

**Presentation to the Tsawwassen Area Plan Review Committee
Thursday December 3rd , 2009**

Core Message – we have a vision for B.C. that involves creating sustainable agriculture and building sustainable communities

How can ISH help TAPC help Delta?



Dr. Kent Mullinix, Director – Sustainable Agriculture Food Security
Dr. Arthur Fallick, Director – Sustainable Urban Systems



Observation

We attended the October 24th meeting and listened to the different presentations and we asked ourselves:

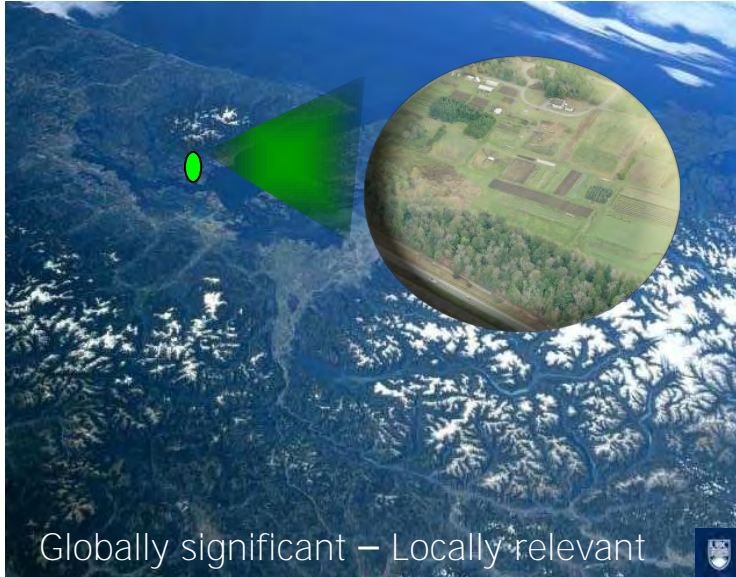
How can the TAP Committee digest and integrate all this valuable information?

What criteria could TAP use to assess the information and opinions in each of the 5 themes?

Can ISH offer a perspective to help TAP help Delta?



A Growing Concern about Sustainability



If we export the food we grow and we import the food we consume, what happens when oil reaches \$400 a barrel?

WHAT ARE THE EFFECTS OF:

