Australian & New Zealand Biosolids Partnership

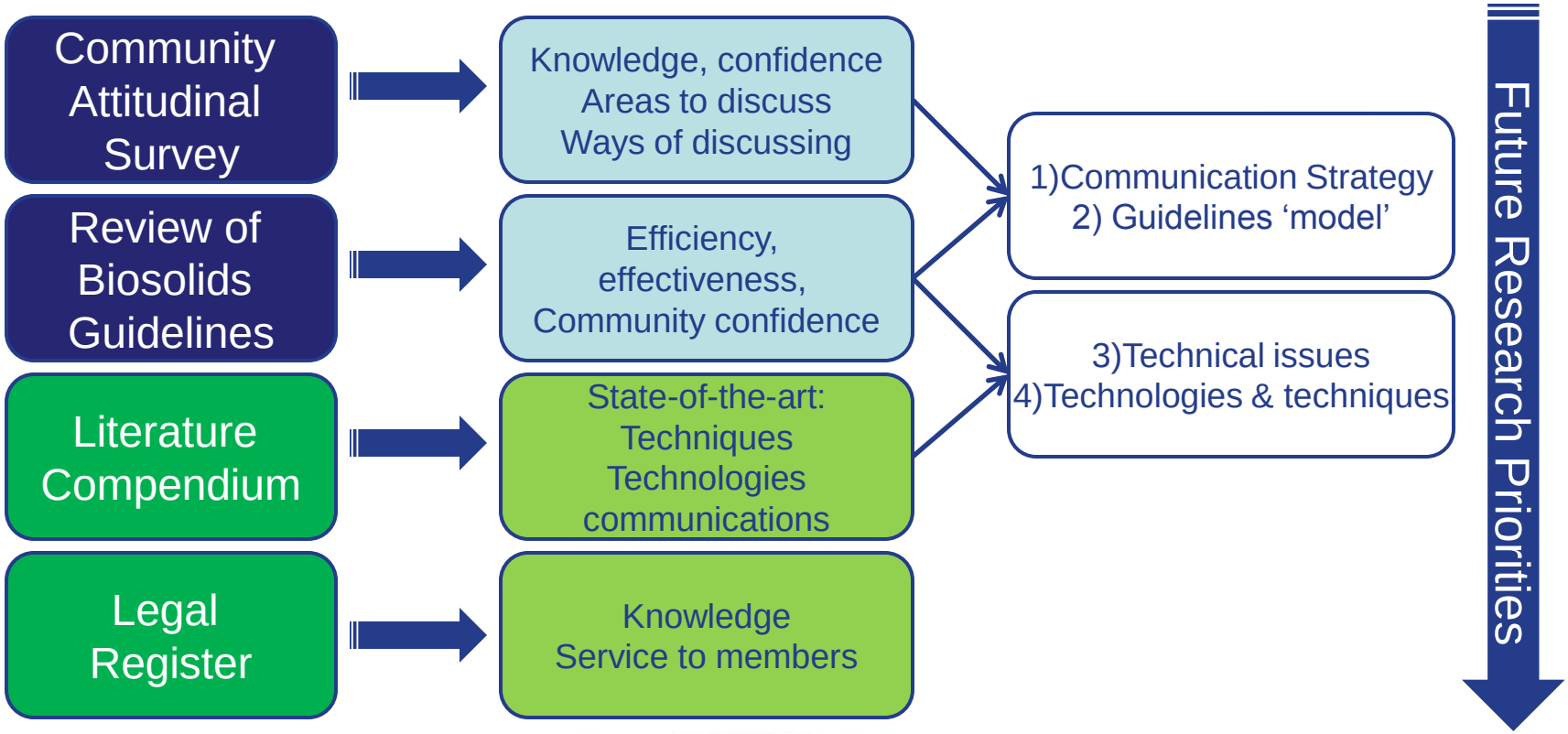
Community Attitudinal Survey Research Findings

Gregory Priest – Australian Water Association

Recent Research Initiatives

- Review of Biosolids Guidelines in ANZ
- Community Attitudinal Survey
- Literature Compendium
- Legal Register

Research Components



Community Attitudinal Survey – Why?

"[It is imperative that in] any successful information and/or public involvement program...the planner... know the level of knowledge and the beliefs about sludge management in the community.

Too often, public discussions on issues such as [biosolids management] are confused because the concerns of the public and the professionals are different and neither end up helping each other".

