

WASTE DIVERSION STRATEGY

Waste Management Bylaw 31/2018

October 09, 2018



Zero Waste Framework

Adopted by Council Fall 2012

The overall vision is Zero Waste, with the interim goal of 80% of waste diverted from landfill by 2020.

Five pathways to achieve zero waste:

1. Organics – in all sectors (Single family ✓ -Multifamily ✓)
2. Multi-family recycling ✓
3. Industrial, commercial, institutional recycling (in progress)
4. Construction and demolition recycling (2019-2020)
5. Events and public spaces (2019)

Zero Waste Framework

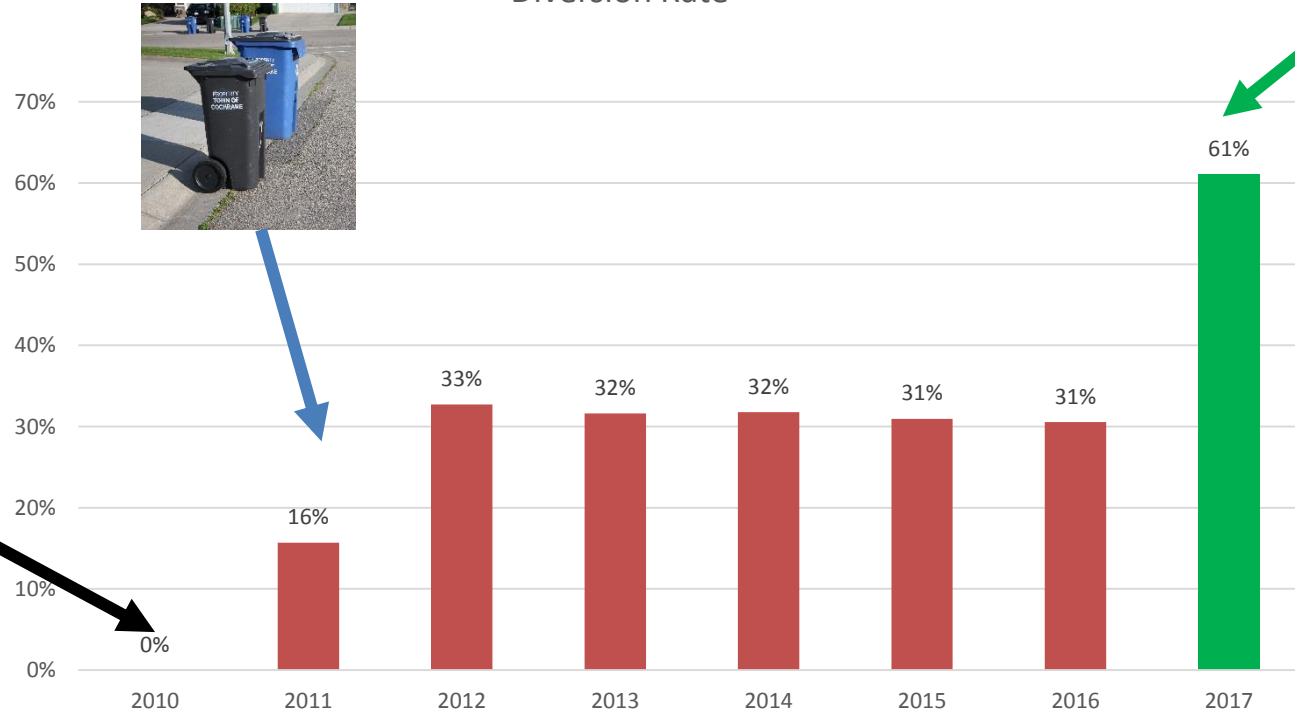
Why we want to get to 80% of waste diverted from landfill by 2020:

- Cost reduction for residents (recycling and composting cost less than disposing material at the landfill)
- Environmental Benefits (turning waste into new items - compost)
- Save space at landfill (bans on recycling , organics, etc.)
- Reduce environmental problems (greenhouse gases, leachate, etc.)

