## Module 4 Lesson 3— Resiliency in Urbon System Design Saturday, October 15, 2022 8:11 PM

## 4.3.2 The Ecosysten Approach to Resilient Design

- · Calls for awareness of both direct & indirect interactions within a city
- · tells us to be constantly aware of interactions of subsystems within larger systems
- · Materials, energy & information flows within & between built and natural environments
- · Systems & system scales
- · Life-cycles of infrastructure a infrastructure elements
- · Involves consideration of context of design
- " 11 11 " Short and long term impacts of the design
- · Necessitates awareness of systems where the infrastructure is embedded
- consideration of life cycle of infrastructure
- > These considerations influence goals of infrastructure design

## 4.3.3. The Ecosystem Approach at UBC

- · Integrating multiple systems into planning, instead of treating them separately
  - enhances resiliency, quality of public realm
- Green spaces provide multiple use
- -Biodiversity needs to be integrated into multiple scales
  - Lintegrate at the building scale
    - 4 e.x. green roofs, walls, planting pallets, protecting tree assets
    - Lo enhance biodiussity (it can attract birds, batterflies, etc.)
    - Lo ecological health is related to human health
      - Lo anxiety levels go down with more green spaces