



Appendix A: Participant input

This appendix records information captured from participants at the 22 June 2019 Palmy Plastic Strategy Workshop held at Te Manawa. This record includes notes and oral reports from each of the nine small group discussion tables, plus additional written comments provided by individuals at the end of the workshop.

For the full report, see: https://enm.org.nz/about/palmy-plastic-challenge/pppc-report

Outline of the appendix

		= =	
1.0	Overview of how participant input was facilitated:		p. 1
	1.1	Small group session one, problems and solutions	
	1.2	Small group session two, solutions and actions	
	1.3	Oral table reports	
	1.4	Invitation for additional written input	
2.0	Reco	rd of table-by-table participant input	p. 2
	2.1	Ko au Te Kawau, ko Te Kawau ko au	
	2.2	Towards zero litter	
	2.3	Plastics policy	
	2.4	Local plastics management	
	2.5	Food packaging & (super)markets	
	2.6	Commercial packaging	
	2.7	Micro-plastics & nano-plastics	
	2.8	Circular economy	
	2.9	Education, awareness, & behaviour change	
3.0	Record of individuals' written input p. 1		p. 14

1.0 Overview of how participant input was facilitated

1.1 Small group session one (approx. twenty minutes): Problems and Solutions

At the workshop, following presentations, participants were given a list of nine possible topics, then asked to join tables based on which topic(s) they wished to discuss.

Once they had joined a table for the first session, participants were asked to brainstorm, to develop their understanding of a given problem and to suggest possible solutions. To start, table leaders shared some very general comments from table briefing sheets that had been prepared in advance. They then asked participants to brainstorm around three questions:

- 1. What do we know about the problem?
- 2. What do we want to know?
- 3. What could help solve the problem?

The first question, what do we know, was an opportunity for participants to develop their understanding of information shared on the day (for example, through the briefing sheets), but also an opportunity to add any community-based knowledge that might provide new insights into the problem.

The second question, what do we want to know, aimed to identify two types of questions:

- a) questions from the general public that indicate a need for further education and awareness raising;
- b) questions that indicate a need for additional research.

The third question invited participant ideas for the plastic strategy.

1.2 Small group session two (approx. twenty minutes): Solutions and Actions

Many participants traded tables (and topics) between sessions one and two, but some stayed at the same table. Table leaders stayed at the same table. To begin the session, table leaders summarised comments from the first session, with a focus on solution ideas. Participants then used sticky dots or tick marks to indicate those solutions that most interested them. One or more of the solutions that attracted the most interest became the primary topic for session two.

Participants were prompted to develop their chosen solution by addressing some or all of the following questions:

- 1. What is your solution?
- 2. What does it look like?
- 3. Who would be involved?
- 4. What do they need?
- 5. What would success look like?

These questions served as a general guide, with the understanding that conversations would develop according to participant interests.

1.3 Oral table reports

Following session two, table leaders were asked to give two-minute summaries of key ideas from their table.

1.4 Invitation for additional written input

After table reports, participants were asked the question, "what have we missed?" They were encouraged to write down any additional ideas, especially solution ideas, that might not have been captured in the rest of the workshop.

2.0 Record of table-by-table participant input

Notes from the nine tables are organised below table by table. Within each table report, notes have been organised thematically, without any clear division between ideas shared in the first and second sessions. Because this thematic organisation involved synthesising some ideas, this appendix does not record participants' selections of favourite solutions. (Participants had 'voted' for favourite solutions from session one as indicated in Section 1.2.) A rough record of tables notes that preserves their original session-by-session organisation and voting choices is available on request.

Table discussions focused on generating and capturing ideas, not on creating consensus. Agreement around particular items cannot be assumed. Ideas that are more developed or that recur across tables are highly likely to have resonated with a larger number of participants.

