitimat and Dease Lake. "Northwest" became the new descriptor and now we are still figuring out if this goes as far as Prince George. By the end of these two days we will all likely have a clearer idea of the size of our planning area.

Laurie has worked developing sustainable, long-range plans (over 25 years), as well as transition strategies (5 years), and pilot projects at the provincial, regional, and community level but pretty exclusively for Zero Waste and Air Quality. Food Security is new but there are remarkable similarities since all touch on economic development and quality of life.

An important asset to be developed is a list of processors, consumers, non-profit groups, etc. to help connect resources. Her SWOT analysis from the 2017 Forum revealed that the Bulkley Valley has many strengths, including a varied and huge landbase, a successful farmer's market, reasonably long growing season (120 days is possible in some areas), and interest in local food. Its weaknesses include limited food processing infrastructure and other than meat, limited value-added food products, as well as limited cold storage capacity, leading to the high cost of importing food. Opportunities include commercialization of food processing (preservation, etc.), the interest in local food, and the increase in frost-free days due to (potentially hazardous) climate change. The threats in the BV include natural hazards (floods, fires), power outages which compromise storage, damage to wild food sources from mismanagement and loss of agricultural land from development.

Perhaps a Foodshed analysis would be useful, to assess the number of people, amount of food needed, and where in the region it can be grown. This was done in Bella Coola and also in Waterloo Region in Ontario. Future plans could include: shared infrastructure for economies of scale, such as root cellars (last year it was suggested these be made mandatory for new residential construction); food dryers; energy alternatives, such as offgrid options for residential and commercial buildings; education, in terms of cooking lessons, local food marketing, and workshops; and the general encouragement of local food production and processing.

#### Questions from the Audience:

Q: Does consumer education factor into the long-term plan?

A: Yes - habits might have to evolve, we might need to eat weird vegetables like rutabagas and not rely so much on out of season tomatoes and pineapples, and cooking education is important, to make local food appealing. Some people really don't cook anymore and take no joy in it, even when time and money are not issues. Also, exposing children to these foods when young will contribute to their comfort with the ideas, and make the things more meaningful.

Further: Government subsidies and housing plans are useful in encouraging energyefficient designs - see Germany and California.

Laurie's slides are available on the website.

# FOOD & AGRICULTURE SYSTEM PLANNING 101

Janine de la Salle

Food is about creating opportunity for greater community resilience, and overall social well-being; it is common ground for all people. We are still in the process of convincing people that food and agriculture are things we need to plan for – it's not a traditional area of planning. There are important cultural aspects – how can reconciliation (with First Nations) take place through food? We have to keep in mind that there is a dynamic tension in play here, as agriculture was a significant displacer of indigenous peoples and other non-European settlers (eg. early Chinese).

People in rural communities tend to be more intelligent regarding emergency preparedness, but there are still many areas in crisis, and grocery stores tend to get wiped out quickly, within a day or two.

Food planning lexicon is important, but don't get stuck on it: Food hubs, Household food insecurity, Community food security, Artisanal agriculture, etc. More generally, it is even hard to define fundamental terms such as "agriculture" and "farmer."

Janine looks at the entire food system as a unit of analysis, using a holistic 6-prong approach (food production; processing and storage; distribution and transportation; buying and selling eating, culture and celebration; food recovery/ waste). Consider this as well: local is not always more sustainable, and a healthy diet is not necessarily local.

There is much investment in Northern communities; Premier Horgan promised 20 million for food security planning in the area. There are provincial, national, and global dimensions in the food system, and it is important to understand where your local influence is, and who is the voice of the plan.

Policy has generally focused on large-scale agriculture, but due to economic and climate change pressures, there is increasing opportunity for smaller-scale agriculture. During the development of the plan, it is important to consider which the jurisdictions regulate which elements (e.g. Fisheries is Federal, so do not expect the Province to handle that issue.)

# Meaningful outcomes:

What kind of plan is appropriate for this initiative? E.g.: Food charters can enshrine your vision, values, and planned actions, but you need to consider what the purpose of your charter is, specifically. Some communities have developed Food Charters and spent up to

two years doing so. Then what? These become documents that get presented to local levels of government who endorse them and hopefully the Charter leads to concrete actions. When you have limited resources and time, developing a Food Charter may not be a priority.

Food plans are not legally binding in entirety, the way statutory plans are, but parts of it might be appended to official community plans, or might inform how bylaws are updated, so it's important to keep the end destination of the plan in sight. Consider the environment, especially urban vs. rural, and where they transect. This also affects market transformation. Recurring goals include: building community and culture, responsible and sustainable practices, protection of natural assets, growing more food in urban & rural areas, education and awareness, access, local economies, capacity building, and advocacy. Priorities should include education and advocacy.

# Planning process:

- 1. Determine what is happening now. Figure out what data is available, what we need to get to paint a picture of where we're at now.
- 2. Decide where you want to go. Co-create a shared vision that is both inspirational and pragmatic.
- 3. Figure out how to get there.

Typical planning process looks like an ebb and flow of broad to specific

- 1. Preparing to plan: Setting up advisory, setting up scope of project, set up administrative structures to manage possibly a 2-3 year process
- 2. Background info scanning and analysis: data collection piece; what is the best way to get in touch with people? Ask questions
- 3. Visioning and goal setting: think 20 years out, many plans are 10 years too
- 4. Creating and testing strategies and actions
- 5. Synthesis and plan creation
- 6. Plan endorsement and/or adoption
- 7. Plan implementation and monitoring
  - a. This is a common one to forget
  - b. Don't work with imaginary data and create a checklist using that info!

How does the NWFS Partnership create a food security plan?

- o Why do you want to plan?
- o What do you want to plan?
  - Is it mainly emergency prep, or more holistic?
- o How do you want to plan?
- o How do you want to engage people?
- o Where do you want to plan?
- o Who is involved?

In this session, we learned the basics of how to go about developing a Food Security Plan for our region. The notes from this session complement the presentation slides and the Toolkit, both available on our website.

# FOOD SECURITY AND COMMUNITY ECONOMIC DEVELOPMENT Ken Shaw

Personal background: a passion for permaculture, and co-teaching a permaculture design course through Northwest Community College.

Food is big business – \$47 million spent annually in Prince Rupert by residents – with the multiplier effect, and a 10% goal of food self-sufficiency – that's \$32 million in Prince Rupert's local economy. The leaky bucket analogy of the economy presents potential business opportunities for local business to "plug the leaks." For all of Northwest BC using a population of 85,000 that equals \$273.5 million/year.

Industrial projects have a projected lifespan of 40 years, and then there are the difficulties of the decommissioning process – food doesn't have that problem. In a comparison between local farming vs a mega project, local farming has many opportunities for economic development, as well as many job opportunities.

Barriers to the growth of the local economy:

- Attitudes
- Production challenge
- Climate questions (but the problem can be the solution: too wet = less irrigation)

Innovative approaches include the two block diet, and the incredible edible, as well as special projects and programs (McKay Street Park Project, Community Build Day, the Sustainable Communities Program, From the Home to the Land, Sustainable 2030 plan, Backyard Chickens, Eco Trust Canada).