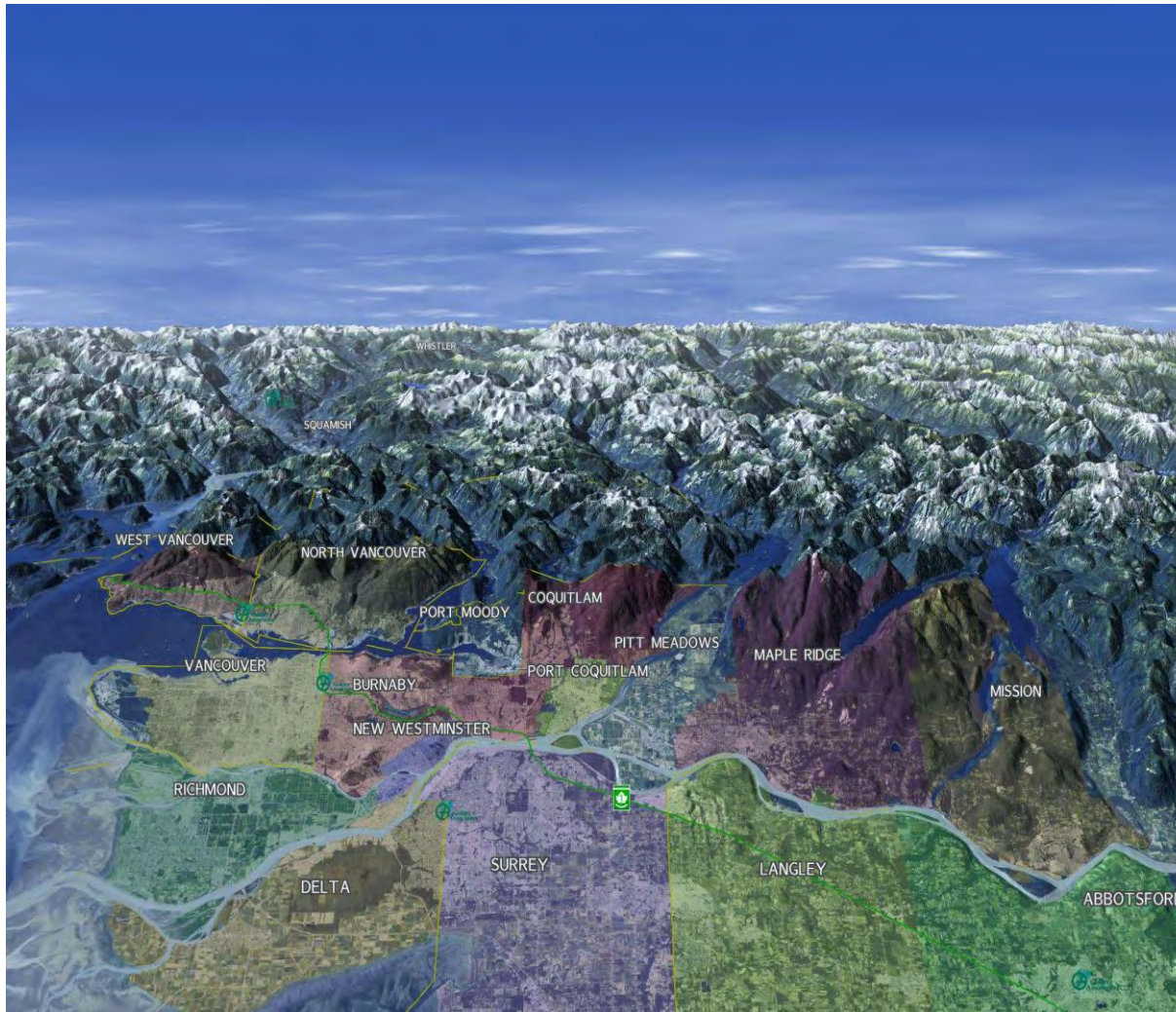
- Climate Change**
- Peak Oil and Peak Water**
- Population Growth**
- Rapid Urbanization**
- Economic Globalization**

ON:

Food Security (Supply)

Food Sovereignty (Control)

What Needs To Happen in Our Region?



Reduce Unsustainability:

- Change Consumption Patterns*
- Reduce Wasteful Practices*
- Adapt Policy and Planning Guidelines*
- Manage Population Growth*
- Balance Local and Global*

Create Sustainable Communities:

Re-integration of Agriculture with Community

Reducing Greenhouse Gas Emissions

Addressing Food Security

Municipal Enabled Agriculture (MEA)



Credit: Michael Marrapese via Farm Folk/City Folk

Municipalities take a leadership role in facilitating the full integration of the agri-food system within the planning, design, development and function of cities.

❑ *comparable to policing, fire protection, water and sewage, parks and recreation etc.*

❑ ***Connects agriculture with the community***

❑ ***Accommodates growth in sustainable ways***

❑ ***Enhances agriculture and contributes to the local/regional economy***

MEA Builds Community:



Characteristics

- human scale***
- ecologically sound***
- in and around cities***
- for and by communities***

Benefits

- Enhanced Food Production***
- Enhanced Economy***
- Community Trust Farming***
- Integrating agriculture with urban culture***

MEA in Practice:



1. Richmond – Farm School
2. Surrey – Reclaiming Agricultural Capacity
3. Maple Ridge – Food System Planning
4. Whistler - Bio-regional food system
5. Langley City – Urban Agriculture
6. Langley Township – Low Carbon Communities
7. Delta – Southlands

Applying MEA to Municipal Planning

1. Enhancing Local Food Production
2. Contributing to the Local/Regional Economy
3. Community Trust Farming
4. Designing communities with enhanced agriculture focus



Our challenge as planners, developers and policy-makers of the built environment in an era of climate change is to figure out how to strengthen agriculture systems and biodiversity of our farmlands, and connect them to livable cities and their consumers.