2.1 Ko au Te Kawau, ko Te Kawau ko au

Problems, challenges, and limitations

Participants noted Te Kawau is a "squeezed stream". Urban development is found all along the Te Kawau stream catchment, from Kelvin Grove to Awapuni. This poses challenges for flooding and stormwater management. Often housing comes right up to the edge of the stream, limiting access and restoration options.

In addition, many of Te Kawau's banks are steep enough to pose noteworthy health and safety issues. Strategic partnerships might help with clean-up actions, for example a Higgins team in waders.

Solutions

This table identified three overlapping workstreams with the aim of connecting people to Kawau Stream:

- 1. Making sure people know Te Kawau is there;
- 2. Developing walkways so that people see and interact with the stream;
- 3. Restoring Te Kawau.

Making sure people know Te Kawau is there

Participants want to spread the message: "Te Kawau is here, and it's a special place." Their goal is culture change and increased awareness. They note that the mana of Palmerston North is connected to the mana of Te Kawau, so that restoring the stream can help restore the city's mana.

Participants also wish to raise awareness of the stream's history, perhaps with the help of historian/geographer Professor Michael Roche from Massey University, and they want to make obvious the issues with the current state of the stream.

They identified the following ideas for spreading the message:

- Graphics, artwork
- Database
- newspaper, radio:, and media releases
- Videos
 - put it out on social media
 - trailer at movies
 - publicity video

- junior film festival
- Memos to residents who back onto the stream, for example a PNCC pamphlet drop
- City Library collaboration, for example for local history week

Developing walkways so that people see and interact with the stream

Participants asked for increassed access to the stream, including increased visibility, pathways, and green infrastructure. Ideas included:

- Maps;
- Walking access;
- A heritage and/or environmental walkway;
- Urban wetlands in strategic places;
- Walkways along streams as part of the city walking and cycling network.

Participants noted that the Highbury stretch is quite open, and there may be more ready opportunities for development in Highbury than elsewhere along the squeezed stream.

Restoring Te Kawau

The table's vision for restoration involves removing rubbish and green waste (and reducing its recurrence), developing urban wetlands in strategic places, stopping weeds from growing in channels, new plantings, clean water, and the restoration of habitat fit for fish, tuna, and birds.

Suggestions for rubbish removal and prevention included:

- Summer cleanups and other rubbish removal actions; this will require help from groups capable of dealing with steep channels;
- Setting up a rubbish collection point along Te Kawau;
- Holding an event to get people to value the stream and to stop throwing green waste and littering.

Ideas for plantings included:

- Negotiate planting with PNCC;
- Trial plantings.

Participants recommended building partnerships with businesses, schools, Te Tihi, training teams, and educators. They recognised the role for funding experts and other forms of expertise. Children could play a role in holistic monitoring.

One suggestion was to identify kaitiaki for different stretches of Te Kawau.

--

Thank you to Siobhan Lynch-Kaitiana for facilitating.

2.2 Towards zero litter

This table group recognised that recycling isn't the answer to littering and rubbish dumping, because much of the rubbish that was found in streams wasn't even recyclable. Instead, their major focus was on changing mindsets for greater social responsibility: "wrappers and plastic crip packets is a small issue; understanding we are the environment—we are nature, nature is us—this is the bigger issue." They called for product stewardship and consumer stewardship / responsibility.

Problems and challenges

A wide range of factors lead to litter, and participants noted the problem has gotten worse over the past decade. More single-use plastic and other cheap and readily available disposable items are being produced. Some plastic packaging is a result of food safety concerns and regulations. Proper rubbish disposal costs, and rubbish bins aren't always available, and there's indifference and lack of awareness. Littering is the easy options.

Solutions

Participants' key solution ideas included:

- 1. awareness-raising events and campaigns;
- 2. increasing access to alternatives to littering;
- 3. picking up litter;
- 4. producing less and making sure packaging is recyclable so people will throw away less.

Awareness-raising events and campaigns

Participants wanted awareness-raising campaigns to be positive, "not telling people off". Participants recognised that, especially but not exclusively for youth, "being eco" was "uncool." One possibility is for community groups and students to work together to co-develop a campaign, with a focus on positive habits and small, incremental steps with achievable goals.