As much as a radical change is tempting to imagine, incremental changes over time are more likely and feasible, while radical changes tend to occur in times of crisis.

Small scale initiatives include the Two Block Diet in Vancouver (neighbourhood-level cooperation), Sole Foods Vancouver, "Weed" dating, McKay street park in Prince Rupert (focusing on "place-making"), the Permaculture Course at NWCC, and Hays 2.0.

Suggested actions to develop:

- \* Create policy and set aside land for farmer's market to make it profitable for local sellers.
- \* Create bills to further sustainability, and support initiatives like backyard chickens.

This presentation did a great job of presenting a business case for investing in local food as an economic driver. Despite the seriousness of the topic, this presentation was very entertaining and used humour quite effectively to make a point. Ken's slides for his presentation will be available at a later date and contain more numbers.

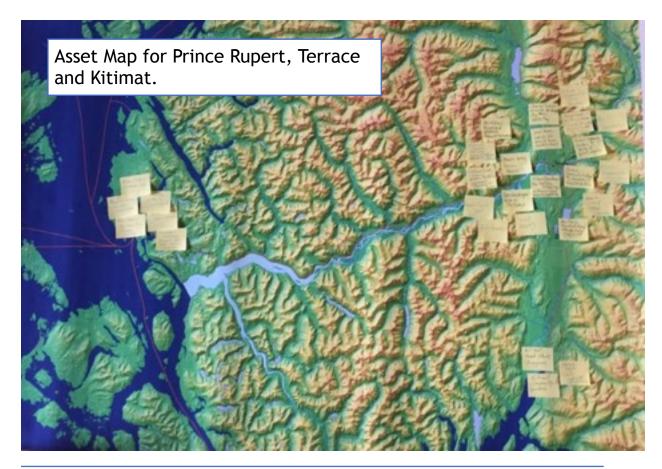
# MAPPING OUR (FOOD) ASSETS

#### Laurie Gallant

This session was an opportunity for people to discuss food security initiatives, projects, or organizations from their home communities. Participants were encouraged to use sticky notes to add these assets to the maps placed around the room.

We learned in the Planning 101 session that Food Assets are places, programs, business, and organizations that play a role in the food system. Commonly, these assets are inventoried at the beginning of a planning process. See the Food and Agriculture System Planning Toolkit For Communities for a more detailed explanation, including the nine major categories of food assets.

It would be wonderful to build on this information each year. Next step is to find the resources to consolidate and digitize the mapping exercise to facilitate knowledge-sharing.



# **EMERGENCY PREPAREDNESS: PACK YOUR BAGS**

# Naomi Gourlay

Emergency Support Services is a small but significant piece of emergency management. ESS helps those affected by disaster; it relies on volunteers to provide physical and psychological relief, and connects people to other disaster services (Salvation Army, group lodging facilities). It serves to increase capacity, and, increasingly, is acting on a larger scale (e.g. house fires were common but now also floods and wildfires). Currently, the ESS is working to develop a mobile trailer to act as mobile reception centre that can go to any community in case of emergency. This is for the First Responders to use.

Community stakeholders include the Ministry of Environment, the Forest Fire Forecast Centre, and regional and local authorities. Current threats include floods, decreased snowpack, forest fires.

- Evacuation Alert: be prepared to leave on short notice.
- Evacuation Order: leave immediately and follow the directions of local authorities; cannot return until the order is rescinded.

Many people are not adequately prepared. Only 13% have a plan, and many do not know about their insurance coverage. 72 hours is the recommended timeframe but in reality 7 days would be better if you have to hunker down at home.

Plan, Prepare, and be Aware. Know the risks, make a plan, get a kit.

Resources on developing the kit can be found online. Naomi brought brochures and cards for household emergency plans and contents for a To Go bag.



PreparedBC is the government agency who does education. Visit their website.

https://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/preparedbc

## FOOD SECURITY POLICY PANEL

Debbie Evans (Regional District of Bulkley-Nechako), Tara Irwin (City of Terrace), Ryan Holmes (Smithers resident with backyard hens)- Moderated by Alison Watson

Alison: in many communities, there already exists pretty in-depth food security policy, but implementation is typically the real issue.

Tara: working in local government, the policy sphere tends to be very divisive, but food security is one area where people do tend to come together. Tara gave an overview of policies in Terrace:

- Skeena Valley once known as the Okanagan of the North can grow a huge diversity of food due to unique climate and landscape – 150 day long growing season, in some areas up to 170 days.
- Also considered at one point to be the bread basket of the northwest starting with the settlers – until logging came in, which was more profitable.
- Not lacking in policy: 2008, Terrace started doing some sustainability planning, and then in 2011 food security planning was incorporated into the OCP.
- In 2011: started looking at backyard chickens and bees people not very resistant, because many people already did it, so community took it very smoothly – in 7 years, only 1 complaint.
- Had backyard hen tours when it first became a bylaw, to get people used to the idea.
- Objective in OCP: promote sustainability through food security.
- Second major policy objective increase percentage of food grown and processed locally. Years ago, held backyard composting workshops, to get people used to the idea.
- Grant to construct 50 garden beds for seniors
- Agricultural Area Plan in depth history, including soil science, and provides 91 recommendations to Terrace and the region – worked closely with Regional District of Kitimat-Stikine on this plan
- Updated plan in 2017-2018 to see what they had done, and what could be updated.
   Tara feels the urban piece, which can be done in backyards, is very important.
- Look at Victoria and their policy for a good example: allow farm-gate sales, allow in any residential zone, lower density, permit setting up a stand to sell produce, no license required. This is very low barrier, so Terrace is now doing this too – helps to address the food desert problem.
- Got some pushback: people saying: "aren't you competing with the grocery stores?"
- Victoria doesn't require that you live on the property you sell from, but Terrace still does – so that's something they're looking to change, to be able to utilize vacant land for food production.
- Community gardens are great, but in a place like Terrace, many people have a little extra land that they can use to grow food without needing a community garden.

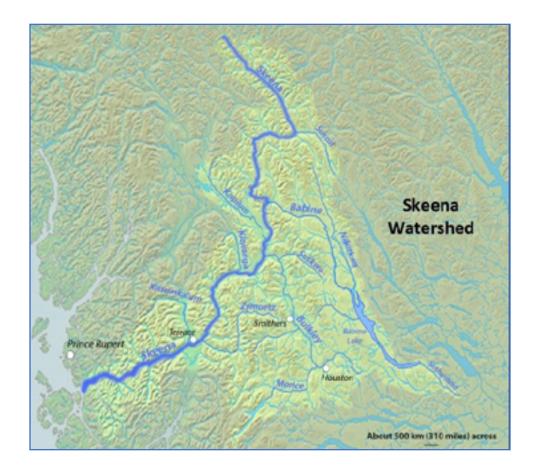
Debbie: Regional District of Bulkley-Nechako has agricultural plan, but it's not policy.

• Debbie is very adamant about protecting agricultural land from urban encroachment.