Source: Williams et al (1991)

Survey Structure

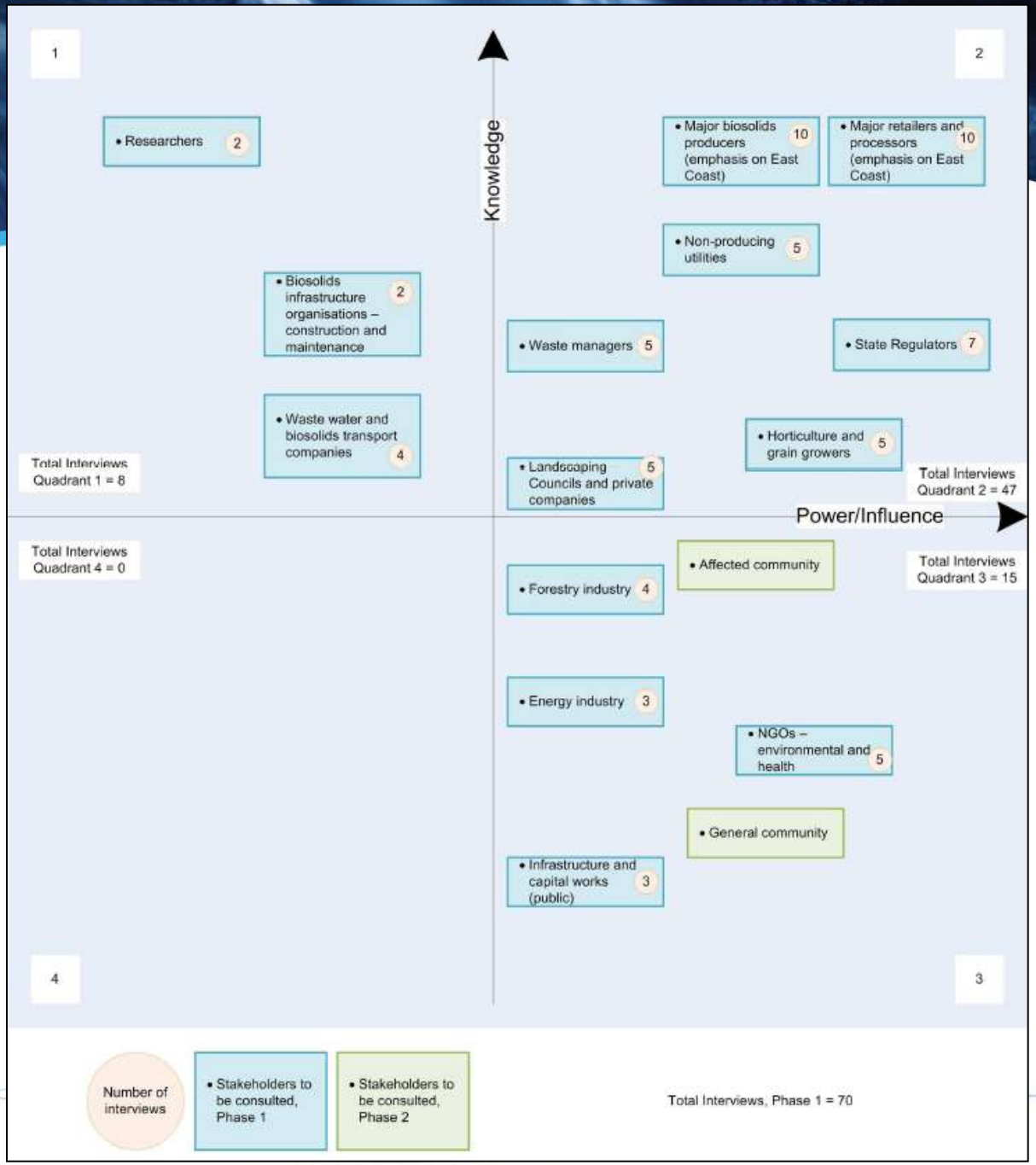
Phase 1

- Biosolids experts/leaders (37 from Aust, NZ + UK)

Phase 2

- General community (Aust & NZ) (n=1221)
  - Affected (600)
  - Unaffected (621)

Phase 1 – Early Stakeholder Analysis



Leader's/Expert's Response (Phase 1)

- Most experts/leaders supportive of biosolids use, yet:
  - Most believed there were more threats & weaknesses arising than strengths & opportunities
  - These were *perceived* weaknesses, rather than *actual* weaknesses