Participants also suggested modeling an anti-litter campaign on antismoking campaigns, looking at impacts on human health and the natural environment plus using visuals to encourage "take pride in your town".

Increasing access to alternatives to littering

Participants suggested making it less expensive to dispose of rubbish, such as free monthly dumping days in high dumping areas, perhaps by bringing in skip bins. Participants named Awapuni, Highbury, and other areas along Te Kawau. They suggested that PNCC could pay for the cost of free dumping days by reallocating costs currently spent on cleaning up. They encouraged community-council partnerships, and working with community groups, noting that community-led initiatives increase social ownership.

An alternative approach would be to fine those who litter.

Singapore was identifed as a litter-free city.

Picking up litter

Participants suggested pick up litter days. One possibility was a primary school challenge, perhaps as a cooperative project between Environment Network Manawatu and primary schools.

The group wanted initiatives that addressed the feeling that it's uncool to be part of the eco group. They recommended starting with primary schools and having inter-school challenges such as clean-up events, with the schools that pick up the most litter winning the prize.

Producing less and making sure packaging is recyclable so people with throw away less

Some aspects of the problem require national policy changes. Participant suggestions included levies and deposit schemes, such as 10 cent bottle deposits (following Australia's example).

--

Thank you to Kate Costley for facilitating

2.3 Plastics policy

Table participants called for a "new politics" with genuine political leadership. They wanted integrated and evidence-based policy frameworks, plus research-informed policy. They identified several policy priorities. They also called for a culture shift, away from an addiction to convenience and toward increased civic responsibility.

Political leadership

Participants stressed the need for a new form of politics with:

- genuine political and civic leadership (champions, like Tariana Turia for the smoking issue);
- politicians who are willing to take the risk of having a long-term view (beyond the 3-year election cycle);
- integrated, evidence-based policy frameworks;
- policy implementation through rules, penalties, and incentives (carrot + stick).

Research

Participants asked for funding and incentives to increase research and development with the ultimate aim of developing stronger and more effective policy.

They wanted answers to questions such as:

- how we can create more of a market for recycling, for more than just 1 and 2 plastics?
- how do we shift a social mindset towards responsibility towards litter, making litter socially unacceptable (like smoking)?

Policy priorities

Participants identified the following central government policy priorities:

- packaging rules, such as
 - requiring supermarkets to take back excess packaging,
 - naming and shaming irresponsible packaging,
 - incentives (tax?) to use responsible packaging,
 - container deposit systems;
- polluter pays;s
- full-cost accounting (so that the costs of plastic use aren't externalised);
- bans on single-use plastics;
- combining bottom-up (recycling) and top-down (reduction) approaches;
- policies taking a broad spectrum approach, from production to use, and including recycling but not just focused on recycling to recycling.

Civic responsibility

The table identified "addiction to convenience" as a problem. They held up a vision of the whole society becoming more responsible, for example by shifting consumption away from a high volume of low value items to a low volume of high value items.

The table noted: "as individuals, small practical steps lead to bigger change. As our tolerance grows, we can increase our efforts. Can't expect people to make massive change all at once."

They suggested a common sense approach to policy: "can't just force people to change – narrate it, needs to feel doable, and small steps."

--

Thank you to Jonathan Hannon for facilitating.

2.4 Local plastics management

Participants at this table suggested education-oriented campaigns and promotions to reduce litter and plastics dependency. They were particularly interested in creating feedback loops within suburbs and neighbourhoods, in promoting champions and leaders, and in targeting particular populations, such as students.

There were additional ideas for new infrastructure and policy changes.

Education, campaigns, and promotion

Participants called for a range of campaigns and promotions to shift behaviour. Many of these had a city-wide focus with general messages: "Don't drop it", highlighting paper alternatives to plastics, and promoting good practices at home, perhaps through a Facebook rubbish challenge. Participants stressed the value of increased community education, and they highlighted the importance of making educational messages accessible to both children and adults.