- Some of her projects for 2018:
  - o build relationships it's important to have farmers on board, and involved with local food initiatives
  - o How can we increase food production and food storage eg. community kitchens and cold storage, where we can produce and dry food? Resources are starting to form, eg. in Burns Lake.
  - o Root cellar workshop in June or July in Burns Lake.
  - Local food production workshops for what can people can do to produce their own food – eg. how many chickens, rabbits, crickets, turkeys, can you have under quota, etc.
  - o Container gardens as an idea to have 365 day farming.
  - o Agricultural plan is from 2012 going to be updating it for a 2019 version.
  - o Climate change adaptation climate change threats and opportunities.
- Deadline for farmers who haven't been added to the producers to consumers directory is coming up fast - contact Debbie if in Bulkley-Nechako; if elsewhere, contact the local economic development officer.

Ryan: Smithers resident, loves urban chickens

 made a delegation to Town Council – you get an idea, you bring people who also have the same idea, then flood the hall, get an articulate speaker, and convince



people inside and outside that venue— coffee table and beer table conversations. Gaile Jenne was the one who organized the original idea — there was only one dissenter, who feared chickens were "gateway" animals to other animals in backyards.

- Have to be careful about feed, because bears will come for the feed more than for the chickens.
- Most people are not quite there yet everyone with their manicured lawns sees it as too much, but the idea is spreading slowly with neighbours and one of his neighbours also has chickens now.

#### Comments from audience:

- The agricultural directory for Bulkley-Nechako why can't the Regional District of Kitimat Stikine (includes Terrace) do one?
- The 2016 version of the Bulkley-Nechako didn't include Hazeltons, so the next update in 2017 did thanks to Laurie's persistence and cost-sharing proposal to both Regional Districts. Someone started this by going to survey farmers who come to farmers markets, and built the directory from there.
- Root cellar workshop Laurie is interested in going to the one in Burns Lake, and bringing it to other communities in the northwest regions

#### Discussion with audience:

Q: What more can be done to protect agricultural land? In Terrace, 3 parcels of land were given over to dynamite storage – Federal gov. started it, but city council approved it.

A: John Stevenson – Ministry of Ag.: He encourages concerned citizens/ planning staff (who are aware) that there is a provincial process for these types of proposals – he usually has to comment on them, and then a board votes on it, but some proposals have been pushed through without going through the province, so the Ministry can't protect that agricultural land.

Tara: The Agriculture Land Reserve was done as a desk exercise, and the land wasn't actually surveyed – so some of it isn't arable at all, which might influence why the city would let it get developed.

John (responding): You can have intensive agriculture on poor or marginal ground – ex. greenhouses, chicken houses, cannabis, which is still better than other kinds of more intensive land use like development – so the land should still be protected, even if it isn't perfectly arable.

# SKEENA SALMON, CLIMATE CHANGE, AND FOOD SECURITY Greg Knox

The Skeena watershed is a huge producer of salmon, both currently and historically. The salmon will spend about a year in the river before travelling down to the estuary and adjusting to new conditions. They are highly susceptible to stressors, such as hotter temperatures, wetter, with earlier melts. Atmospheric rivers can cause extreme weather

effects, including major flooding and droughts, as well as events such as the pacific "Blob." Glacier melts also affects salmon success. These all contribute to the nutritional value of zooplankton and overall survival.

The Skeena Knowledge Trust works to gather and gain information on fish health, numbers, and habitat in a centralized location. The salmon act not only as an extraordinarily important traditional food source for First Nations, but also a cultural and economic staple. It is also independent of income, so provides an important nutritional source to those with limited financial resources.

The Skeena Watershed is the 2nd largest salmon-producing watershed in Canada, with 5-10 million fish/year, and it covers an area approximately the size of Switzerland. Among these are the chinook salmon, which lay their eggs in gravel in the tributaries of the Skeena. The hatchlings will migrate down to the estuary, then adjust to saltwater before spending 1-4 years in the ocean. They will migrate as far the coast of Russia, before returning to spawn in the same rivers from which they came.

Climate change is affecting ocean temperatures and acidity, which has affect migration patterns of the salmon, their prey, and their predators. Further, the changes in precipitation – more rain and earlier run-off, as well as higher average temperatures, more frequent droughts, and the melt of arctic ice – contribute to large change in salmon habitat and behaviours.

Formerly rare occurrences such as fall floods are becoming more frequent, which threaten to wash away or smother the eggs which are laid in gravel beds, and jeopardize their food sources once hatched. Droughts can cut off access to spawning grounds and trap fish in still water where they are exposed to the elements, disease, and predators – including fishermen - before they are able to lay their eggs.

The "Blob" was a large section of the North Pacific which, for several years, was 3 degrees warmer than the ocean average. This not only impacted weather patterns, but also lead to zooplankton – which are a major food source of ocean-swimming salmon - having less fat content, and therefore being a poor nutritional source. The precise way this affects salmon return is difficult to ascertain, since salmon can remain in the ocean for many years, and they have a large territory. However, an overall trend of decreasing return has been present for many years for most species, although some have proven quite resilient. In light of these threats to salmon population, it is important to prioritize local food harvesting and distribution, particularly for local First Nations. Currently, local fishers are lumped in with tourists and more commercial enterprises, which threatens regional food security.

#### Questions/Comments/Answers:

- Q. What does the recent closure of recreational and sport fishing mean?
  - Skeena and Nass sports and commercial fisheries will be closed until further notice may remain for 2 years

- First nations food fisheries will still go on, except for Sockeye
- 25% return of salmon compared to what we've seen in previous years
- Q. Agriculture and fisheries difficulties in distinctions between jurisdictions. Any information on how to navigate that?
  - It is valuable to be talking about those two elements together and not shy away from it just because of how distinct they are. Fisheries is federal, but there are important steps which can be taken at this level.
  - Greg we're now dealing with a situation that is much different than the past so perhaps this is an opportunity to break down traditional barriers.

Greg's presentation slides contains many detailed graphs and charts and can be found on our website.

### FOOD SECURITY PROJECTS IN HAZELTON AND HAIDA GWAIL

I) Anissa Watson - Local Food to Schools Program in Hazelton

Anissa works with the Storyteller's Foundation, on Gitxsan traditional territory. Her work is to facilitate initiatives deemed important by the community. Food sovereignty means knowing what good food is for you, and being able to go out and get it.

The Learning Circle has been an important tool for building relationships and moving past trauma from residential schools. It's also wonderful for engaging the youth, which is an excellent way of developing community involvement and improving community health. Strengthening intergenerational bonds, and developing relationships between teachers and growers, is an important step in this project. Anissa's work is very action oriented. They encourage opportunities for knowledge-sharing and hands-on learning, such as preservation techniques and intergenerational workshops.

The Hazelton Food Charter has 5 principles: Food is central to identity as citizens; Central to social relationships; Central to how we work on the land; Central to a healthy economy; Central to our health.

Over the last two years, many of the ideas put forward have been enacted in local schools. New Hazelton Elementary School has acted as a foundation, and the project now expands beyond the school and into the community. For example, the Memory Bed project works to create places for people to sit and consider lost loved ones, and hopefully find some measure of peace.

#### Questions/Comments/Answers:

Q. How to address lack of participation and maintenance of gardens over the summer?

A. One option: partnership between farmer's market and school garden, engaging volunteer groups, parents, and the community. Plan low maintenance garden over the summer, with plan to harvest in the fall.

