

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.

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 other's 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

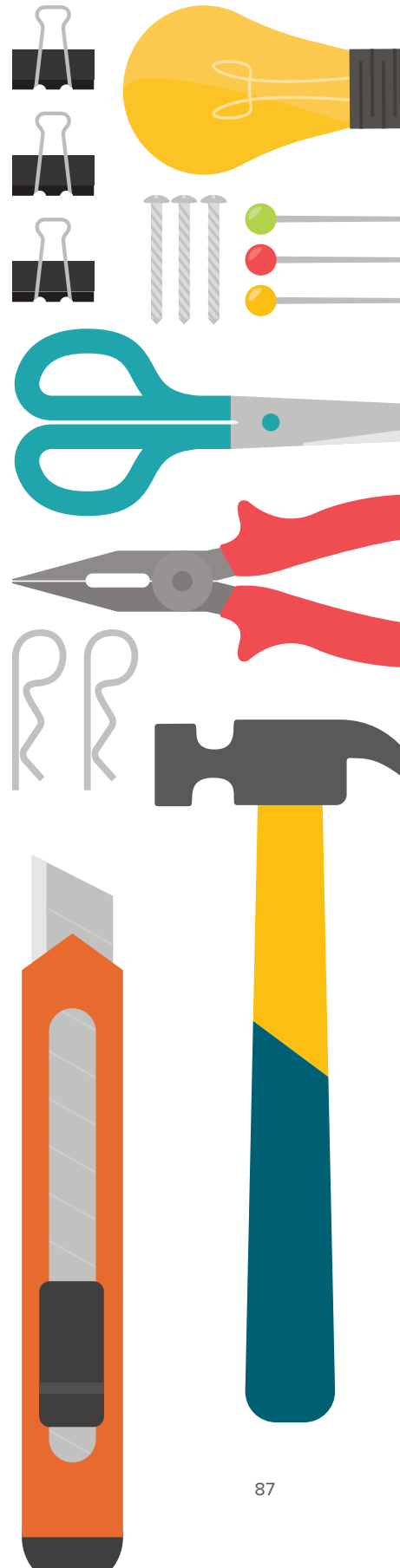
Your team has been selected to develop the prototype of a system or a tool, that will allow animal caregivers/owners the ability to leave for a period of time with peace of mind. Your prototype will address one or more of the following needs:

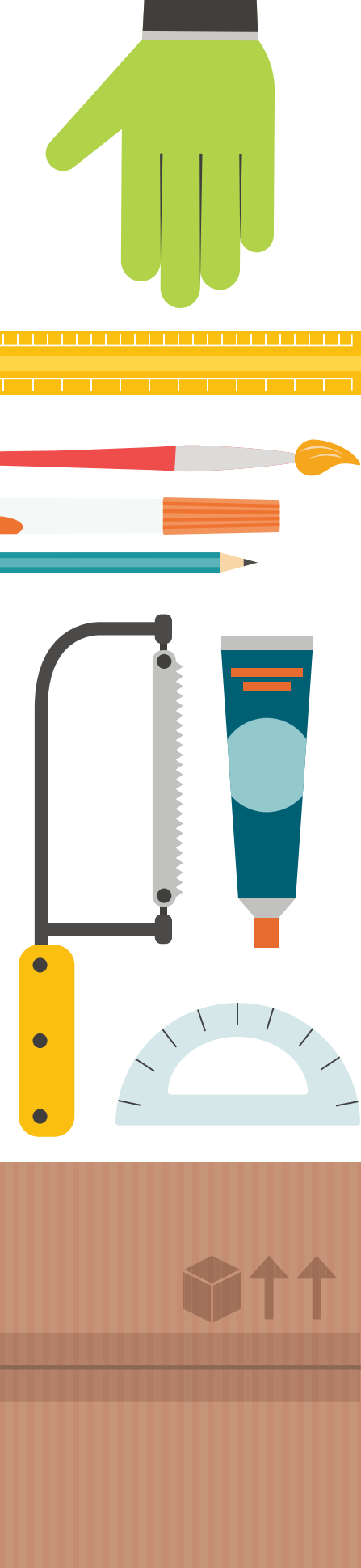
- Access to food
- Access to water
- A waste solution
- Comfort (temperature/light)
- Exercise
- Companionship

Success Determinants

Success will be determined by the degree to which your design solution:

- ☐ 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
- ☐ Uses the consumable items in the participant group kit provided
- ☐ Alignment to the design motto: "Make it smaller, stronger, do more, be easier to use, be cheaper, be cleaner, be greener."





Parameters

- ❑ Must incorporate at least one functional element enabled by the technology (Little Bits) found in your participant group kit.
- ❑ Plan how to use something of every consumable item in the participant group kit provided.
- ❑ Choose consumable items and materials found in the shared pantry to aid in the enhanced development of your group's prototype.
- ❑ Use the tools that have been provided at the shared tool station.

Note

This Design Challenge comes from Joanne Britton and her colleagues at Chilliwack School District, British Columbia. It was first designed for use at a Maker Day for educators held at the University of the Fraser Valley. It is a modification of Design Challenge #7.