Another suggestion was to target existing groups and gathering spaces as a way to get the message out: community groups, Enviroschools, temples, churches, international students, farmer's markets and other community gatherings.

A few ideas were further developed.

- Summer interns can pick up rubbish and use the app litterati (https://www.litterati.org) to collect data on what and where litter is occurring.
- Information can be gathered and shared in ways that create feedback loops for particular areas: streets, communities, suburbs, etc.. This was seen as a way to incentivize reduction, and it was highly popular in table voting.
- A programme can be developed to promote those who are doing the right thing. For
 example, existing champions can be given a certificate, or endorsed businesses can be given
 a sticker that they can put in the window, and these champions could be highly promoted.

Community infrastructure

Participants at this table were asked, what can PNCC do? They recommended the following infrastructure:

- water refill stations (to reduce single-use plastic bottles);
- more rubbish bins in local parks;
- signs.

They also encouraged PNCC to investigate energy recovery systems: incineration and cogeneration.

Policy change

Many of this table's policy recommendations could operate at either the local or national level. They requested incentives, such as a deposit scheme, and they recommended looking at the

European approach. They want to require all businesses to recycle, and they identified the following single-use plastic items for bans:

- produce bags,
- straws,
- cutlery,
- takeaway containers.

--

Thanks to Samantha Battman for facilitating

2.5 Food packaging & (super)markets

Participants at table five recognised that reducing food packaging is challenging due to food safety requirements. They focused on plastic alternatives and on other plastic reduction strategies, and on making information accessible to consumers. They gave two solutions extra attention:

- developing a phone app to help consumers make good choices;
- rediucing packaging through re-localising food and renewing and redeveloping the Manawatu Food Action Network.

Our elders, they noted, have lived through times with less packaging and can give advice.

Food safety

Participants recognised that food safety and hygiene means that food packaging is required, but they wanted to be better informed about regulations. What, specifically, are supermarkets required to do?

Plastic reduction strategies

They had multiple suggestions to reduce packaging:

- supermarket butchers can wrap food in paper;
- reusable containers can be brought back for sterilisation;
- plastic wraps and rubber bands can be eliminated for vegetables;
- a phone app that rates packaged goods can help consumers make informed choices;
- local places that sell plastic-free can be listed and promoted;
- 'buy local' promotions can reduce food transport packaging related to food;
- food can be grown and made at home;
- vegetable dense diets can be encouraged as these require less packaging;
- leftovers and homemade goods can be shared without packaging;
- kids can make their own school lunches at home using gardens;
- plastic can be replaced with bamboo and paper.

Participants were pleased about the plastic bag ban.

Solution 1: Create a phone app that rates the eco-friendliness of supermarket packaging

Participants wanted a phone app developed that would help consumers make purchasing choices in favour of better packaging: a "Packaging Switch" app like the FoodSwitch New Zealand app, or

some other adjustment of what has been done in the health sector to make it relevant to packaging. They recommended investigating what apps are already available, talking to IT, and doing a literature review around packaging. They had multiple suggestions for how the app could work for users:

- make it free;
- make it able to scan a package to get a rating;
- use a star rating to identify good packaging;
- allow for user feedback and review to improve the app;
- make it so that kids can use it in an interactive way, for example, supermarkets could have challenges or competitions, like "can you find me the best packaged sweets (or biscuits or whatever)";
- make it fun and friendly.

To get the app developed, participants suggested turning to an eco-friendly producer, a summer internship for a UCOL or Massey student, academics working on sustainable business, or an Innovation Challenge.

Participants noted that a food sharing app that included information on food safety regulations could be useful.