II) Sarah Stevenson - The Local Foods Pantry Program in Haida Gwaii

Food Sovereignty on Haida Gwaii is the primary focus of Sarah's work. The Food to School Program, and the Pantry Program are two of her projects. The Food to School Program includes a local salad bar, and was partly funded by IMAGINE grants. Funding is often targeted at infrastructure rather than human capacity, which is a barrier to developing many projects.

Initially, the priority was to form coordination and connection between schools and local farms and opportunities. It is important to be cognizant of the needs and wants of the community, rather than competing for personal or group agendas – these projects must come from and be for the community, without leveraging a demographic to get funding for an individual endeavour. A Learning Circle was formed in 2014, with a paid position for the coordinator, which enable the project to expand beyond what could be achieved when relying on volunteer work without burnout.

The Pantry Program formed as a method of addressing barriers by creating a food hub, with input from farmers and harvesters, donations, and youth involvement. Much of this food goes to schools, youth centers, prenatal groups, wellness groups, and food banks.

Other aspects of the projects are promoting food preservation workshops, which also serve as intergenerational network-building, as well bringing local food into hospitals. Developing food safety skills is also an important element.

Since none of the organizers are indigenous, there is oversight by the Council of the Haida Nation to maintain historical and cultural knowledge and practices. This also creates learning opportunities, such as the time Sarah took children on a field trip to Yaan village site to harvest seaweed (Sgyuu). The group was working with a local from that area, but had not asked permission from the matriarch, which was the proper protocol in that case. Since this had occurred with only the best intentions, it was a chance to build connection, and no harm was done; being open and honest fosters community, and it is always appropriate to check and listen.

This sort of project also fosters things beyond what it organizes. For example, high school kids spontaneously helped an elder restore her garden, leading to excellent learning opportunities and genuine community building – this sort of spontaneous giving and receiving is inspiring.

Slides from Sarah's presentation are available on our website. This was a phone-in presentation as Sarah's travel plans had to be altered at the last minute.

# IMAGINING A FOOD SECURE FUTURE

#### Janine de la Salle

A Vision Statement is a great tool to use to anchor your planning process. It should contain goals and objectives for 5-10 years, but should not be bogged down in details. These should be the guiding principles on which to hang projects and more complete plans. This is also an opportunity to build consensus on what definitions a group will use, since terms vary widely. Each statement should be enduring. Under a given statement, multiple projects or objectives can be listed, and under these, detailed bullet-points can be laid out. Regardless, always keep outcomes in mind when planning projects, and prioritizing.

In this situation, you have many great reasons for the work you do - emergency preparedness, strengthening your local economy, working towards a healthier population - these are the pillars for your Vision Statement. We then brainstormed on some words.

# What words would you use to describe the desired future state of food security and agriculture:

- Equitable access
- Fresh and healthy
- Sense of community
- Lifestyle
- Culturally respectful
- Inclusive
- Connection to land
- Economic development
- Delicious cooking
- Protect language and environment
- Nourishing
- Community building

- Minimize impacts of the agriculture industry
- Sustainable
- Fair compensation for farmers
- Employment
- 'learning circle'
- social cohesion
- food for emergencies
- Less use of fossil fuel
- Local
- Developing skills
- Celebrating
- Education in schools

- Backyard, urban agriculture
- Alternative protein
- Food waste recovery- no food is wasted
- Develop dignity
- Value-added
- Recognize ancestral wisdom
- Resilient
- Innovation re: climate change adaptation
- Intergenerational learning

End of Day 1 - participants were given feedback forms and invited to a social at Bulkley Valley Brewery, a sponsor of this event.

# DAY 2 OPENING REMARKS with Nathan Cullen, MP

It is wonderful to see the many efforts with respect to food security in the region. Given the limited amount of food in stores locally, there is great fragility in the food security system.

What you folks are doing, the gathering, the strength, the resiliency you are building across our region can't be understated. All the people that you know and that are around us, no pressure, but they are going to rely on the plan that you come up with by the end of today, and the years to come.

This is a back to the future moment. If you went back a hundred, a thousand years, we were incredibly resilient with food, we had great food security. People knew how to plan and anticipate, they made sure they could absorb whatever changes came. And with all the advancements we have made, all the incredible technology, all we have done in the past few decades, gave the appearance of resiliency and strength but in face we have made ourselves very, very vulnerable to changes that we cannot control which is very worrisome to me, if not worrisome to you.

I am so inspired by Laurie's leadership and all the work that you folks are doing, it gives me great hope. We had a small session last night that some of you folks came to, about creating new laws for a better Canada.

There is a proposed national food security day (Bill C268), for local food, to celebrate. It will be the Friday before Thanksgiving, every year. It will bring greater awareness to where our food comes from, who produces it, and how to support them better. And I think the greater awareness, the more education we bring to people about where our food comes from, how it is made, the better it will be because I think people will make better and better choices. So, good luck. We want to continue to support you in any way that we can, and an absolutely wonderful side benefit is that the stuff that you do, and the stuff that you support, the food that you make, is better, it tastes better, it is better for everyone involved. And that's a really nice thing because I like to eat, and I like to eat well.

So thank you for doing this, we need to bring the federal government's attention more to this as we have a role to play in the trade deals we sign, the treaties we make, the type of economy we set up,



because I've seen some things in Parliament that worry me. When the Americans sued us on pesticide use on apples from Washington state, because the levels of pesticides we used on our apples were lower than what Washington had, Canada relented and raised the amount of pesticides you could put on our apples. We chose to meet the level of Washington instead of raising the world to a better level with less pesticides. That kind of thing troubles me. And when Canadians learn about that kind of thing, they don't like it.

The Northwest is such a beautiful place to have this conversation in. So thanks very much for what you do, and thanks Laurie for having me this morning.

# PRIORITY SETTING FRAMEWORK

Janine de la Salle

A common issue in community initiatives is the Planning-Implementation Gap. While it is traditional to set goals and objectives, as well as a series of action steps, there is often no timeline or prioritization, resulting in nothing being accomplished for want of knowing how and what to begin. Beyond a simple ranking, it is important to quantify expected timelines, and identify long-term vs short-term, low-medium-high priority objectives.

The following framework is a way to organize priorities:

Readiness Estimate  Resources (\$ or other required assets) and partnerships needed to implement are currently in place or are easily achievable.	NR (Not ready)	GR (Getting Ready)	R (Almost ready/ Ready to go)
Cost Assessment A preliminary estimate of the cost associated with the strategy or action	\$ (Under \$10k)	<b>\$\$</b> (11k-\$50k)	<b>\$\$\$</b> (\$51k +)
Priority Score  The degree of priority based on three criteria. The total possible score is 9, indicating the highest level of priority.			
a) Impact / benefit. The strategy/action has the greatest impact and/or benefit	1	2	3
b) Urgency. The strategy/action is targeted at the areas of most need	1	2	3
Measurability. The strategy/action is specific, measurable, agreed upon, realistic and time-based	1	2	3

- Readiness once you have a plan, order things based on how ready you are and whether
  you have the resources in place to get going on it quickly.
- Priority scores important to determine the level of impact and urgency of each action/ objective.
- Go through this exercise in groups, to build consensus (this activity is outlined in detail in the Toolkit that Janine made for forum).
- Make sure the agency/ person/ group understands and agrees to the work you've put them down for.
- Quick starts are a way to build momentum, show actions, and get something off the ground quickly tend to be medium to high priority, ready, low cost.
- Big moves these will build real momentum high priority, not ready, med-high cost.
- Enabling actions eg. hiring a staff person.
- Catalyst activity eg. food hub or farmers market have a lot of spin-off effects and can be a spark – sometimes it's good to focus on these catalyst projects to start, to help mobilize other actions, usually good for funding opportunities and media/ marketing, etc.