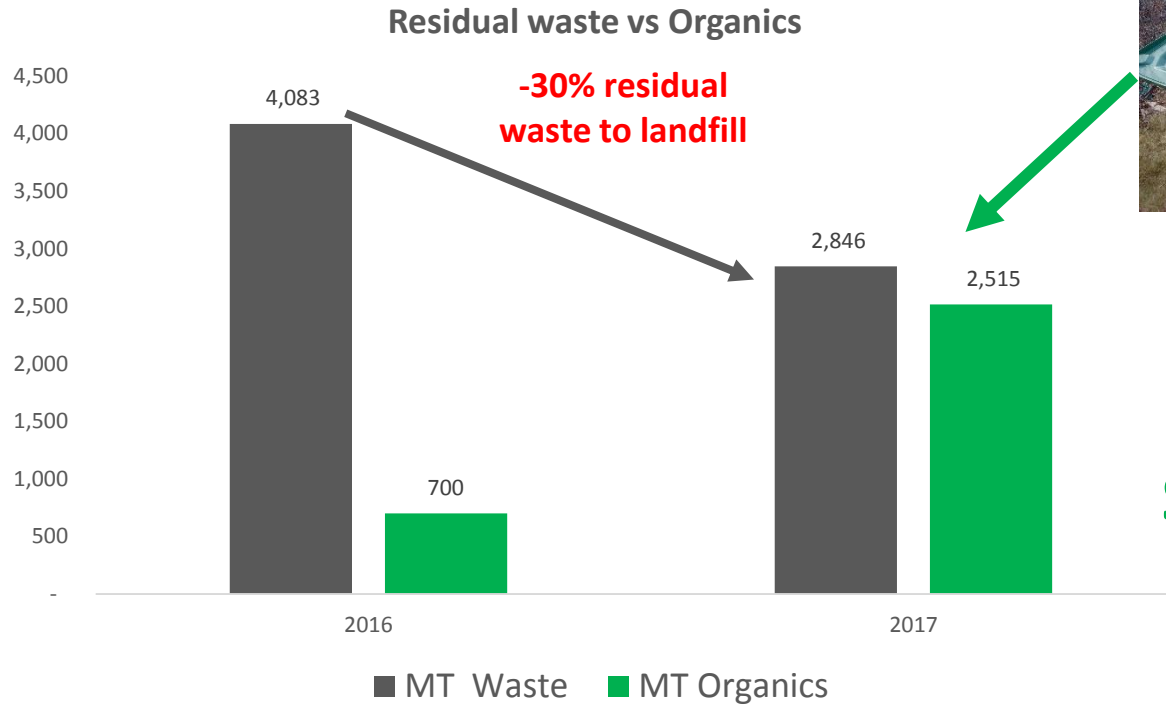
We want to be a leader for sustainability in the nation!

A bit of history

Diversion Rate



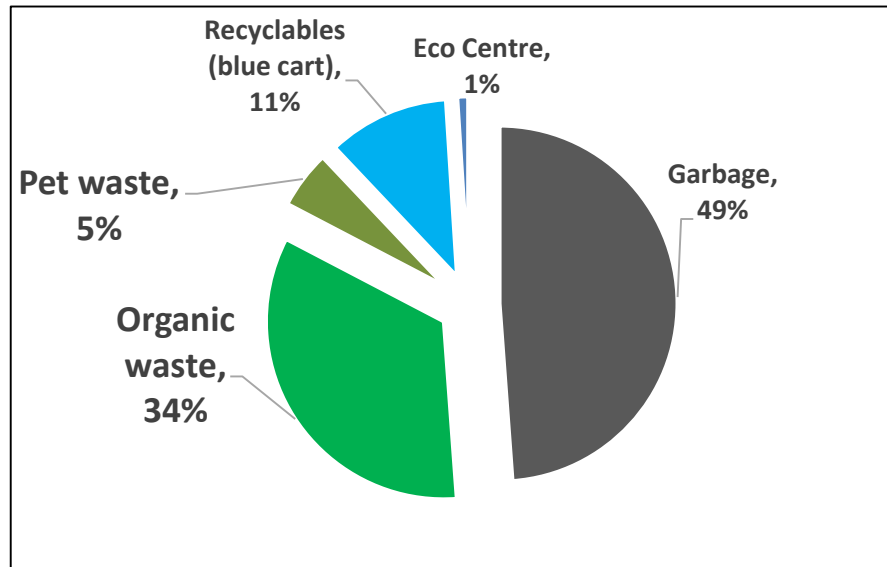
How are we doing?