Solution 2: Sharing economy and homemade food

Participants recognised that local food and food from the sharing economy typically has less packaging, and they asked for the following actions:

- learn from experience;
- recall what our grandmothers (grandparents) have done, as they lived with less packaging than we have;
- use seniors' knowledge to educate our youth;
- get young people visiting and involved in rest homes, or going to seniors' properties to help with gardens;
- use private and public spaces more efficiently, with community gardens and sharing tables;
- bring back the Manawatu Food Action Network, with coordinators.

Raised awareness of food safety regulations would also support increased food sharing.

--

Thank you to Julia Panfylova for facilitating.

2.6 Commercial packaging

This table was guided by the principle of product stewardship, the expectation that producers will take responsibility.

Practical suggestions included:

- 1. raising awareness of the extent of the problem with commercial and transport packaging,
- 2. developing alternative forms of packaging (e.g. shrinkwrap alternatives) that meet business's practical needs, and

3. finding ways to hold companies responsible, such as a hub for packaging return.

Awareness raising

Participants pointed out that it's a long journey from producer to retailer, and a lot of commercial packaging isn't visible. Consumers don't actually know how much is used at the various stages, but it's not just wrapping, and there's packaging behind the packaging.

The first step towards addressing the problem is to raise consumer awareness so that they can "claim" their packaging and understand the impact they're having through wrapping and transportation materials. One idea was a blog that showed how much plastic is involved.

Another suggestion was to promote "buy local" to reduce the transport journey and associated packaging.

Plastic packaging alternatives

Participants brainstormed alternatives to disposable plastic commercial packaging:

- biodegradable alternatives, for example bubble wrap and polystyrene alternatives, and alternative packaging for new appliances, furniture, and other products;
- reuse of commercial packaging, for example, by making plastic signs out of waste;
- reusable wrapping alternatives, for example, a shrinkwrap alternative for pallets.

Participants wanted research into why shrinkwrap is so practical that virtually no one is using alternatives, so that we have a better idea of what qualities we would need in reusable wraps.

Holding businesses accountable

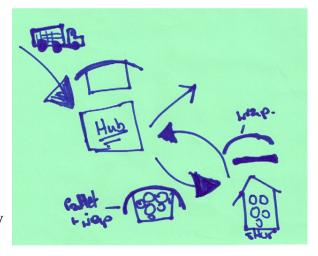
Participants suggested several ways to hold businesses accountable and encourage better practices, such as creating a tracking platform or another way to track plastic packaging in products, and also developing a network of zero waste business suppliers.

Another suggestion was the creation of a hub to return packaging. There could also be a hub for composting biodegradables.

Participants wanted producers and freight companies to be responsible for packaging, both by providing the funding for a hub or similar solution and also by managing the logistics of any product stewardship solution.

--

Thanks to Laís Vidotto for facilitating.



2.7 Micro-plastics & nano-plastics

Participants discussed the health implications of micro- and nano-plastics and the need to make people aware that food packaging is responsible for some ingestion of micro- and nano-plastics.

They called for:

- awareness raising, media attention, and more research;
- for a policy and regulatory response based on the precautionary principle and informed by science;
- actions in schools and at city events.

Awareness raising, media attention, and research

We know that nano-plastics are super tiny. They're found everywhere, and they pass through cell membranes. They're expensive to research, and we don't know what they do to us.

Micro-plastics are released into food and beverages through contact, and they have been proven to have detrimental impacts on health and development.

Participants noted that plastics are produced without knowledge or conscious thought. Roading provides an example, with plastics being used as road material, and tyre dust. Is this a sound solution? Is it harmful? If so, how and when is it harmful? Which solutions are even more harmful? How long will plastics stay in roading aggregate? How often will they need to be replaced? Will micro-plastics from roading wash into stormwater systems, then head out to rivers and our marine ecosystems?

Participants called for more media attention, more scientific research into health impacts, and for scientists to work closely with industry producers, businesses, local councils, governments, and other politicians. They seek a precautionary approach.