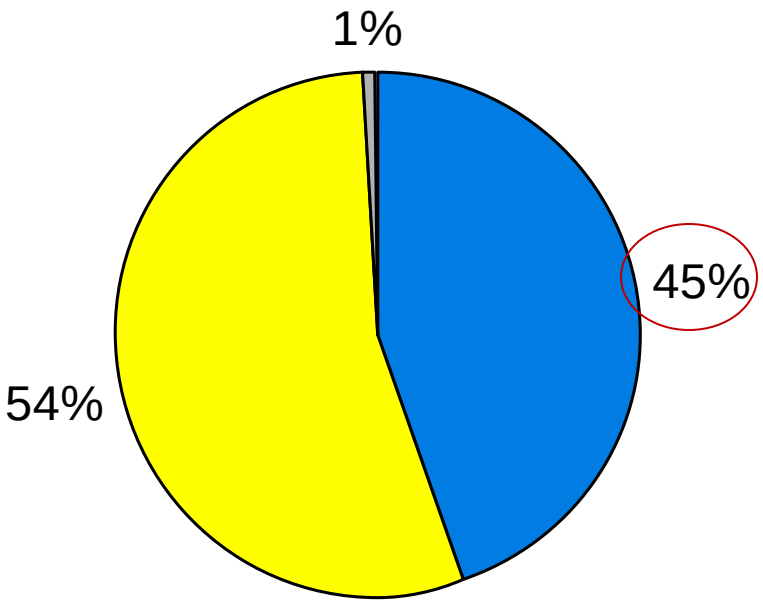
Leader's/Expert's Response (Phase 1)

- Quotes
  - *"Public meetings end up in negative publicity"*
  - *"People don't get as excited if it does not smell – if it does not smell like faeces maybe it isn't faeces"*
  - "*With the community we try and be invisible*"
  - "*Retailers do not want their name associated with the use of biosolids*"
  - "*We have to remember that not much more than 20 years ago we were using raw sewage on vegetables*"

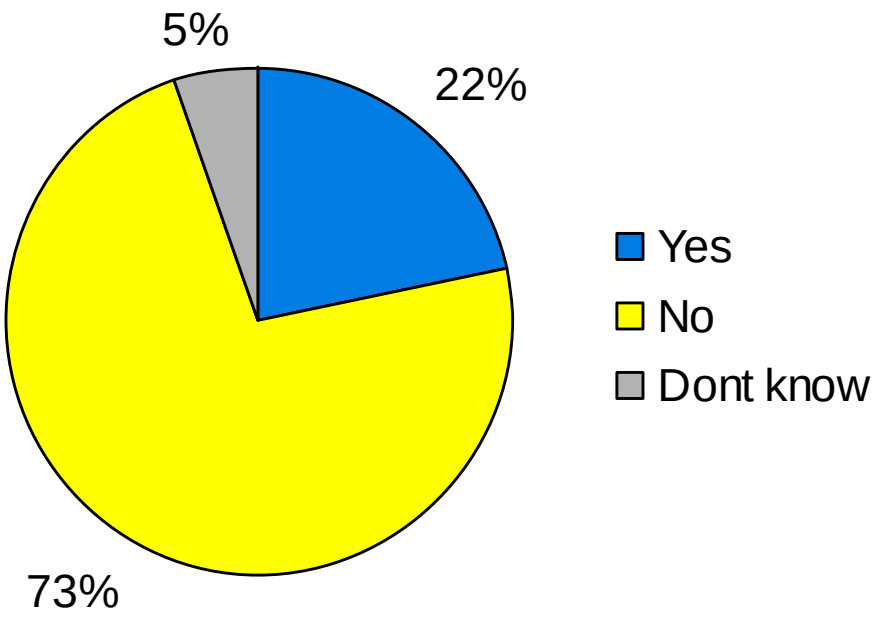
Awareness of Biosolids (Phase 2)

Have you ever heard of the term biosolids?

‘Affected’ – n=600)



‘General’ – n=621



Understanding of Biosolids (Phase 2)

How would you define the term Biosolids?

