

Lessons Learned

Lessons learned from the Langley Urban Agriculture Demonstration Project (LUADP) pilot have the potential to inform the development of similar initiatives across the Metro Vancouver region, by providing a model for urban agriculture in utility right-of-ways (ROW), and demonstrating successful connections between municipal and community partners. When initiating the project, it was recognized that there are other publicly owned, utility ROW corridor sites within the region that may be suitable for urban agriculture. This section summarizes some of the **scoping questions, considerations** and **key learnings** about balancing ROW compatibility restrictions with requirements for urban agriculture to support the potential for similar initiatives in the region.

Project Initiation

Covered in this section:

- Identifying and accessing land within hydro ROWs for urban agriculture.
- Establishing and managing partnership with utility companies
- Project funding
- Establishing and managing relationships with community partners
- Establishing a project timeline

Accessing Land

Is urban agriculture a compatible use on site(s) being considered?

In BC, agriculture is considered a compatible use in hydro ROWs, however farm infrastructure and practices may be restricted by the utility company based on public safety requirements.

See Resources at the end of this section [BC Hydro Compatible Use Guidelines](#).

The suitability of a given site may also be impacted by local policies related to urban

agriculture, utility ROW development (i.e. land use policy, bylaws). Be sure to identify any local policies, bylaws and regulations that may impact an urban agriculture project.

Is urban agriculture aligned with the goals/mandate of the landowner, local government and community?

Clearly understand ownership of the land in question: Is it publicly owned? Privately owned? Owned by the utility company?

Consider the landowner's goals and priorities, and the potential for urban agriculture to align with and support these goals.

What relevant policies or strategies support the development of urban agriculture in the community (eg. Official Community Plan, healthy city initiatives, etc)?

This may help in the process of identifying potential partners or accessing project funding

This could also help guide the site design and amenity development. For example: If a municipality is working towards improving health and nutrition for children a UA project that connects on farm learning with school food programs could be a good fit.

Local Land Inventory for Urban Agriculture Sites

The appropriateness of the site should also consider the level of need and community support in the local area, and specific site conditions which may support or deter urban agriculture. Conducting an inventory of land available for urban agriculture, or assessing the suitability of multiple sites (ROW and non-ROW sites) could be helpful when selecting the most appropriate location for urban agriculture in a community.

Partnerships with Utility Companies

When to approach a hydro/utility company?

Consultation with the utility company that manages utility works and infrastructure on this site is a critical factor in project success. In the case of the LUADP the project team engaged with BC Hydro throughout the planning process. The utility company should be contracted BEFORE any planning work begins to ensure that urban agriculture (of some kind) is possible on the site) and, the project team understands the plan approval process.

Engagement with utility companies could vary depending on the site and the type of project being proposed.

Working with BC Hydro on the LUADP

BC Hydro was contacted at the beginning of the detail planning phase for the LUADP. For all development projects in or adjacent to hydro ROW areas BC Hydro must approve site plans and work with partners to establish site use agreements. In the case of the LUADP, BC Hydro was primarily concerned with scale and location of amenities, buildings and structures, access to utility infrastructure, compromising utility infrastructure. The **BC Hydro Properties Division** is the point of contact for compatible use development, and can be reached at:

Phone: 1-800-667-1517 or 604-623-3637

Email: properties.helpdesk@bchydro.com

How much time will a representative from the utility company commit to the project?

Based on the experience from the LUADP a representative from the BC Hydro properties division should be asked to commit the following, over the anticipated project lifecycle.

- 4 hours for project scoping
- 6-8 hours for check-ins and meetings
- 3-4 hours for plan review

Key Learnings

1. Food production is possible in ROWs, but restrictions for infrastructure development on public land, and in utility ROWS, could limit the scale of food production on a given site.
2. Municipal governments are key partners for urban agriculture projects.
3. Suitability of a site is informed by site characteristics AND the surrounding context.

Funding

How much does a project like this cost?

The initial 2010 project feasibility study between the City and KPU was first proposed by the City of Langley in partnership with Kwantlen Polytechnic University, at a cost of \$5000.

Funding for the site plan and business plan as described in this report came from the Metro Vancouver Sustainability Innovation Fund, and cost \$50,000.

Funding for implementation, and project management will vary based on the size of the site, and the type of amenities proposed.

Who should fund a project?

Funding for urban agriculture projects can be divided into three different categories:

- Planning – Site assessment, design, community engagement
- Implementation – site preparation, amenity development
- Operations – staffing and maintenance

Funding for these various stages can come from a variety of sources including:

- Municipalities
- Regional Governments
- Foundations/Community grants
- Public/private partnerships
- Educational institutions
- NGOs

Project Team & Stakeholders

Who should be on the Core Project Team?

- **Technical experts:** practitioners with expertise in urban agriculture and design
- **BC Hydro or utility owners:** an individual(s) who can participate, and can advise the project throughout the planning phase.
- **Municipal planning staff:** individuals who have an understanding of the community.
- **Staff from other municipal departments:** Consider participation from other municipal departments, including; parks, recreation and cultural services, and engineering
- **Funders:** funding agency for the project and/or community groups providing support for the project.
- **Health authorities:** staff can provide information and research on potential health benefits, as well as guidance in addressing perceived health concerns from the community; their participation may also lead to greater visibility, and public and political support.