Policies and regulatory action

Participants noted that impending policy changes are driving innovation and better solutions, and they asked for additional regulation. They noted that food packaging is unnecessary and largely avoidable. Moreover, food packaging regulation would level the playing field so that all people, not just the wealthy, can afford food packaged safely. Participants thought the health industry would be harder to address.

They called for the following actions:

- bans or phase-outs of single-use packaging;
- locally produced and regulated plastics used only;
- regulation for the most toxic food packing materials;
- innovation and funding for safe alternative materials and food delivery systems;
- food container eco-labelling, perhaps with a traffic light system, or easy-to-decipher colour-coding (like the health star rating), and more media attention;
- no more fast fashion.

School programmes and city events

Participants saw schools as a starting point, with hands-on learning options so that students could learn and be part of the solution at the same time. Schools could become "single-use free", with supporting actions including reducing plastic packaging for stationery, providing beeswax wraps for all students, and running beeswax workshops.

City events could also be run on a plastic-free basis.

--

Thanks to Trisia Farrelly for facilitating.

2.8 Circular economy

This table discussed the mindset and values behind the circular economy approach, then suggested a range of products (e.g. plastic alternatives) that are a good fit for a circular economy, with particular attention to solutions for supermarkets, food trucks, and takeaways.

Participants wanted to know more about product design and what can be composted. A recycling guru could help. Their goal is a 50% reduction in soft plastic in PNCC in 3-5 years.

The circular economy approach

A circular economy mimics nature's cycles by using materials that can be recycled and ultimately returned to the natural environment, for example to benefit the soil. The challenge is to find products that at the end of their lifecycle nourish the next product produced: "cradle to cradle" design. It can be thought about as a "technical version" of permaculture, with waste from one phase used as the input for the next phase. It's a mindset that switches from concepts like GDP and exploitation to regeneration and renewing the Earth's systems, and it takes into account the total costs of the system, not just the production costs.

Participants noted that Sweden is trying to move in the direction of a circular economy, and that carpet manufacturing provides a real world example.

Supermarket solutions

How would supermarket packaging work in a circular economy? Suggestions included biodegradables, such as hemp to replace polystrene and other shaped forms, and wool products to protect glassware instead of bubblewrap.

Another suggestion was a container exchange system. Standardised glass or metal containers (e.g. 1 or 1.5 kg) could be used in multiple participating places (supermarkets, restaurants, local food shops). By exchanging them and sanitising them between uses, they could be used safely even for safety critical foods such as meat, fish, and dairy. Containers could be colour-coded for different types of products (e.g. vegetable, fish, and meat). The programme could be piloted with willing shops.

Food trucks and takeaways

Participants wanted standards for food trucks and takeaways (including McDonald's, KFC, etc.), so that all containers need to be cardboard or otherwise compostable or reusable. Means to achieve this goal included education of food truck owners and council prescription.

2.9 Education, awareness, & behaviour change

Awareness raising, cultural change, and personal responsibility

Participants were concerned by our "very disposable society."

They noted that there is a need for more community awareness and suggested several solutions, encouraging a "little steps" approach that doesn't overwhelm. They wanted everyone to take responsibility for picking up rubbish when they see it, with a culture of people leading by example to model and socialise new behaviours. There needs to be more media attention, including monthly highlights of problems and solutions in community papers.

They also wanted to see more leadership from the Ministries of Environment and Education. Some suggested personal consequences, like a two-tiered fine system for littering: either a big fine, or a small fine combined with education. Recycling needs to be seen as one solution but not the ultimate solution.

One suggestion was visual impact education, for example having anti-littering signs and clearer signage on recycling bins, plus putting images on packaging to show the impacts of the packaging, as has been done with smoking.

They suggested using community organisations to reach a diverse public. For example, there is a need to get more information out to the deaf community. The presence of deaf community members was acknowledged gratefully. They shared that funding already exists for workshops that are run through the deaf community or disability support organisations.