Most frequent definition of biosolids	As % of responses
Broken down; recycled; or treated waste	40%
Don’t know	19%
It is or can be used like a fertiliser	10%
Solid waste or sewage	9%
What is left once water is removed	5%

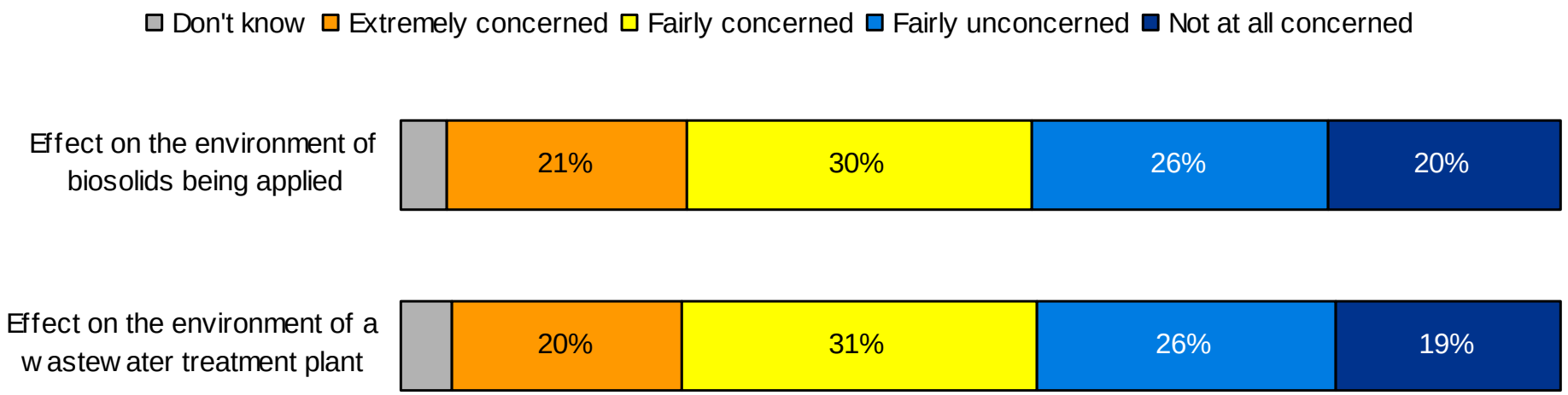
General Attitudes to Use

Appropriate Use:

	Affected		General	
As a blended fertiliser for gardens				
Strongly agree	219	36.5%	194	31.2%
Agree somewhat	274	45.7%	230	37.0%
		82.2%		68.2%
As a fertiliser for forest soils to grow trees				
Strongly agree	353	58.8%	309	49.8%
Agree somewhat	191	31.8%	187	30.1%
		90.6%		79.9%
As a fertiliser for soils in which non food products (eg cotton) are grown				
Strongly agree	354	59.0%	299	48.1%
Agree somewhat	183	30.5%	188	30.3%
		89.5%		78.4%

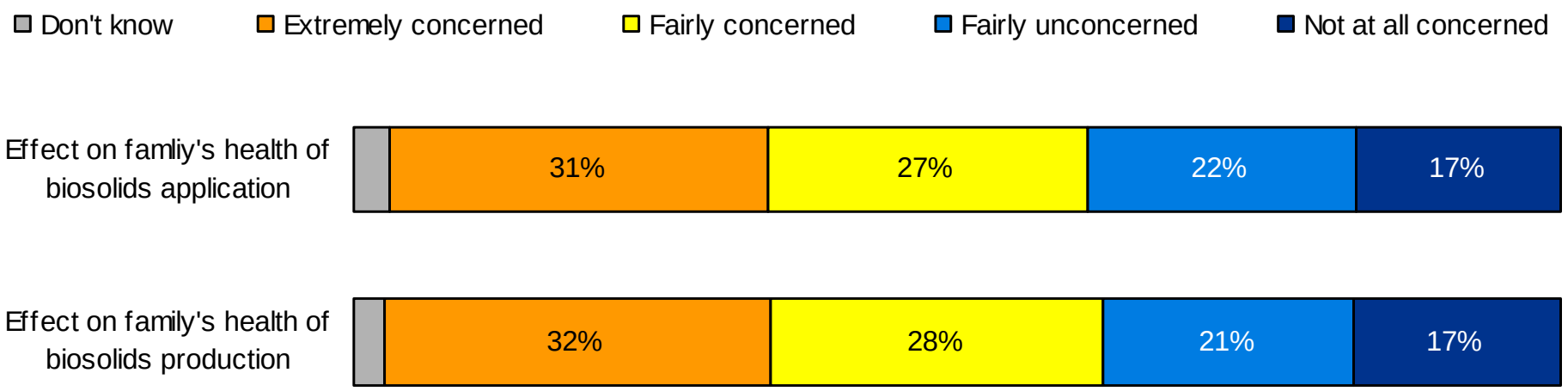
Biosolids and the Environment (Phase 2)