Who else can be engaged?

Affected and Interested Stakeholders: These stakeholders are not likely to be directly involved in development of the project, but may provide helpful feedback based on experiences from other jurisdictions.

- Neighbouring municipalities
- Adjacent Schools and/or local school board
- Community agencies with facilities near project site
- Civil society groups active in urban agriculture, environmental causes or education
- Urban agriculture, farming, or community gardening groups

- Agricultural agencies (Ministry of Agriculture, Agricultural Land Commission)

Community Partners: Establishing community partnerships can support project development and programming, support access to funding, and help garner broader community support. Initiating contact with potential community partners early can help inform project development, and support the planning phase.

LUADP Core team planning meeting summary.

Meeting Date	Description	# of hours
February 16, 2017	Core Team Meeting #1 <ul style="list-style-type: none"> • Review of BC Hydro ROW restrictions • UA amenities discussion 	3
March 29, 2017	Core Team Meeting #2 <ul style="list-style-type: none"> • Review of BC Hydro ROW restrictions • UA amenities discussion 	3
April 20, 2017	Interagency Meeting <ul style="list-style-type: none"> • With local governments and agencies with interests in urban agriculture 	3
June 29, 2017	Core Team Meeting #3 <ul style="list-style-type: none"> • Review public input • Evaluate Amenities 	2
August 29, 2017	Core Team Meeting #4 <ul style="list-style-type: none"> • Review conceptual plans 	2
October 25, 2017	Core Team Meeting #5 <ul style="list-style-type: none"> • Review public input • Identify components for final plan 	2
Total # of hours		15

What to look for in potential community partners?

- Are there urban agriculture or local food related projects in the community already? Who supports them?
- Are there organizations that represent the interest of potential user groups? For example: youth organizations, seniors groups
- Are there any special interest groups that could support urban agriculture activities? For example: garden clubs, beekeeping clubs
- Are there existing groups who have good reputation in the community for the programming they provide?

Site Assessment & Planning

Covered in this section:

- Soil testing protocol and funding
- Understanding site context and characteristics.
- Considerations for site management and operations.
- Creating a site management budget and plan.

Soil Analysis

Soil testing and analysis should be conducted in all ROW sites as there is risk of contamination. Cost of soil testing depends on the size of the site. As an estimate, soil testing in BC could cost \$2000 to \$6000 (approx. 500/sample). This expense should be covered by the project planning budget (funder of project planning should support soil testing as an integral part of this project).

See Resources at end of this section [Soil Analysis Guides](#) and [Testing Labs in Metro Vancouver](#)

Site Analysis

Community Considerations:

- Is there any relevant policy supporting urban agriculture? Any potential barriers?
- Any other urban agriculture in the community?
- What are the characteristics of the neighbourhood where the project would be located?

- What resources exist in the community that could support urban agriculture?

Site Considerations:

- Is there existing vegetation on the site?
- Are there any site characteristics that might impact urban agriculture amenities?
- Is the site publicly accessible? Where are the access points?
- Are there any features to protect? (i.e. existing amenities, trails, natural features)

BC Hydro ROW Considerations:

- Where are transmission towers located on the site? Is there any other utility infrastructure?
- What are ROW owner access requirements?
- Has project team obtained a copy of the title for the ROW property?
- Is there an existing hydro ROW site management agreement? (can be obtained through the BC Land Title Office).

ROW Ownership

In this project, BC Hydro was the utility ROW owner. However, if you are considering a similar initiative in your community, the ROW owner may be a different utility (eg. Fortis, Telus, etc.).

Site Management

Key issues to address in a site management plan.

- Infrastructure needs for urban agriculture – water/electricity/waste
- Roles and responsibilities for participating, managing the operations, and maintaining infrastructure and urban agriculture amenities
- Site Use Agreement – agreement between ROW owner and urban agriculture stakeholders
- Production practices – scale, technical considerations How will food be shared / sold?
- Financing plan for ongoing management

Other technical issues to consider that are not addressed in LUADP report but that should be addressed the next phase of work (ie. Implementation Plan)

- Bio-safety – to ensure compatibility between urban and commercial agriculture (eg. management of pests, disease potential, etc)
- Security – assessing potential of vandalism/ theft of equipment & food, and mitigation plan
- Enforcement – who / how would agreements be enforced
- Closure strategy – how the municipality can ‘close up’ the project if interest / community capacity declines

Time Requirements

Exact time requirements for the development of urban agriculture projects will vary based on site size and project complexity. The time line below reflects the experience with the LUADP, and can act as a reference for estimating a project time line.

Sample project timeline.



Community Engagement

Covered in this section:

- Anticipating and addressing common misconceptions and barriers to community buy in.
- How and when to engage the community.
- What kind of information should you collect from the community.
- Early engagement, and how it is valuable.
- Other important considerations for public engagement.