Schools, youth, and competitions

Participants wanted to see more schools involved in the Palmy Plastic Pollution Challenge. Schools could hold assemblies, or they could adopt specific waterways, or include plastic pollution as part of science fairs. Community-school linkages could be developed, and senior students could be encouraged to volunteer for community groups or environmental businesses, which could have career benefits for them.

Games, competitions, and rewards were also seen as ways to get people involved, and this might appeal to youth. Apps and social media can be used to support gamification. There could be a local hashtag competition for litter and bottles picked up and photographed, to make it cool. Litterati is a useful app for posting how much litter is picked up.

One participant won a keyring made of recycled plastic from a PNCC action twenty years ago, and she still has it.

Community events are another approach. There could be fun events, for example events in The Square, with incentives and with the involvement of children.

Spreading alternatives

The table wanted more visible consumer alternatives.

Plastic bags are still used in supermarkets, especially produce bags. Supermarkets need to lead the way to more widespread adoption of reusable and compostable bags and containers, such as brown paper bags and glass bottles. They noted that netting bags are poor alternatives because, like nets, they're harmful to wildlife.

There is currently no current system for polystyrene recycling in Palmerston North. Can it be used for house insulation? Innovation and technology solutions are needed.

Product stewardship

Participants wanted a product stewardship model, for example, paint manufacturers taking responsibility for the disposal of left-over paint. Other producers could be encouraged to also take responsibility for waste and left-over products.

Plastic bottles were a particular focus. There's so many of them! Participants asked, who owns the bottle, and they suggested a software identification system to make people more responsible (possibly referring to producers, possibly end-users who dump bottles). Other suggestions to encourage reuse were more expensive water and a tax on bottled water, or to have a deposit scheme (return bottles for money) as incentive, motivation, and awareness-raising.

--

Thank you to Brian Finch for facilitating

3.0 Record of individuals' written input

At the end of the workshop, participants were asked, "What have we missed?" Individuals made the following notes.

- Encouraging "slow fashion" (plastic-free fabrics)
- regulate toxicants used in food & beverage packaging (precautionary approach)
- locally produced and recycled plastics only
- targets & goal-setting to reduce plastics in super-markets & retail stores / industry
- composting food waste
- stop recycling plastic (& paper & board) for single-use food packaging!
- More research on the health implications of nano-plastic on humans
- a way for students (high school & primary) to volunteer and connect with groups so they can be involved with change ... also, volunteering could be done with scientific research
- do something big for World Cleanup Cay in September! 21 Sept. 2019. There will be about 40 local body candidates desperate to be in the public eye doing leaderly things.
- Roads which have large amounts of plastic, and other rubbish these roads should be signposted, with large, easily visible posters
- Commercially compostable packaging still is going into landfills
- do we have commercially compostable process here in PNCC?
- Also wood spoons, etc. They make the landfill gasses worse education is needed
- Community centres:
 - recycle bins in community centres
 - pamphlets or info when community make bookings
 - community centre gathering evening
 - local culture groups gathering (churches, iwi, service providers)
 - data report collection
- change the rubbish transfer stations. Have people there to make sure things are able to be recycled or reused.

- Look at Singapore model of incineration of rubbish, and have made an island with the ash
- water refill stations
- recycle bins beside rubbish bins
- make roads using plastic chips
- businesses in NZ to make products that can be recycled in NZ
- giving responsibility to specific groups like was proposed by the education group, could have applications outside of schools
- Food
 - cooking lessons
 - celebrating making food from real ingredients
 - encouraging shopping at markets such as Albert St. With own bags
 - working with takeaway outlets to use card-board packaging
 - support "plant to plate" initiatives for children
 - "unpack" obsession with packaging
 - o loose goods / own containers
- Before there were sanitary pads and tampons we used cloths. The same before there were
 disposable nappies. Educating people about the wisdom of returning to cloth nappies &
 reusable pads or menstrual cups would be very good. As an 80-year-old who has bladder
 issues I have incontinence panties that are easily washable and long lasting.

--

End