



# Waste Data Framework Workshop

WasteMINZ Mid Year Roundup

3 April 2013

Presented by:

Duncan Wilson



# Waste Data Workshop

## Outline

- Overview of waste data framework
- Background document
- TA Bylaw licensing data guidance
- Workshop: Data needs
- Feedback & discussion

# Overview

## Rationale for a Consistent Approach

- Better planning and management
- Benchmarking, reporting & information sharing
- NZ needs decent waste data for national reporting – impossible if everyone is collecting it differently
- Establishing consistent definitions and data gathering approaches saves significant time and effort
- Smaller authorities can ‘piggyback’ on national and large council work
- Waste operators want consistent systems

# National Waste Data Framework

## Overview

- Application to WMF last round by WasteMINZ
  - Steering group established
  - Awaiting outcomes of funding process
  - Start soon if successful, run for 15 months.
- Key parties involved/support application:
  - Central Govt: Ministry for Environment, Statistics NZ
  - Auckland/BOP/Waikato/Canterbury Regional Councils
  - Range of TAs
  - Industry representatives (large and small)
  - Consultants!

# National Waste Data Framework

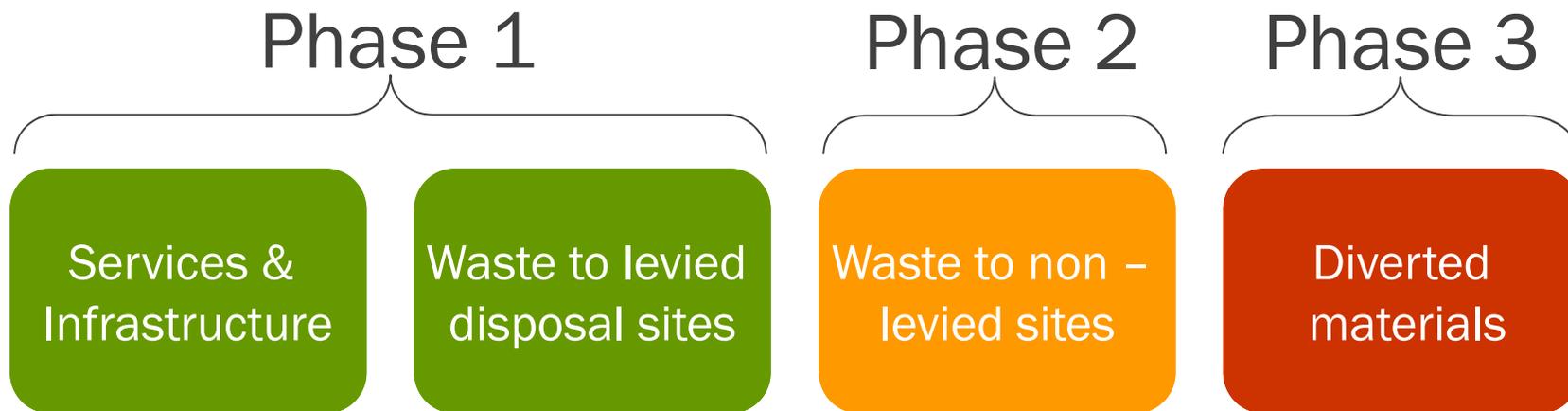
## WMF Supported Project

- Project is to develop all the key elements that will be needed to operate a national waste data system – ‘Flat-pack’ minimal assembly required!
  1. Identify waste data needs of key parties
  2. Establish definitions
  3. Establish measuring and reporting protocols
  4. Identify roles, responsibilities & resourcing
  5. Legislation/regulatory tools
  6. Develop draft IT specification

# National Waste Data Framework

## Modular/Phased Approach

- Key to the approach is that it is phased/modular - not trying to do everything all at once
- Four key data types identified to be addressed in 3 phases:

