

# Reducing Food Waste in Schools

## Using Composting, Worm Farming and Chickens

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[www.gardentotable.com.au](http://www.gardentotable.com.au)

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# Housekeeping

- 15 minute session
- 5 minute time for Questions at the end
- Please put questions in the zoom chat box or
- Email questions:  
[megan@gardentotable.com.au](mailto:megan@gardentotable.com.au)

# What's the problem with Food waste?



# Problem with food waste

- The average NSW household throws away \$3,800 of edible food each year.
- Currently with the council bin system there is too much food waste/green waste going into landfill.
- Schools - pre/primary, secondary, business & households are wasting so much food that could be diverted from landfill to reduce greenhouses gases and carbon emissions.

# Co-originator of Permaculture

The only ethical decision is to take responsibility for our own existence and that of our children.

Bill Mollison

“ quote fancy

# • What Do We Waste Most?



## SALADS

50%

Almost 50% of what we buy we throw out



## FRUIT & VEG

25%

Almost 25% of these are thrown out

Potatoes are our most wasted vegetable

Bananas & Apples are the most wasted fruit



## BREAD & BAKERY

20%

Almost 20% of this is wasted



## MEAT & FISH

10%

10% of these are wasted



A close-up photograph of a green leaf with water droplets, serving as a background for the title.

# Solutions

Start small and expand!

Ask parents to involve children in packing their lunchbox.

Turn your food waste into a resource!

Type one solution in the chat box.

# Reduce food waste in schools

## Seven solutions

- #1 - New bin system
- #2 - Embedded sustainability education
- #3 - Composting
- #4 - Worm farms
- #5 - Chickens
- #6 - Share waste
- #7 - Council



# Learning Objectives



# Solution #1 - new bin system

# Identify the waste via a bin audit



2



## Alternative Solutions

- ☹️ Zip lock bags
- 😊 Beeswax wraps
- 😊 Buy in bulk
- 😊 Reusable containers
- ☹️ Sucky yoghurt
- 😊 Buy in bulk repack
- Tupperware



Click here for Redcycle



what to  
REDcycle

where to  
REDcycle

FAQs

partners

# Click here for Redcycle

## how to REDcycle

1. collect



2. drop



3. recycle





# Sorting the waste



# Five bin system for schools

## Aldavilla Public School



Photo: Gaye Dufty  
Aldavilla Public School

## 5 bin system

- Red bin - Landfill
- Yellow bin - recycling
- Green bin - food scraps
- Blue bin - soft plastics
- White bin - 10 cent refund return and earn

# Mid Coast Council Compost bucket

**Collect food waste**



Photo: Megan Cooke

**Add to your school bin system**

- Yellow compost bucket for classroom/playground
- Available FREE from Mid Coast Council
- Email Annette James  
Education Coordinator  
[education@midcoast.nsw.gov.au](mailto:education@midcoast.nsw.gov.au)

# Mid Coast Council Scraps to Soil

## Scraps to soil compost bin



## Claim a \$20 compost bin

- Turn your kitchen scraps into rich compost
- Click [here](#) to find out about the Scraps to Soil Online Program