Level of concern for their *local* environment - application & production of biosolids



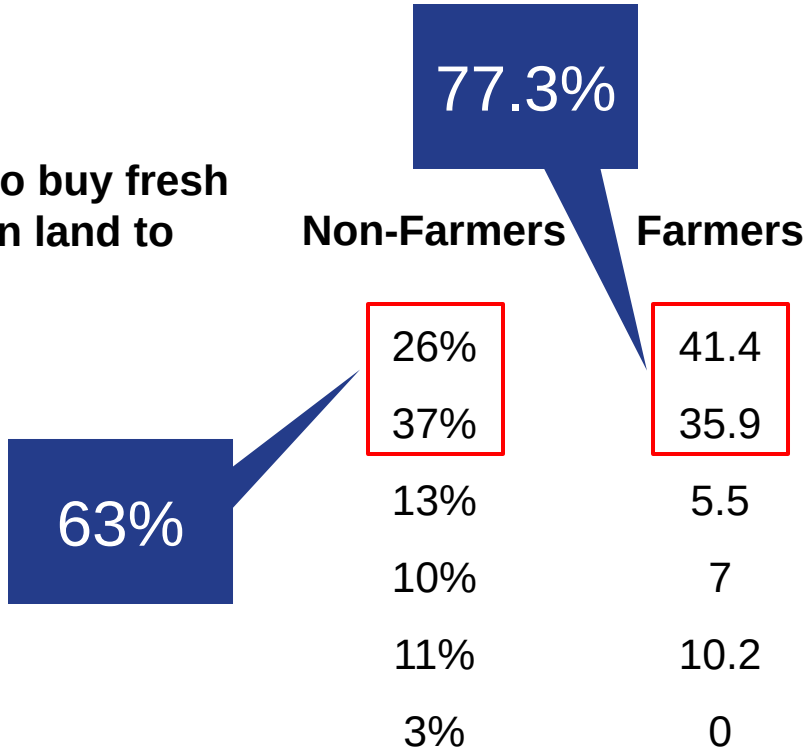
Biosolids and health (Phase 2)

Attitudes to effects of biosolids production and application on family health

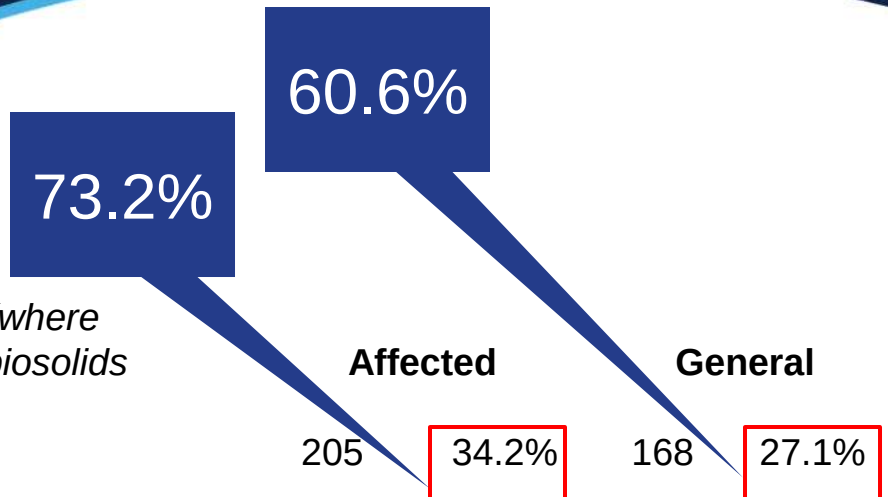


Biosolids and Food 1

To what degree would you be prepared to buy fresh produce like fruit or vegetables grown on land to which biosolids have been applied?