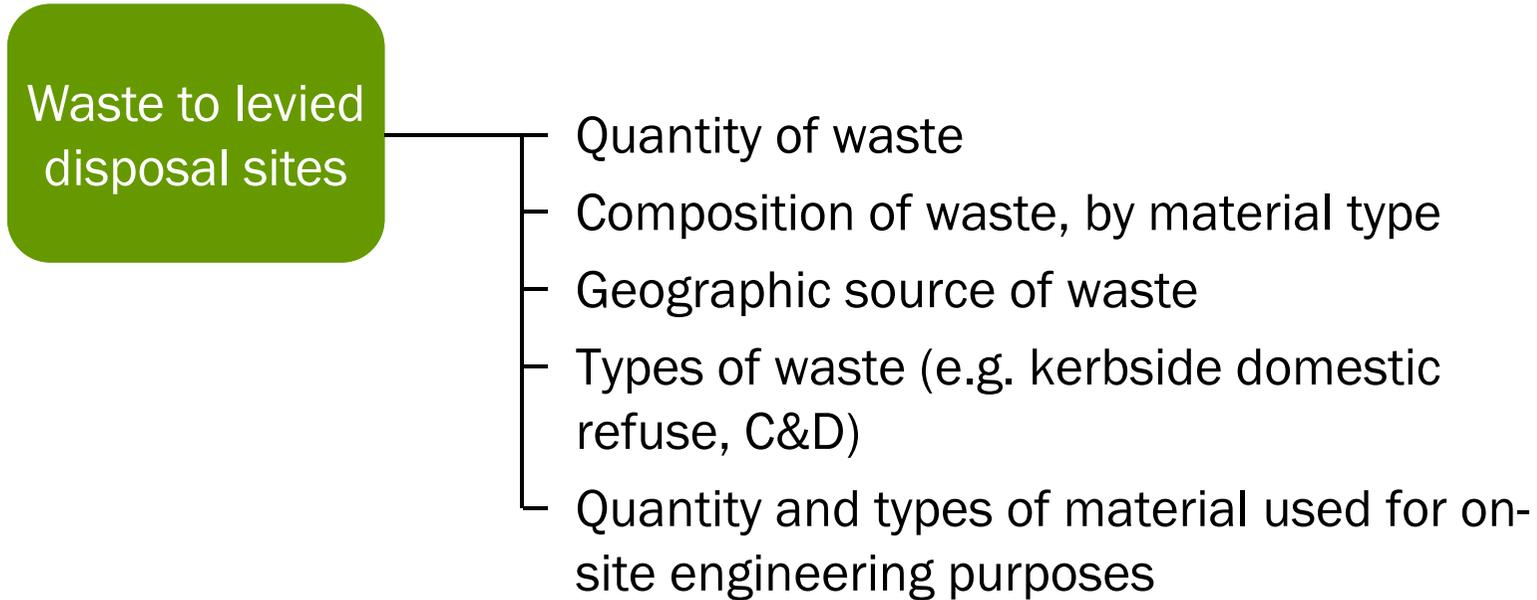


# National Waste Data Framework

## Services & Infrastructure

- Kerbside services provided by all TAs
- Other services provided by all TAs
- Levied disposal facilities, by district, including information re gas capture, leachate treatment, life span, etc.
- Other consented disposal facilities, by district, including information re gas capture, leachate treatment, etc.
- Non-consented disposal facilities by district
- TA-controlled diverted materials processing
- Privately-controlled diverted materials collections and processing