# Mid Coast Council Bins



# What goes in the compost?



# Kempsey Shire Council



# Kempsey Shire Council Compost bucket

**Collect food waste**

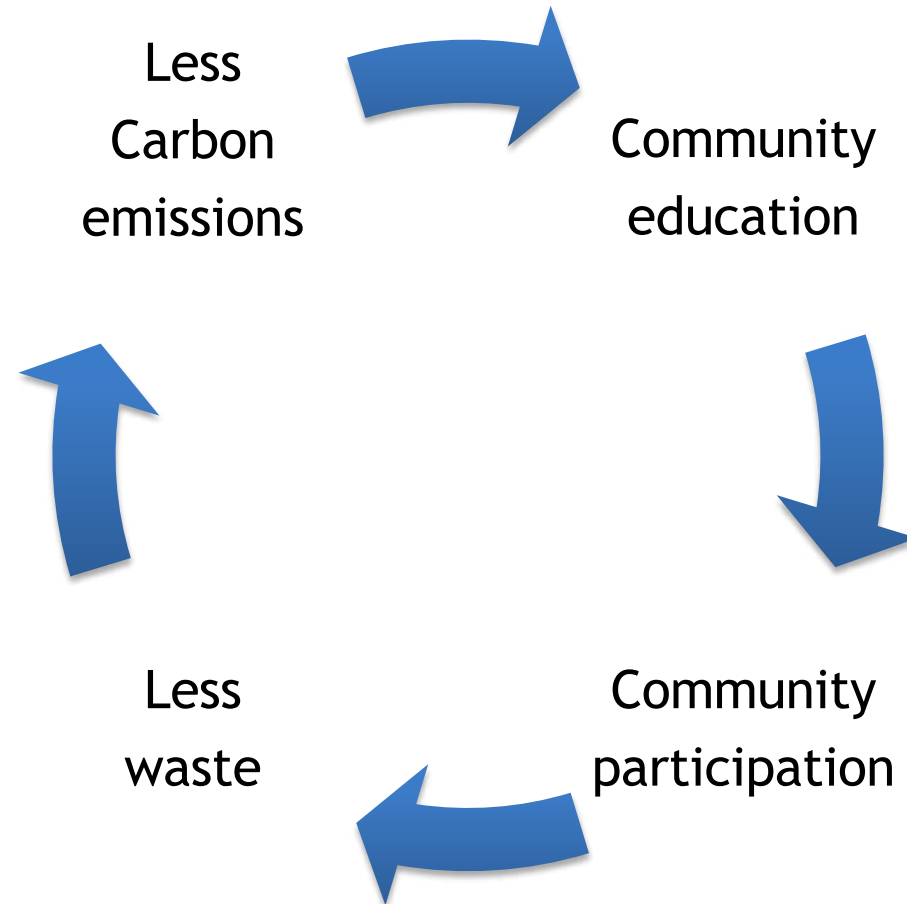


St Columba Anglican School  
Photo: Megan Cooke

**Add to your school bin sytem**

- Yellow compost bucket for classroom/playground
- Available from Kempsey Shire Council
- Email Louise Hoade  
[louise.hoade@kempsey.nsw.gov.au](mailto:louise.hoade@kempsey.nsw.gov.au)

# Reducing waste in the community





## Solution #2 - Education

Join Australian Association for Environmental Education (AAEE)

Click [here](#) for Costa as the ambassador for AAEE NSW

Click [here](#) to join Sustainable Schools it's free!

A rectangular banner with a dark green, textured background, possibly representing a close-up of a leaf or a similar natural surface. The text is centered in white.

# Start a green team! Engage your students

Educate students and teachers - new bin

Get the students involved - brainstorm ideas & let them lead the project with teacher support



# Solution #3 - Composting

# Hot Open Compost Bay



# Open Compost Bay



# Open/lidded compost bays

## Compost



## Benefits:

- Can be built with upcycled materials, corrugated tin, hardwood timber not treated pine!
- Turning compost - good exercise for children especially children who struggle in classroom

## Disadvantages:

- Needs regular turning
- Invasion from vermin/insects

# Cold compost bin

**Place metal sheet under compost to prevent vermin**



## **Benefits:**

- Cost Bunnings \$60
- Available Local council - scraps to soil program

## **Disadvantages:**

- Hard to harvest compost
- Slow to rot
- Invasion from vermin/insects



# Solution #4 - Worm farming



# Worm farms

3 options -

- Above ground worm farm
- Below ground Subpod worm farm
- Ice cream container worm farm

Click [here](#) for instructions - Garden to Table  
Permaculture Instagram video