Kaid Benfield 2009

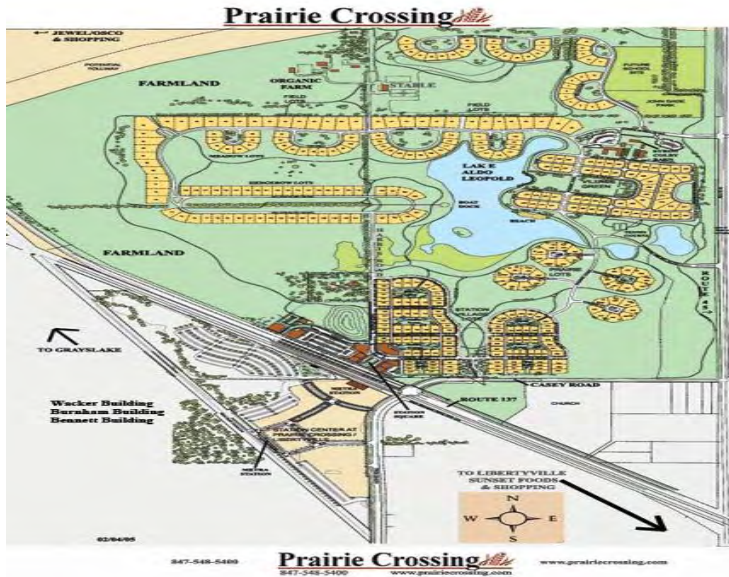
Comparisons with other Communities: Intervale, Vermont



Community Farming, Integration of agricultural enterprises, Machinery Cooperative



Comparisons with other Communities : Prairie Crossing, Illinois



Incubator Farms, Diversity of farming enterprises, Agriculture embedded in community



System Establishment:

Feasibility of MEA



Year 1-5

39 ac in full production

Soil building & site rehabilitation, while starting intensive vegetable production.



Year 5-10

78 ac in full production

Incorporate grazing animals, improve infrastructure and begin harvest of tree fruits.

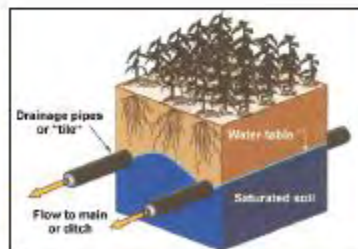


Year 10-20

150+ac in full production

Integrate agricultural fingers into the Southlands urban community to inspire an urban agricultural spirit.

Using a phased plan with a heavy emphasis on soil rehabilitation, community input, research, habitat restoration and human-scaled agriculture, Southlands can develop patiently into a PLACE that responds to the agricultural, economic, social and ecological needs of the community.



Improving drainage and soil structure with drain tile and through ongoing amendments will be a necessary component to establishing a healthy agricultural system. Starting sensitive fruit and vegetable crops in poly-tunnels will help extend the growing season.

Summary - Viability of Human-scale Agri-food System:



34 acres
40% of fruit needs met
7 Seasonal Jobs
\$428,600 in marginal revenue



39 acres
40% of vegetable needs met
27 Seasonal Jobs
\$621,490 in marginal revenue



37 acres
8% of grain needs met
1 Seasonal Job
\$88,500 in marginal revenue



40 acres
6% of dairy needs met
69% of egg needs met
12% of poultry needs met
6 Seasonal Jobs
\$126,800 in marginal revenue



\$1.27 million in
marginal revenue
40 full time equiva-
lent seasonal jobs

In our professional opinion:

- ❑ Tsawwassen can address food security using Municipal Enabled Agriculture (MEA)**
- ❑ The proposal for the Southlands is consistent with the principles of MEA - e.g. Community Trust Farming and human-scale agri-food production**
- ❑ Delta can be a leader in BC - showing how MEA can contribute to sustainable communities**