This exercise helps determine where to apply resources, and allows a phase estimate of readiness and feasibility. In short, it creates a critical path forward, adding rigour and ease of implementation. That said, plans need to be flexible and adaptable over time, since resources and priorities will evolve.

Slides are available for this presentation.

# GITANYOW WILDLIFE AND FOOD SECURITY MANAGEMENT STRATEGY

Kevin Koch

Kevin has worked with Gitanyow Wildlife for 11 years. There is a term in the Gitanyow language – Ha'nii Tokxw (our food table)– which speaks to the responsibility of people to protect the land and water.

Gitanyow Wildlife (GW) is intended to work with the Gitanyow to foster sustainable systems, including fisheries, hunting, and land use. Their role is to bring technical and scientific expertise to aid in this objective. Traditional foods, such as salmon, moose, and foraged foods, continue to be significant in the lives of the local peoples, for consumption and spiritual or ritual purposes. Fish is the largest source of protein, with moose being the next most critical source.

Their Land Use Plan is one of the most successful of its kind, and focuses on protecting both land and water habitats. GW has been performing assessments of moose ranges to

determine the availability of winter forage and determine population and carrying capacity of the region. For example, they are attempting to identify how heavily the winter range is browsed, and what the primary limiting factors are.

GW also performs habitat mapping (as with moose), management (as with salmon streams), protection, and enhancement (such as through controlled burns to create renewal and promote berry crops). They monitor road kill for number and sex ratio, and facilitate its transfer to the Gitanyow people on whose territory it was discovered to avoid wastage.

Another function of the GW is to develop community infrastructure and education, such as surrounding hunting practices – for example, historically, a large number of pregnant moose cows were killed, which has significant impact on moose population stability.

More information is available online at the Gitanyow Wildlife website.

#### Questions/comments/answers:

- Dr Chan at UNBC did a lot of work on distinct animal species to give insight about contamination levels
- o Generally, wild foods are healthy to eat because they are not contaminated
- o Link to studies available see slides.

Kevin's presentation slides are available on the website.

# INDIGENOUS FOOD SOVEREIGNTY

Jeannie Parnell

Formal greeting – thanks to the Wet'suwet'en people for allowing us to meet on this land.

This begins with a story:

Starting 10,000 years ago, this area was inhabited by the Sasquatch people. Before colonization, near where Laurie lives in New Hazelton, there used to be a large village; there was a gathering of the chiefs, and the head Chief told people: soon others would arrive. They would come on boats, and the land would be filled with rock, and there would be a snake among the mountains.

The leader of a warrior clan stood up and said they would fight – but the Chief said no, that wouldn't work; another said we'll sit with them and show them our way of life, but the Chief said that too would fail; and a third leader stood up and said we'll go off into the mountains where we can't be found – and ever since then, these people are known as the Sasquatch people. The rock over the land referred to pavement, and the snake referred to the train.

Food Sovereignty – Indigenous people have lived on the land for 10,000 years and followed the salmon migration, typically having two homes – and managed the fish well. In contrast, DFO and Canada have only been here 150 years and are doing a terrible job. Small scale, regenerative bio-region strategies are how Indigenous Peoples have managed their land and food.

Indigenous food security and access relies on the ability of people to access their lands, and that those lands are kept healthy. The idea is to only take what they need, and leave enough with the acknowledgement that other animals also need this food. This access or lack thereof also has social, political, cultural and economic effects. This plays into the UN definition of Indigenous Food Sovereignty.

Our people also had a trading system – called the grease trail – extended North through the Yukon. This trading system was another way through which stories and teachings were passed along. The social system was organized around food processing, hunting and gathering, and knowledge sharing – they kept culture alive through these actions.

The trauma of colonization and residential schools destroyed those networks and educational systems – many elders don't have this knowledge anymore. There needs to be protection for Indigenous Peoples' lands and their ability to use their lands in traditional ways, to harvest and hunt, gather berries, and rebuild self-reliance. This knowledge is still there; indigenous peoples didn't starve during the Great Depression. More recently, this has been lost, and it is important to return to this level of self-sufficiency.

Jeanie was a part of the BC Food Systems Network and Working Table on Indigenous Food Systems, but she has now stepped down from those boards, because they're based in Vancouver. She is very interested in getting involved in Food Security in the North and getting involved in this partnership.

#### Comments from audience:

Janine: Can Jeanie speak to the tension between agriculture and land-use and the history with Indigenous peoples?

Jeanie: Start small, at the micro-level – eg. farmers can allow access to sacred lands that they now own, but it must be done through a personal connection, relationship building is very important.

Laurie: I was involved with a Traditional Land Use Study as part of a proposed LNG pipeline project and learned many things. It's important to be able to point out important sites (Food Assets such as hunting huts or berry batches) and raise awareness of what those places mean to keeping a culture intact. Understand what you're saying yes to when you support projects on certain lands – "yes to jobs" might also mean yes to wiping out sacred grounds and access routes. In the food security plan being developed here, it's important to keep the environmental and cultural protection piece in mind, and an especially important conversation to have with local indigenous people.

# FOOD SECURITY AND COMMUNITY HEALTH

#### Laurel Burton

Food security is very complex, and figuring out who all the players are is a real challenge; this conference has been very useful in working towards that. Laurel is a population health dietitian, and her focus is on food security in the Northern Health region, which covers more than half of BC and is approximately the size of France. She works with many other programs, and can speak to how important it is to avoid program "silo-ing." Food security initiatives cannot operate in a vacuum. Her job includes acting as a support liaison for food security in the north, which means providing connections to people who are more local in communities. All three components of food security are important: household food insecurity, community food security and food sovereignty.

The question becomes: how can NH advocate for people who are household food insecure, while also addressing community food security. This conference has focused on community food security, but not so much on household food insecurity, which is a distinct but interrelated issue. It is important to think of the household as well, since a lack of sufficient income to purchase food relates to the local food economy. This does not imply that local food is "too expensive," because farmers and producers have the right to make a decent living, but rather, the household has too low of an income to participate in the food system. A community cannot be truly food secure if some members do not have the financial means to participate in the food system.

A strategy to address this comes in multiple stages:

Stage 1 – Efficiency/ emergency strategies: food banks, food hampers, soup kitchens. These don't really address food security issues – more food banks is not necessarily a good thing, and people accessing food banks are often unable to maintain dignity; it is not a personally acceptable way to access food.

Stage 2 – Transition/ participation strategies: Community gardens and kitchens, etc. These are good for developing engagement, but do not necessarily produce lasting changes.

Stage 3 – System change/ strategy redesign: policy and government level developments. These tend to be slow and dependent on local engagement, but can produce lasting changes.