# Above ground worm farm

## Can of worms - above ground



## Benefits:

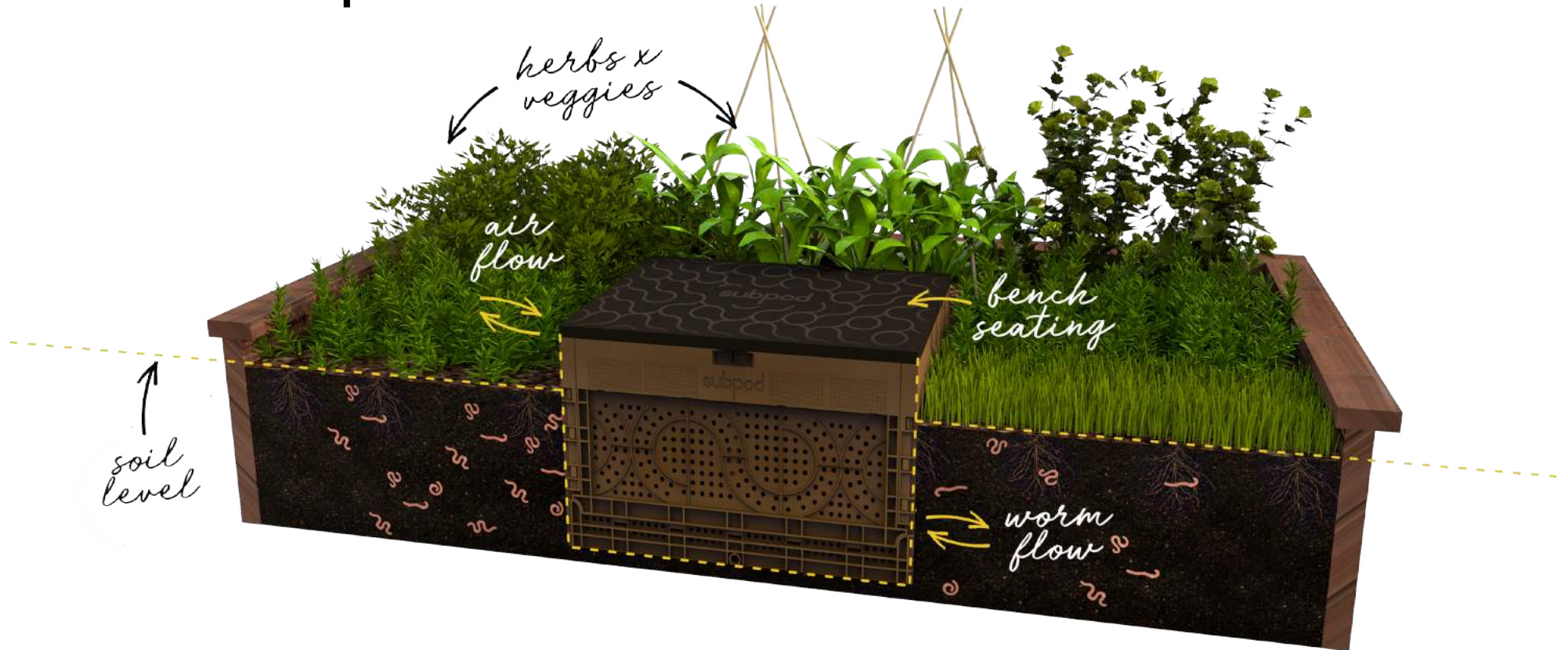
- Worm farm \$60
- 1000 worms \$50
- Available from Bunnings
- Check with your local council if they offer these
- Harvest liquid castings

