



Wonder  
Project

## Water Challenge

### Activity 4.1: Create

#### Your prototype plan

Look at your wai network plan.  
Have you considered:

- The materials you'll use?
- Gravity and flow?
- How you'll solve your challenge scenario?
- How your network will help protect the mauri of wai?

Take the time to make any final  
changes to your plan before you start.

#### You'll need:

- Nozzle
- Nozzle connector
- 1 x clear joiner pipe (long)
- 2 x clear joiner pipes (short)
- Large elbow connector
- Tap
- "Hydrate your hapori" set
- Your reservoir from the clean activity
- Resources to support wai network stability (boxes, tape, bulldog clips)

#### Create a pipe prototype to connect the journey of wai from collection, to your hapori.

Watch the 'create' video, then bring together your  
wai network plan, and knowledge on gravity and  
flow to construct your prototype.

#### Create your prototype

##### Step 1

Twist the nozzle  
onto your reservoir.

##### Step 2

Attach the nozzle  
connector onto  
your nozzle.

##### Step 3

Attach the long clear joiner  
pipe to the nozzle connector.

##### Step 4

Attach the large elbow  
connector to the long  
clear joiner pipe.

##### Step 5

Attach a short clear  
joiner pipe to the large  
elbow connector.

##### Step 6

Attach the tap to the  
short clear joiner pipe.

##### Step 7

Attach the other short  
clear joiner pipe to the  
other side of the tap.

##### Step 8

Attach an elbow  
connector from your  
"hydrate your hapori"  
set to the clear joiner pipe.

##### Step 9

Attach a short clear  
pipe from your  
"hydrate your hapori"  
set to the elbow  
connector, followed  
by a t-bar connector.

##### Step 10

Bring your wai network plan to  
life with your choice of pipes  
and connectors! Make sure  
you use resources to stabilise  
it so it can stand on its own.

**Karawhiua  
koutou!**