# National Waste Data Framework

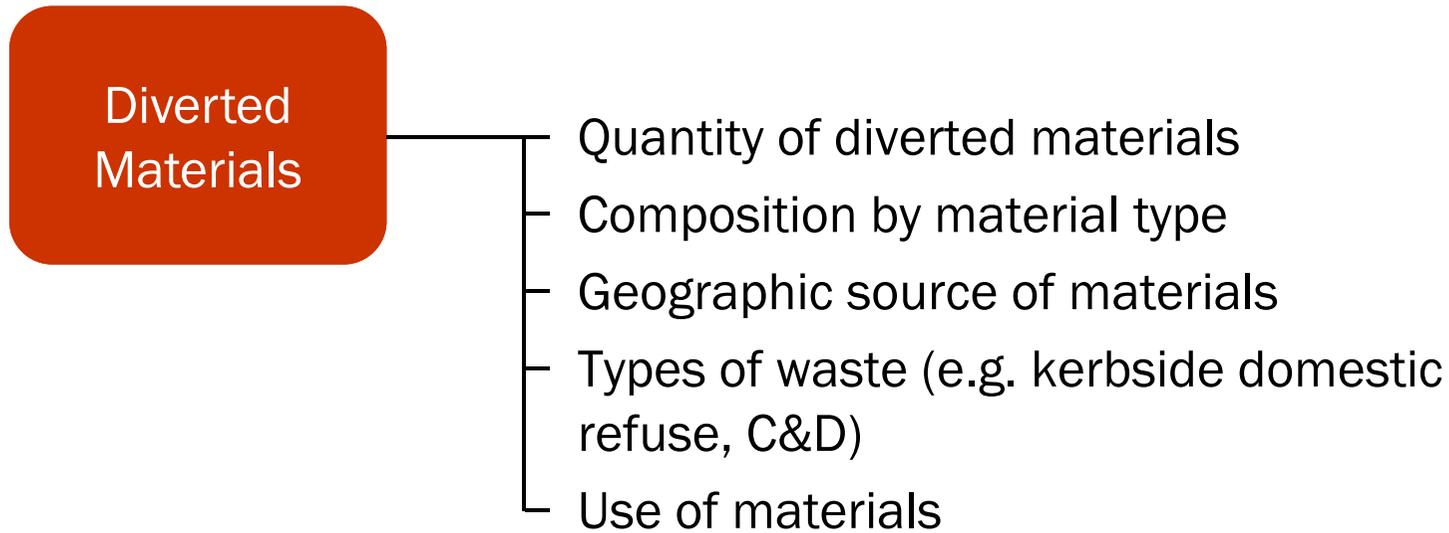


# National Waste Data Framework

Waste to non-levied sites

- Quantity of waste
- Composition of waste, by material type
- Geographic source of waste
- Types of waste (e.g. ICI, Landscaping, C&D)

# National Waste Data Framework



# National Waste Data Framework

## Summary

- Project to develop a framework that will provide consistent, reliable data for everyone
- Outcome won't be the working system but everything needed to build one
- Will take over a year – lots of consultation to come
- Questions?

# Waste Data Framework Background Document

## Outline

- Overview of national and local data issues
- Key issues:
  - Definitions
  - Measures
  - Proprietary data
  - Lack of standard protocols
- Characteristics of waste
- High level data classification
- Prioritisation criteria
- Apply prioritisation to high level classification

# TA Bylaw Licensing Data Guidance

## Overview

- TAs establishing bylaws under s59 of WMA
- Many of these include provision for licensing of collectors
- Some TAs seeking to make progress on waste data reporting
- Danger of everyone heading in different directions
- Interim guidance to help align such initiatives with a national waste data framework
- Download the guidance...

# TA Bylaw Licensing Data Guidance

## Key Points

- Background: Based on work to date on National Framework and Auckland Council Framework
- Guidelines:
  - What waste streams to include
  - Who to license
  - What data to collect
  - What reporting periods to use
  - How to manage and report

# TA Bylaw Licensing Data Guidance

## Guidelines

- What waste streams to include:
  - All solid waste that is sent for disposal
- Who to license
  - Any party that collects and transports waste to or from any source or facility
- What data to collect
  - The quantity of waste
  - The type of waste
  - The destination (facility) for that waste quantity and type