## Disadvantages:

- Worms can dry out easily
- Invasion from vermin/insects

# Below ground worm farm Subpod

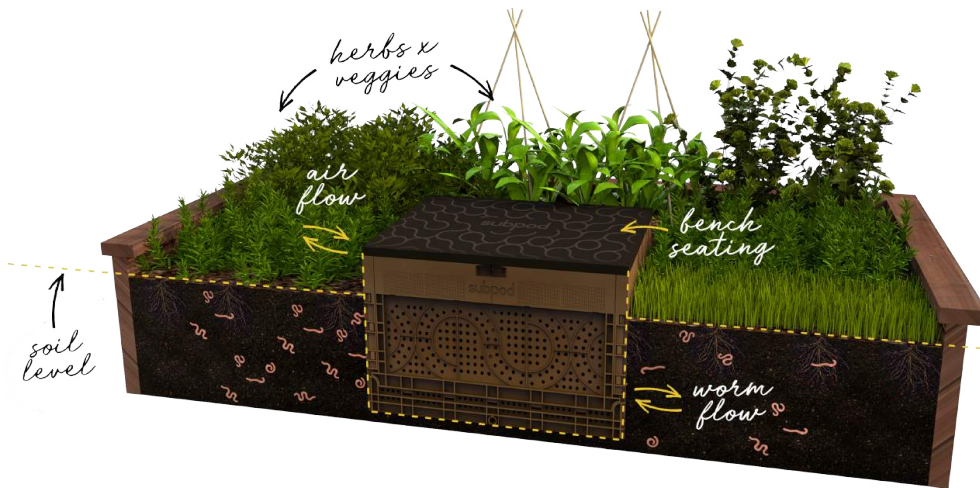
## The Subpod worm farm



# Below ground worm farm

## Subpod - below ground

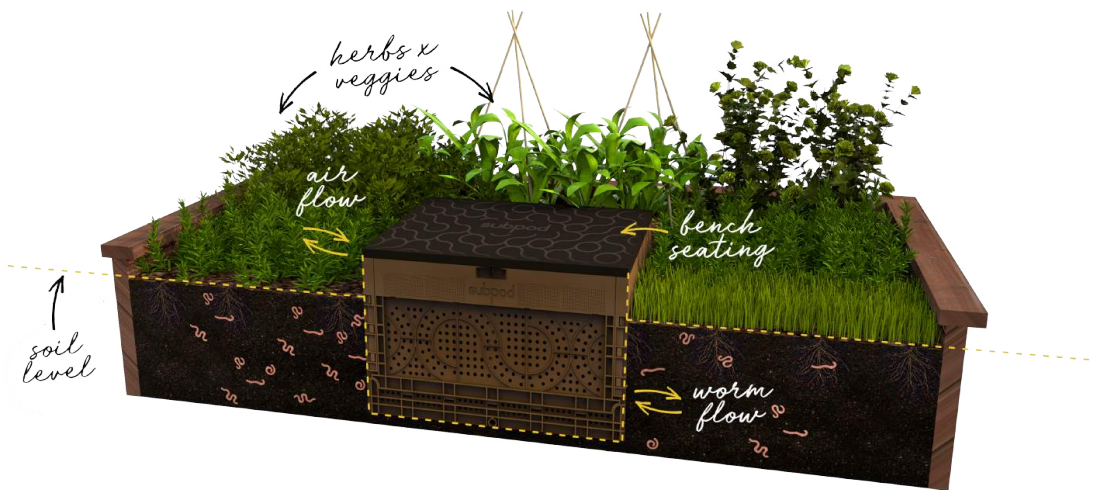
- Benefits:
- Cost \$280 - [www.gardentotable.com.au](http://www.gardentotable.com.au)
- Discount code: GARDENTOTABLE10
- Available at [subpod.com.au](http://subpod.com.au)
- Nutrients are directly transferred to garden
- Vermin can not enter
- Stays cool and moist
- Ongoing Online support videos
- Processes larger amounts of waste
- Suitable for schools, households, business
- Disadvantages:
- More expensive than above ground