Since her role is regional, Laurel recognizes that people are experts in their own communities. The purpose here is to give a general overview of the northern context, e.g. shorter growing season, most food in the retail system is shipped in from south, winter and adverse weather conditions, communities reliant on boom-bust economies. For example, a community recently ran out of food because it didn't prepare for influx of temporary industry workers.

In the Northern Health region, there is a higher than provincial average percent of food insecure households, especially houses with children. Another tool is to look at is a food cost survey: with permission from grocery stores, volunteers cost food at the stores based on the "National Nutritious Food Basket" to approximate out how much food costs in the region. This too reveals the north struggling, since the cost is greater in this area than elsewhere in the province.

This issue of food security is complicated, since a community or health authority does not have control over all relevant factors, such as minimum wage and import costs. Other factors such as geographic isolation, grocery store access, and transportation are also important to consider.

Northern Health sits on the provincial health authority food security committee, which has representatives from each BC health authority. This provincial working group discusses and plans priority strategies and actions on which to collaborate.

There are a number of food security initiatives taking place within NH. These include but are not limited to:

- FreshIT, a food retail environment study in the northwest region of NH
- NOURISH, a nationwide program with participants on Haida Gwaii which looks at improving food in healthcare
- Northern Environmental Action Team in Fort St. John, dedicated to environmental sustainability and food security initiatives
- Support for breastfeeding throughout the NH region.
- Farm to School BC, a program that brings healthy, local food to schools and provides hands-on opportunities for children to learn about food

Healthy Communities is a part of the NH population and preventative care program. It is a team that works with a variety of settings to support local healthy community action. There are three team leads in NH, one in the northern interior, one in the north east, and one in the north west. Some of their efforts include community engagement, supporting healthy public policy, community capacity building and broad, cross-sector partnership. This team coordinates the IMAGINE grants that support community development.

Laurel then invited Karina Fagerstrom-Castro to address the group. Karina is an SFU Masters student examining the impact of social inequities in health. She is conducting an environmental scan on current food security strategies that exist at he local, national and international level, to help inform future food security work within NH. There are many stakeholders and relevant populations to consider, including First Nations interest, local government priorities, community organizations, existing policies etc.

# Comments:

Q: IMAGINE grants: up to \$5000 per season, and usually for pilot projects; generally, the same project won't be funded over and over again. Do you know of any grants that would give larger grants, like \$50k+?

A: On the IMAGINE website, they do give information for other opportunities, including Plan H.

Q: What are the main causes for differences in food insecurity between north and south, besides distances?

A: Income, boom-bust cycles, higher proportion of FN on reserves, geographical isolation. The NOURISH program is national, but manifests on Haida Gwaii as seeking to increase the amount of traditional and local food available in the hospital. NH does work with FN Health Authority.

Q: Hazelton used to have a community garden beside the hospital but it was shut down for health regulations – what barriers exist?

A: Food safety regulations and standards must be considered. Community gardens are one type of project that IMAGINE grants can fund. Communities can engage with local government to support local food programs.

Slides from this presentation are available on the website.

# OPTIONS FOR HANDLING POWER OUTAGES

**Kevin Pegg** 

Kevin is the owner of Energy Alternatives, for the last 18 years, but they existed for 30 years. He relocated to the north about four years ago.

When preparing for backup systems, what is the goal? Take inventory to determine whether the purpose is to keep a freezer going for a certain period of time, or are there more extensive demands that will need to be met. So far, BC has been doing okay. Power outages tend to be fairly short, but they will continue to increase in length and frequency with fires and extreme weather events becoming more common. This also impacts preparation, since being ready for a summer outage is not the same as for a winter one. This area (northwest BC) has more resiliency because BC power grid is segmented, so power can come down from Alcan, and up from south, but this is not true of all communities in BC.

Handling power outages can be thought of in terms of individual, commercial and community wide needs and also in terms of short-term, medium-term and long-term outages.

Priorities for indivduals, other than freezers, tend to be water pumps for wells, and the like.

For short outages, up to 6 hours, usually not much needs to be done. Fridges and freezers hold temperature pretty well, but minimize opening and closing, and throw blankets over a chest freezer to keep it insulated.

Medium length: 1-2 days. A small generator will keep a chest freezer going for a while (low energy draw), but fuel can become an issue, since gas pumps will not function. To get around this, keep jerry cans on hand. Remember, however, that gas does go stale, so keep it circulating it through every 3-6 months. Also keep vehicles fully fuelled, as an extra reserve - you can always siphon the gas if needed.

In the longer term, solar systems come into play, because fuel will become scarce. When considering options for energy sources, there are many considerations. For example, solar power systems can be stand alone or grid-tied. Grid—tie solar systems generate their own electricity to feed it into the grid, but when the power grid goes down, these systems will automatically shut down as well, rendering a them useless in an outage. However, when power is up, they feed back on the hydro meter, and allows the owner to avoid buying batteries and other elements of an off-the-grid system. Therefore, when installing solar, it is important for people to consider what is important to them: backup power or using as much green energy as possible. Another consideration with solar is the environmental conditions in which it is effective. Fog, cloud, or smoke will drastically reduce the efficiency of solar systems. Solar is great for a good day, very low maintenance, but also very fussy and may get obstructed; placement on the property is important.

Commercially and industrially, there are currently very few resources in place in case of emergency. For example, Safeway uses a massive amount of energy, particularly for open-faced freezers. Yet they are not mandated by insurance to have back-up generators, or other energy sources, since the loss of produce on hand is not considered worth the cost of a system. In the US, some stores use solar. Locally, stores do not, although they could feed back into the grid and decrease operation costs. However, since this has little effect on the bottom line, it is not promoted as an option, and, regardless, does little for feeding people in case of a power outage.

Personal solar systems for individual homes can vary widely in cost. As a rough estimate, the basic range would be approximately \$10,000, but to have a fully self-sufficient home, it is closer to the \$40,000 range and up. This seems startlingly expensive, until you consider that it is effectively buying 25 years' worth of energy up front – no moving parts, low to no maintenance, barring damage. This cost estimate is based on the fact that panels are cheap, but the rest of the system – batteries, installation, etc. – are still expensive. However, this means you can easily increase the number of panels with minor additional cost. (Note: the solar systems currently available through hardware stores tend to be much more expensive than their worth; consider a solar tech specialist.)

#### Batteries:

The batteries are the part of the system which will need the most maintenance and replacement. The "starter" batteries will last 5-7 years, and are cheaper; this is often recommended for starting out since, if they get destroyed during the learning process, they are less expensive to replace. There are also batteries lasting 20-25 years, which are better value but still somewhat more expensive. They come in sealed or unsealed versions – the

unsealed ones need maintenance (pouring water in every few months) and the sealed are maintenance free, but more expensive.

Lots of new tech is being developed in this field, including lithium, Tesla, etc. Considerations on this new tech include: can the materials be safely disposed of? This is a challenge with lithium, since they are not currently recyclable, and can explode.

#### Questions

Q; What about solar water pumping?

A: The BC government is behind on making this legal. Cost is \$3k-\$5k, but pressure and such will range with amount of sun falling on them.