Responses to Common Misconceptions about Urban Agriculture

Urban agriculture always means community gardens: Community gardens are a common examples of urban agriculture. However, there are many other urban agriculture features and amenities that can be adapted to meet the needs of a community. Understanding what a community's needs might be, and how different urban agriculture amenities could meet those needs is an important part of the engagement process.

Urban agriculture is messy: This assumption is often associated with community gardens or allotment gardens. Those unfamiliar with urban agriculture may envision shabby structures, or overgrown areas that don't appear well taken care of. This is not a universal characteristic, or true, of all urban agriculture, however concerns about aesthetics should be carefully considered when developing urban agriculture plans.

Urban agriculture presents public health risks: In some cases, there may be an increased risk of pollutants in the soil that could impact the health of those working on the site, or consuming food grown there. This type of risk is well understood by practitioners and can be mitigated by testing the soil to determine if there are pollutants on the site that could be harmful to human health, and designing urban agriculture amenities to safely respond to the risks. Soil test results can be compared to national standards for agricultural

soils – this information, and other details about potential contaminants can be found through the Canadian Council of Ministers of the Environment (CCME).

Urban Agriculture is not the highest and best use of land: There is a common perception that urban farms use scarce land resources in cities that could be otherwise used for commercial, residential, or recreational purposes. Sites that are not appropriate locations for commercial or residential development, such as utility ROWs, floodplains, or parks may be ideal sites for creating a community amenity such as urban agriculture.

Potential Barriers to Community Buy in

Urban Agriculture will Exacerbate Existing Issues: Residents may be motivated by other underlying issues in the community. In some cases urban agriculture may be seen as undesirable because it may be perceived to exacerbate existing issues in the community, such as pest infestations, traffic, non-resident parking, vandalism and crime.

Urban agriculture projects will be a burden on taxpayers: Urban agriculture projects have the potential to achieve a variety of outcomes. Many are operated by non-profit organizations that seek external funding resources (grants, fundraisers, etc) to support non-production programming such as education, and community development, in addition to revenue generated from the sale of products grown on the site. Very few urban agriculture projects are 100% publicly subsidized.

Public perception of safety/quality of food produced in ROWs: There is often public concern around urban agriculture projects due to a perception that urban soils might be contaminated, and therefore unhealthy for food production. There can be additional concern when proposed projects are located within a hydro ROW. Health authorities can provide research, and evidence-based information on public health and safety of food production in urban areas, including in ROWs. BC Hydro also has resources that can provide information to the public.

Key Issues to Address During Public Outreach

- Is the site currently used? If so how?
- Is there a general understanding about urban agriculture in the community?
- Are there any misconceptions to address?
- Are there any local issues that may be exacerbated by introducing urban agriculture?
- Are there local needs that could be met by introducing urban agriculture?

Early Engagement and Public Outreach

Preliminary outreach, before beginning the planning phase may help assess community need, and gauge the level of community support. This can help to:

- Identify/confirm potential site(s) for urban agriculture in a community
- Determine the level of community support for urban agriculture in the community

Key Learnings:

1. Aim to engage potential users from across the community, including immediate neighbours.
2. Integrate public education into the planned engagement process
3. Invite potential urban agriculture partners in the community to be part of consultation, along with residents, in order to inform amenity selection and demonstrate broad community support for a project

Project Risks

Conflicts between ROW uses and Urban Agriculture.

- Development restrictions in hydro ROWs limiting and restricting the kind of urban agriculture amenities that may be desired by stakeholders or members of the community.

Timing or funding challenges.

- Significant time required to establish / maintain multi-agency partnerships.
- Securing funds for planning implementation, and operations could be a challenge.
- Finding appropriate community partners and supporters could be a challenge.

Community buy in and engagement.

- The potential for no, or delayed community buy in.
- Urban agriculture may appear to conflict with existing or surrounding uses.

Expertise and knowledge sharing

- Agricultural expertise is needed for development and operation of an urban agriculture site.

Value of Early Engagement

The planning process for the LUADP did not involve preliminary outreach with the community, and instead built on the earlier work from 2010 that aimed to understand the feasibility of urban agriculture in a hydro ROW.

Without preliminary consultation with the community, it proved challenging to gain community support, and the plan was ultimately put on hold by City of Langley Council due to community opposition.

Resources

BC Hydro ROW Resources:

- [BC Hydro Rights of Way Guidelines](#)
- [Planting Near Power Lines](#)
- [What the Health Experts are Saying](#)
- [Understanding Electric and Magnetic Fields](#)

Soil Analysis Guides:

- **Toronto Public Health.** [*From the Ground Up: Guide for soil testing in urban gardens.*](#)
- **The Johns Hopkins Center for a Livable Future.** [*Soil Safety Resource Guide for Urban Food Growers.*](#)

Soil Testing Labs in Metro Vancouver

- **CARO Analytical Services, Richmond**
<https://www.caro.ca/>
- **Exova, Surrey**
<https://www.exova.com/>
- **Maxxam, Burnaby**
<http://maxxam.ca/>
- **AGAT Laboratories, Burnaby**
<http://www.agatlabs.com/>