# Subpod worm farm

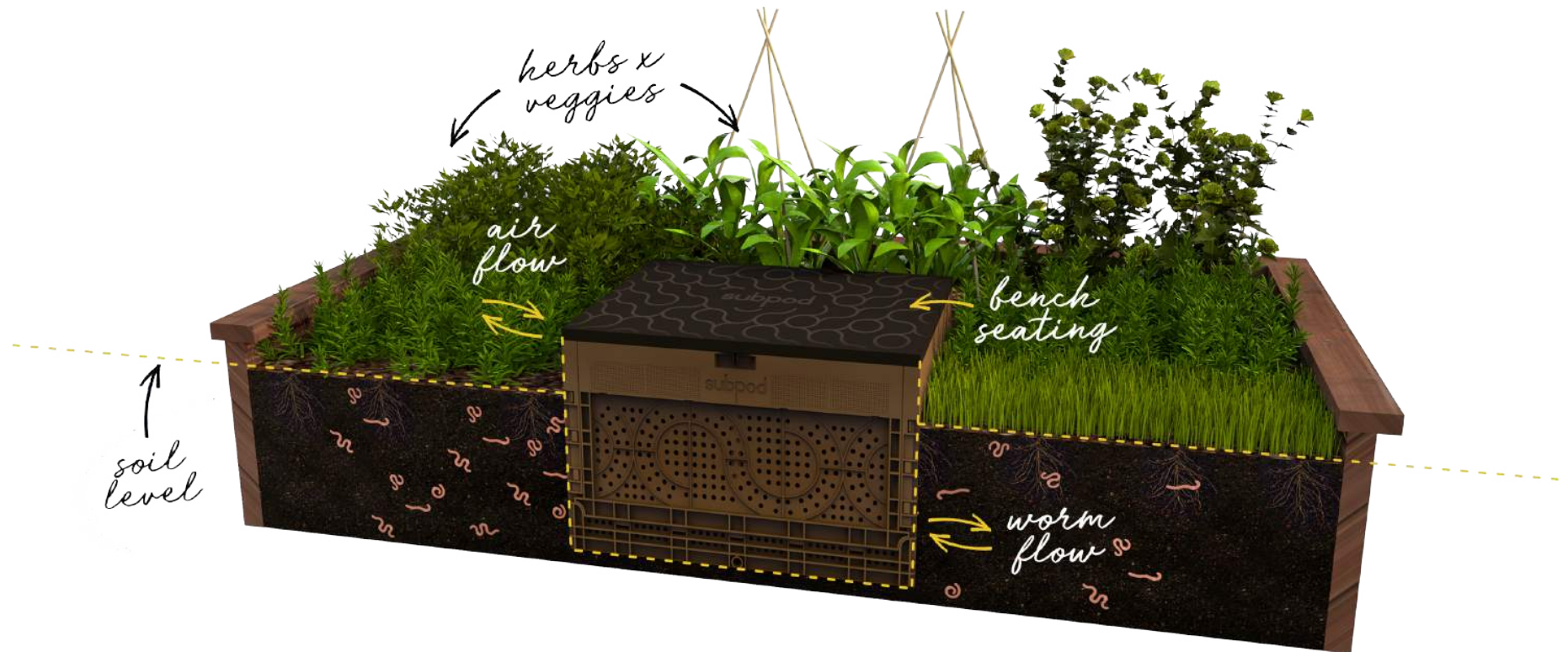
## Subpod - below ground

- Can process approximately 16kg Food waste per week after about 3 - 4 months



# Getting started with Subpod

- [Click here for the Subpod Online Course](#)



# Join the Subpod community

- Click on the link below to start the subpod online course.
- [Getting started with subpod online course](#)
- [Join the subpod community](#)

# Online resources Subpod

## What can I compost in **subpod**®?

Start slowly, your worms take about 12 weeks to settle in

### Yes please



Food scraps, veggie & fruit,  
bread, egg shells, grains  
(in small pieces)



Dry leaves,  
grass clippings



Coffee grounds,  
tea bags



Shredded newspaper, paper towel,  
tissue egg cartons, toilet rolls,  
uncoated cardboard (no tape)

### No thanks



Non-organics

### Take care



Onion, garlic, citrus fruits



Meats, bones, fish,  
seafood



Oils, dairy, cheese



Chilli, spicy foods



# Sort the rubbish student activity

## What can worms eat?

- On the whiteboard create a list with four columns as below, student write in their notebook.

- YES      NO      TAKE CARE      TAKE HOME

# #4 Share your food waste

*I have*  
**SCRAPS**  
SHOW NEARBY COMPOSTS

*I have a*  
**COMPOST**  
START RECEIVING SCRAPS

JOIN 74,547 PEOPLE WHO ARE ALREADY COMPOSTING  
THEIR SCRAPS.

JOIN US OR BROWSE MAP  
(It's free!)

[www.sharewaste.com](http://www.sharewaste.com)

# Solution #5 - Chickens



- Benefits of chickens:
- Improve student/staff wellbeing 😊
- Eat Cooked food
- Eat Sandwich crusts
- Eat Meat
- Eat Dairy
- Eat Insects
- Add manure to compost

# Chickens



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We offer:

- ✓ Services for Australian Association Environmental Educators Members
- ✓ Waste reduction packages for schools
- ✓ Consultancy and education on sustainability & waste
- ✓ Professional development for teachers
- ✓ Online help and support for schools
- ✓ Edible Garden design and resources

Visit [www.gardentotable.com.au](http://www.gardentotable.com.au) for garden and waste resources

Contact: Megan Cooke  
[megan@gardentotable.com.au](mailto:megan@gardentotable.com.au)

[www.gardentotable.com.au](http://www.gardentotable.com.au)

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# Question time