



DESIGN CHALLENGE: Animal Care

Overview

In 2012, many residents of the Fraser Valley experienced, or were threatened by flooding. River levels along the Fraser corridor were at their highest in 40 years. Water eroded berms and caused flooding in many areas along a 600 km stretch from northern BC to the Fraser Valley. Natural disaster is just one reason a family may have to unexpectedly vacate or abandon their home on short notice. An unexpected short term absence raises the question of animal care for companion animals and livestock.

Design Rationale

People in our community rely on pets for love, companionship, security, entertainment and more, and they give them the same in return, each enhancing the others existence. At times though, life does not allow us to provide the daily care they require. In these instances, we take on the responsibility of ensuring their needs are met even when we are not there to provide for them.

Problem Scenario

Your team has been selected to develop the prototype of a piece of system, or a tool, that will allow animal caregivers/owners the ability to leave for a period of time with peace of mind. Your prototype will address one or more of the following needs:

- ☐ Access to food
- ☐ Access to water
- ☐ A waste solution
- ☐ Comfort (temperature/light)
- ☐ Exercise
- ☐ Companionship

Success will be determined by

- ☐ Uniqueness and usability of the tool
- ☐ At least one piece of functionality using technology
- ☐ Alignment of the prototype with the design
- ☐ Ability of your tool to be adaptable to animals of different species and size, indoor/outdoor use.
- ☐ Degree to which you have used the materials provided in your kit
- ☐ Alignment to the design motto: "Make it smaller, stronger, do more, be easier to use, be cheaper, be cleaner, be greener".



**Chilliwack
School District**

Parameters

- ☐ Your prototype must incorporate at least one functional element enabled by the technology (Little Bits) found in your participant kit
- ☐ You must use at least one piece/unit of every item supplied in the participant kit in some way
- ☐ You may make a pitch to use materials found in the Pantry
- ☐ You will use tools located in the Shared Tool Crib