# TA Bylaw Licensing Data Guidance

## Guidelines

- What reporting periods to use
  - Monthly
- How to manage and report
  - Standard forms (ideally into simple electronic database)
  - Support confidentiality

# Questions?

# Auckland Waste Bylaw & Data Framework

## Overview

- Auckland Council determined accurate and reliable waste information critical to fulfil responsibilities. Data from private sector key to this
- Solid Waste Bylaw 25 Oct 2012
- Licensing of collectors in force from 31 Oct 2013
- Waste facilities from 31 Oct 2015

# Auckland Waste Bylaw & Data Framework

## Overview

- Clause 12 of the bylaw requires that:
  - *any person who collects or transports waste from or to land in Auckland that on 31 October 2010 was part of Auckland City, Manukau City, Papakura District or Franklin District must obtain a licence to do so from the council.*
- Similarly, clause 16 requires that:
  - *“any person who operates a resource recovery facility, landfill site, clean fill site, managed fill site or mono-fill site must obtain a licence to do so from the council.”*

# Auckland Waste Bylaw & Data Framework

## Overview

- Clause 19 lists the terms and conditions upon which a licence may be granted. These conditions include:
  - *(e) provision of information – the licence holder must provide waste data to the council during the term of the licence in the form and at the times determined by the council from time to time including the following data:*
    - *(i) waste log books for each vehicle operated in accordance with the licence recording the quantity, composition and destination of each waste type and the point in time when such data was recorded during the waste collection, transportation or disposal process;*
    - *(ii) weighbridge receipts;*
    - *(iii) gate records of waste tonnage.*

# Auckland Waste Bylaw & Data Framework

## Overview

- Bylaw came into effect 31 Oct, Intended first reporting month Nov with Nov data submitted in Dec (now a trial)
- Lot of work behind the scenes on what to report (industry consultation etc)
- A slice of the issues that National Data Framework will tackle have already been grappled with:
  - What data is available
  - What definitions apply
  - Who is responsible
  - How can it be gathered

# Auckland Waste Bylaw & Data Framework

## Overview

- Auckland Council is seeking to understand how much of which types of waste are being disposed of at each facility used by the region's waste collectors
- No standard operator practices or available data
  - All use different software and record different information
  - Difficult to identify waste source (e.g. by industry type)
  - To get the data Council wants will require making estimates

# Auckland Waste Bylaw & Data Framework

## Classifications

1. Domestic waste from households
2. Other waste from households
3. Industrial/commercial/institutional waste (ICI)
4. Construction and demolition waste (C&D)
5. Hazardous waste
6. Transfer station waste
7. Natural hard fill material
8. Food waste, green waste, and recyclable materials collected from public places

# Auckland Waste Bylaw & Data Framework

## Classifications

- The basic classifications for reporting may seem obvious but a lot of grey around the margins. E.g.
  - Should ‘domestic waste’ that is collected at kerbside include waste from businesses collected in the same vehicles via the council provided service?
  - Should ‘domestic waste’ include large quantities of hazardous /medical waste?
  - Should it include both council and private collections?
- Every classification requires similar determinations
- Standardised list of facilities also being developed

# Auckland Waste Bylaw & Data Framework

## Classifications

### Other waste from households

- as per 'inorganic material' in bylaw (*Inorganic material means waste consisting of household equipment, furniture, appliances or material of a similar type that due to its nature or size cannot be collected as domestic waste in an approved container.*)
- includes green waste from both households and commercial properties that is intended for landfill disposal (excluding green waste in domestic waste), includes mixed loads that contain a substantial proportion of green waste
- **excludes** loads with significant proportion of hazardous waste
- **excludes** waste from a household that is primarily from construction renovation, or demolition of a building
- **excludes** loads composed entirely of natural hard fill material
- self-haul data not available from waste collector reporting but can come from facility reporting
- includes waste collected from both public and private places