## BULKLEY VALLEY CUSTOM SLAUGHTER: GOT MEAT?

#### Manfred Wittwer

Local animals are sold to major meat industry, but taste of food is reported to be less tasty as meat coming from cattle that are processed locally. Why is that? To Manfred, this is a sign of something wrong with the system, and he wants to increase the availability and ease of local meat processing.

Building a meat processing project and getting it to full production requires a huge input of money. Manfred eventually began leasing the abattoir after the bank stopped providing funding, and has been running it that way for the last several years.

2017 numbers compared to 2012:

- o Doubled the number of turkeys
- o Over 70000 chickens
- o more than 4x the amount of pigs
- o 15% more beef
- o More than doubled in lambs

It takes time for consumers to realize there is an alternative to food coming from grocery stores, but once they do, they are likely to seek it out. For example, he now has people who come with a handful of, or even a single, chicken for slaughtering - this is linked to Backyard Hens Bylaws too.

Currently, he has 500k lbs. of meat storing in coolers, 350k lbs. of that can be eaten. This translates to 700,000 8 oz. servings, or 900,000 6 oz. servings, all of which are of greater quality and flavour.

There is a trend towards a decrease in skilled farm people, as they realize farming is not their idyllic image, and there can be very little profit. Most new farmers last approximately 7 years, before deciding the high input with low yield isn't working for them.

How do you connect farm to consumers and how do you get people excited about local food? It's not that easy to figure out how to engage people, but it is sometimes difficult to compete against grocery stores, since due to prices and ease of access (location, hours, etc.), it can be difficult to present as an alternative.

If trucking stops, another issue is that milk would have to be thrown out because milk cannot be processed locally. Currently, we export milk to be processed, then import the cheese and products thereby produced.

## **Questions/comments**

**Q:** What happens with all the meat if there is a power outage?

**A:** The freezers would keep things cold for a while, and back up generators could be used.

Q: Would you be interested in providing your services as part of learning circle?

**A:** Yes. Also, it is a positive to teach youth culinary arts, through programs such as the one in Terrace. This not only helps develop local food resources, but increases future skilled labour (farming or processing). Currently, they can't compete with wages from logging or mining; this needs to change.

Q: What is the percentage of cattle that end up locally?

**A:** Difficult to say, but estimate it is likely 15-20% beef, and higher in pigs and lambs. Some people will not say whether they've slaughtered an animal because of "legality."

## COMMUNITY ROOT CELLAR INVENTORY

Josette Wier and Laurie Gallant

There are a range of needs and solutions to food storage, both residential and commercial. Josette and Laurie have been working on both primary research (visits and calls) and secondary research (books and online resources) into the variety and availability of local food storage options. More information on that topic is available, and there may be a separate event on it to come.

#### **Commercial Root Cellars - Laurie Gallant**

Houston cold storage was built for silviculture, but has been used historically as rental space for food storage. Rates were based on volume, time, and temperature, and the environment was regulated using electricity from BC Hydro.

Deep Root Food Hub in Ottawa is looking into building a commercial root cellar using a culvert. It took two years to find land for their project. Their plan is to host small to medium sized producers to extend the selling season. Once the culvert is installed, they will be monitoring the environment for a season to demonstrate reliability and increase buy-in.

Locally, work has been started for a pilot project for a commercial root cellar using a shipping/sea container (s). This could serve, depending on interests, as a coop or non-profit system for local food storage. The target markets are small-scale farmers, emergency support teams, and grocery stores during power outages.

This project has growth potential, in terms of duplication and modification, and could also act as an educational tool. The costs are estimated to be \$8-12,000, depending on size and location. A shipping container was identified as a reasonable basis for the project due to cost, and the ease of related surveying and permitting.

At the NW Innovation Challenge, where the pilot project was awarded \$1,000 towards its construction, suggestions were offered regarding having fans to reduce heat if needed. These aspects will be incorporated into the plan moving forward, as well as other community input, which is welcome.

#### Home root cellars - Josette Wier

This is a practice which has been used for millennia to extend food storage into the winter months. In Newfoundland, there is a huge concentration of these, to the point where it has been woven into their tourism campaign.

There are three primary parameters which need to be considered:

- Temperature: 0-5 degrees
- Humidity: 80-95% (this can be obtained using a bucket of water and a t-shirt)
- Ventilation: to regulate temperature and humidity, and deal with the ethylene producing foods

There are many designs, including above and below ground, large and small, and a wide variety of building materials. There is much knowledge to be gained from people currently operating this technology; it is important to respect the existing experience, even while working to expand and develop community infrastructure.

For more information and images of designs, see the presentation slides posted at www.nwfoodsecure.org.

## STRENGTH IN NUMBERS

Megan D'Arcy

Megan is the President of the Smithers Farmer's Institute (SFI), and also does audits for the provincial Environmental Farm Plan.

The geographic area for SFI used to only include Driftwood and Glentanna area, since several other institutes existed at the time, but the area has broadened now, and forage, lamb, poultry, honey, grain, etc. are all represented. SFI objectives were written up in 1922,

using outdated language. The current board has discussed updating the language, but some of the objectives are still used and relevant, especially the one about social involvement, because the social piece is important to community agriculture.

Initially, the SFI donated money to BV Food Directory, but this ended in 2014 when the Regional District of Bulkley-Nechako integrated this information into their own guide. SFI currently works on pasture fertilization demonstration trials, wherein they compared manure to inorganic techniques. Other projects include the Carrots to Cattle Conference in 2016.

## **Keys to success**

Projects work better when the mandate is very clear, and terms are well defined (*e.g.* small scale agriculture can be defined by land size, profit, employees, and also philosophical bent about small vs. industry – and all the assumptions that come with that). It is important to have goals and objectives that are results driven, but it is also critical to have the ability to *measure* whether it was effective (*e.g.* the directory was created by volunteer hours and costly to produce, but there was no way of evaluating whether it was of benefit to the farmers listed in it).

Aside from that aspect, having a good problem-solving framework is essential. It is important to set clear standards for dealing with conflict before conflict comes up in order to prevent erosion of good relationships (e.g. clear rules of engagement to set standards for how people interact, as well as good entrance and exit strategies, so people can leave with dignity, because not everyone has the same viewpoints or can maintain the same level of commitment over time). Be sure to work with good intentions and celebrate victories; especially when working with volunteers, it is important to keep these at the forefront.

Food production as a business is really difficult. However, on the positive side, many people are interested in locally grown food and people have lots of energy and passion. This is inspiring change, such as through the environmental farming movement, where people really care that agriculture is done in an ecologically sound manner. Megan finds comfort in the several layers of food safety and traceability, as this puts the sellers at ease, and ensures public safety.

It is important to not throw out the old, but don't try to force the old ideas to solve newer problems. Innovation and new ideas are great, and should be embraced (e.g. Community Supported Agriculture and WWOOFERs).

#### Questions

**Q:** Laurie - some of the projects we have in mind would benefit from bulk-buying i.e. solar panels and shipping containers. Any advice for us?

**A:** Megan - bulk buying can be a little difficult, with smaller numbers of people, and also an extra level of administration for the group, to make it sustainable over the long term.

Currently, it is mostly done with feed and such, but SFI could look into it for solar panels and shipping containers, etc.