Biosolids and Food 2



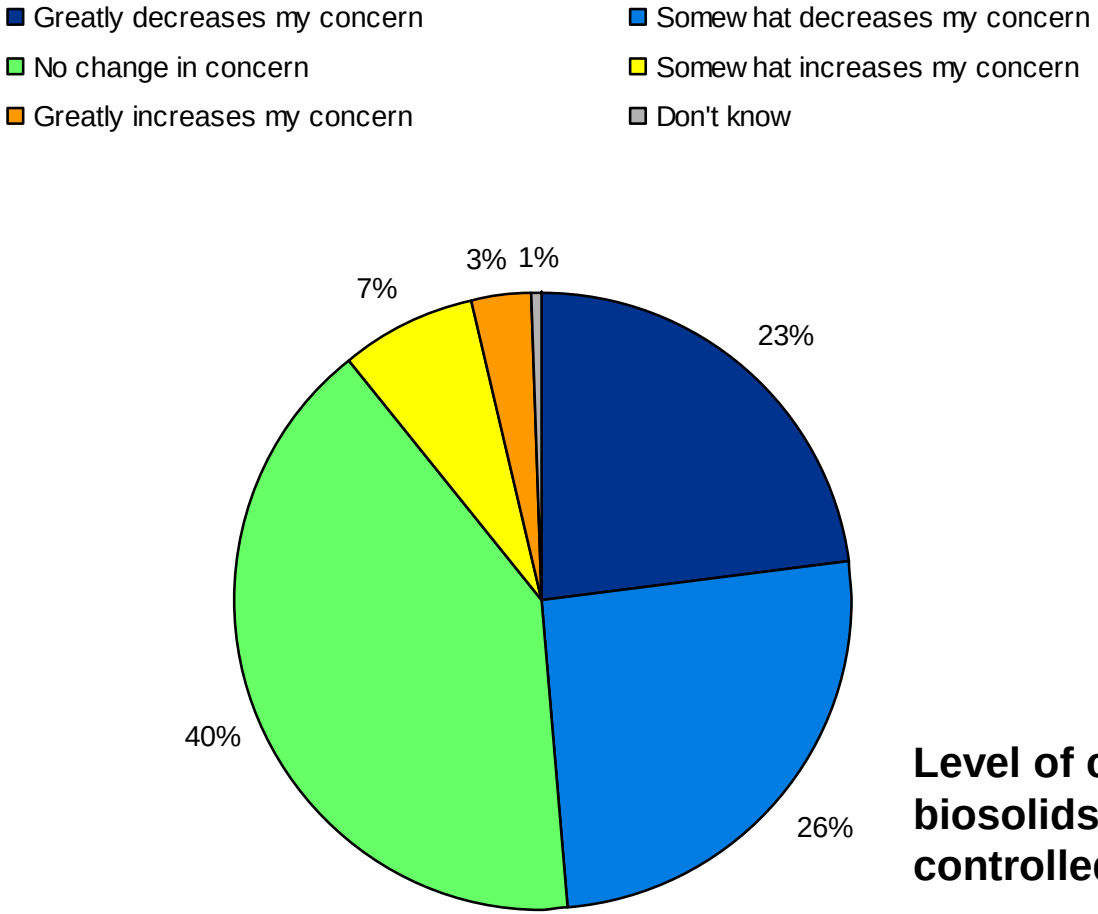
PREPARED TO PURCHASE - Dairy/meat products (where cows/cattle/sheep have grazed on land treated with biosolids

	Affected		General	
Very likely to buy	205	34.2%	168	27.1%
Fairly likely to buy	234	39.0%	208	33.5%
Neither likely nor unlikely to buy	49	8.2%	99	15.9%
Fairly unlikely to buy	50	8.3%	56	9.0%
Very unlikely to buy	49	8.2%	66	10.6%
Don't know	13	2.2%	24	3.9%
Grand Total	600		621	

Regulation and Guidance 1

INFORMATION SOURCES	*Knowledgeable*	*Credible*
CSIRO/Crown Research Institutes/Science NZ	40.8%	42.5%
University researchers	11.2%	13.7%
Federal health department	10.8%	10.8%
Local councils	7.2%	**7.3%**
Dont know	7.0%	**6.7%**
Environmental groups like Greenpeace	5.7%	**7.7%**
State health department	5.3%	4.8%
Sewage and wastewater treatment plant operators	4.8%	2.5%
Local media (eg newspaper, radio)	3.5%	2.0%
Private companies that sell, manage and use biosolids	2.8%	1.2%
Local precinct action groups	0.8%	0.8%

Regulation and Guidance 2



Level of concern knowing biosolids are strictly controlled

Biosolids and Risk(Phase 2)

Information needs	'Affected'
That it is safe to use	23%
They are tested and proven by reliable source or meet established standards	19%
Need more information about it	16%
How it was treated	17%
What is in it or if chemicals are in it	15%
Any side effects or health risks	10%

Conclusion

- There is a gap between community and expert perceptions of biosolids risk
- Community is generally supportive of biosolids use
- Careful, honest and appropriately communicated information will reduce risk of opposition
- Further ANZBP research and communications priorities now being developed, based upon outcomes

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Thank you