# Workshop Session

# What Are Your Data Priorities?

1. Split into groups:
  - TAs
  - Regional & Central Govt
  - Operators
  - Consultants, researchers & other
2. List of 24 key indicators
3. First review indicators and think about how might be used: Policy, Strategy, WA, WMMP, Targets, Reporting, Benchmarking, Info sharing, Education, Performance etc
4. Next rank on 2 dimensions: How useful, and ; How easy to get the data

# Discussion Points

- Easy – have it now
- Bit of work but possible
- Dream on

## How to Rank

Indicator	Essential	Useful	Nice, but no-one is going to die
Tonnes waste to landfill from region/district	<span style="color: green;">●</span> <span style="color: yellow;">●</span> <span style="color: yellow;">●</span> <span style="color: yellow;">●</span>		
Council-controlled tonnes to landfill	<span style="color: green;">●</span> <span style="color: green;">●</span> <span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>
Privately-controlled tonnes to landfill	<span style="color: yellow;">●</span> <span style="color: green;">●</span>	<span style="color: yellow;">●</span> <span style="color: red;">●</span> <span style="color: green;">●</span>	<span style="color: red;">●</span> <span style="color: red;">●</span>
Tonnes of council diverted materials	<span style="color: green;">●</span> <span style="color: green;">●</span>		
Tonnes of private diverted materials	<span style="color: red;">●</span>	<span style="color: yellow;">●</span>	<span style="color: yellow;">●</span> <span style="color: red;">●</span>

# Feedback & Discussion

“Insufficient data is available on New Zealand refuse to accurately define past and present trends.”

*1990, Solid Wastes Management Plan Definition Study - Background Report, Auckland City Technical Services, unpublished*

“Comprehensive waste data are lacking in New Zealand. There are limited data available on solid waste collected for recycling and recovery, littered waste, incinerated waste, and waste dumped at sea.”

*1997, National Waste Data Report, Ministry for the Environment*

“New Zealand’s waste problem is large, and growing. Just how fast it is growing is difficult to judge precisely. Data on the size of the problem is inconsistent, difficult to compare, and in many cases, doesn’t exist.”

*2002, The New Zealand Waste Strategy: Towards zero waste and a sustainable New Zealand,*

High on the list of priorities is improving the information on waste volume and the adverse effects associated with them. Without the means to define the problem to be solved, waste policy is like a ship without a compass, clearly pointing in a direction but with no gauge on where it is to go.”

*2007, NZIER: Waste or Rationality? Economic perspectives on waste management and policies in New Zealand*

“As the 1996 OECD review noted, the absence of a comprehensive national waste database is a serious constraint on effects-based, objective-driven policy-making.”

*2007, Organisation for Economic Co-Operation and Development: OECD Environmental Performance Reviews: NEW ZEALAND.*

“The lack of data about waste hampers our ability to plan appropriate activities to improve waste management and minimisation.”

*2010, New Zealand Waste Strategy Reducing Harm Improving Efficiency*

“It is not possible to calculate, with any degree of precision, up-to-date tonnage and composition of waste being disposed to landfill in the Auckland region.”

*2011, Auckland Council Waste Assessment, Auckland Transition Agency*

“No information about cleanfill quantities was compiled for this report because the few sites with available data are unlikely to be indicative of what is happening around the country.”

*2011, Consented Non-levied Cleanfills and Landfills in New Zealand, Ministry for the Environment*

“It is not possible to determine whether the amount of waste disposed has reduced because there is no comparable baseline data”.

*2011, Review of the effectiveness of the waste disposal levy: In accordance with section 39 of the Waste Minimisation Act 2008, Ministry for the Environment.*

# Contact Details

Duncan Wilson

Eunomia Research & Consulting

[duncan@eunomia-consulting.co.nz](mailto:duncan@eunomia-consulting.co.nz)

Office: +64 9 376 1909

[www.eunomia-consulting.co.nz](http://www.eunomia-consulting.co.nz)

 thank you