Q: Where does SFI stand on applying poisons?

**A:** SFI tries to remain neutral, in order to represent everyone, but even more conservative groups are concerned with the herbicides. SFI doesn't have control over what people put on their lands, as they have no regulatory influence – only the federal government has that jurisdiction. The SFI tries to influence through education.

The slides from Megan's presentation are available on the website.

# GAME PLAN FOR MOVING FORWARD

Janine de la Salle, Laurie Gallant

NWFSP will be an Umbrella group and all members will continue doing their own organization-specific projects. For this project we partnered with Music and Agritourism Society of the Hazeltons as was done last year, but this is not a good option moving forward as our scope is much broader and we may also jeopardize their chances of getting funding from local sources for their own projects.

Questions to consider moving forward:

- 1. Food SECURITY vs food SOVEREIGNTY
- 2. Watershed based planning (Skeena) or political boundaries (MLA or MP)
- 3. Avoid volunteer burnout; find funding for paid coordinator(s)

# Should we form a non-profit or some kind of entity?

- We need a way/ structure for working together
- No obvious other groups to merge with
- Important to be autonomous
- Could help to secure fundraising and a paid staff position
- What is the purpose of the group?  $\sqrt{\sqrt{\sqrt{1}}}$
- Could this come under ESS?/ existing provincial work?
- Look at new energy in Province where departments are merging
- Dovetail with Community Futures?
- Form working group to establish Terms of Reference
- Need draft TORs before engaging a broader group in agreeing on next steps e.g. forming the entity
- Make region smaller, focus around Smithers and Terrace
- Start with commercial root cellar as a pilot project √√√√√√

Better Together: Northwest BC Food Security Forum Final Report www.nwfoodsecure.org

# FORUM CLOSING

We had a jam-packed two days of connecting and learning with some significant outcomes that we can all be proud of. Thank you again to all our speakers, sponsors, Chicken Creek Coffee and Paul's Bakery for the morning muffins, our lunch providers, the Bulkley Valley Museum Society for renting us this wonderful venue, and Peter Haines our volunteer sound consultant who was on call for 3 days to support us.

All members of the Planning Team were asked to come to the front and pose for a photo.



From left to right: Laurie Gallant, Josette Wier, Bryan Swansburg, Denise Gagnon, John Stevenson, Laurel Burton, Alison Watson, Claire Deboer.

# POST-EVENT ACTION PLAN

ACTION	WHO	RESOURCES	WHEN/WHERE
Produce Forum report, and distribute	Claire to compile session notes, Laurie to write report and distribute		Notes by June 1 Draft Report by June 5, 2018 to Planning Team; release by June 11 <amended 18="" june="" to=""></amended>
Prepare report for Buy BC	Laurie G	Feedback forms, session notes	by June 30
Create a digitized Map of Food Assets identified	Looking for project partner to complete this task.	free online software	July 31
Follow up with First Nations Health Authority on participation and planning	Laurie G, Sandra Harris, Janet Melanson, Jeannie Parnell		by June 11
Form working group to establish Terms of Reference for Advisory Board	Laurie to call meeting and prepare Terms of Reference.		June 21
Fundraise, create job description, hire staff	Working Group, Laurie	Private and public funders, job description	by September 30
Interactive Display at Farmers Markets	Planning Team plus interested people; Laurie to lead	Borrow pop up canopy, table, chairs	Smithers, Terrace, Hazelton by August 31
Design Pilot Project for Commercial Root Cellar	Laurie and Limwell	Need funding	Initiate Project Design by July 15; develop plan for approval by Aug. 15.
Develop a NWBC Food Security Strategy	Paid staff and Advisory Board	Need funding; partner with other agencies developing strategies e.g. NHA	Proposal to write strategy in time for budgeting process in October 2018; completed by Dec 2019
Plan for another annual Forum	Paid staff and Advisory Board	Need funding	April 2019, Terrace
Support and promote other projects as capacity permits.	Paid staff and Advisory Board		
UPDATED JUNE 11, 2018			

# BUY BC: EAT DRINK LOCAL Recommendations

Our partnership with the Province of BC's Buy BC: EAT DRINK LOCAL campaign invited an opportunity to provide direct recommendations to senior staff regarding ways to increase market development for BC food products. Suggestions were solicited from suppliers and delegates at the forum during sessions, as part of the Feedback Form and from the Planning Team in the the event debriefing process.

While we generally felt that our recommendations would evolve over time and especially as we develop relationships with stakeholders during consultations for a Northwest Food Security Strategy, some initial suggestions are as follows:

- 1. Build capacity to offer more BC food products in Northwest BC by enabling more producers through training, business skills, research and field extension services. Demand for local products outpaces supply.
- 2. Provide producers with a monthly farming allowance, similar to child allowances, for farmers that supply local markets.
- 3. Fund paid positions in Min. of Agriculture regional office and offer funding for non-profits to complete contracts.
- 4. Present at local food related events on programs, resources and services available.
- 5. Designate a Northern Marketing specialist and develop a "northern" brand.
- 6. Develop a northern campaign to support farmers all year long it seems people think eating local is only for the summer and then forget to keep buying local in the winter. Smithers has a winter farmers market but it is not well supported. One farmer reported \$1200 days in the summer and \$120 in the winter.
- 7. Develop a marketing campaign for BC meat similar to New Zealand lamb.
- 8. Support winter food security in the north. Training on winter production, value-added processing, and availability of food through extended growing seasons through a winter farmers market.
- 9. Promote more farm/market garden tours for schools and tourists; provide funding for farms to open doors to tours something like the Circle Farm Tours in the Fraser Valley.
- 10. Work with local grocery stores to stock more local produce what are their barriers and how can we bring them down? Help producers get their products in local stores.
- 11. Create a website of Local Food Champions caterers, suppliers etc we have a producer directory but nothing for suppliers for special events etc.- can this be added in to existing farm directories and can we make a directory for all of northwest BC instead of using Regional District boundaries?
- 12. Become a sponsor for new or existing entrepreneurial contests such as the Northwest Innovation Challenge and ThriveNorth. Establish a special prize category in Agriculture and get involved with Community Futures to be on the panel that reviews business plans; they do not have agriculture specialists in Terrace.

## **RESOURCES**

For any further information or to become involved, please check out the website (https://www.nwfoodsecure.org/), find us on Facebook at Northwest Food Security Partnership, or contact a member of the Planning Team.

**Food and Agriculture System Planning Toolkit For Communities (2018)**. Developed by Janine de la Salle of Urban Food Strategies for this event, with input from Laurie Gallant.

Better Together: Northwest Food Security Forum Participant Program (2018). Developed by Laurie Gallant. Includes planning team and speaker profiles, descriptions of all sessions, and acknowledgement of sponsors.

BC Agrifood and Seafood Conference 2016: Growing the Future Together, Post-Conference Report. November 15-16, Kelowna, BC. Province of British Columbia.

The Future Of Our Food System: Report On The Southwest BC Bioregion Food System Design Project (2016). Institute for Sustainable Food Systems at Kwantlen Polytechnic University.

**Long-Term Food Security Initiatives: Information Packages (2018)**. Government of British Columbia. (see pp 17-12 regarding forming a new organization).