Savings
of over
\$75,000

How are we doing?

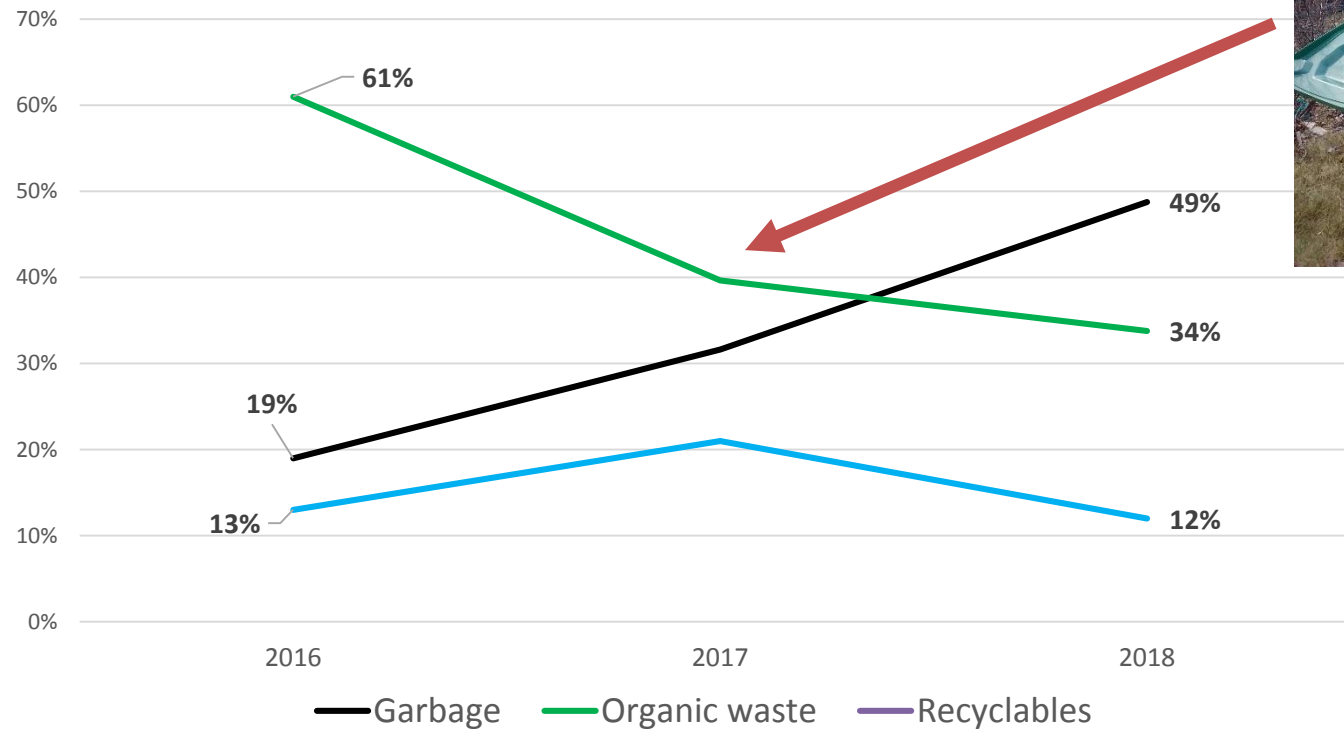
Content in Black Bin (summer 2018)



1,200 MT of organic waste sent to landfill over the last year

How are we doing?

Content in Black Bin



Volume of waste in carts

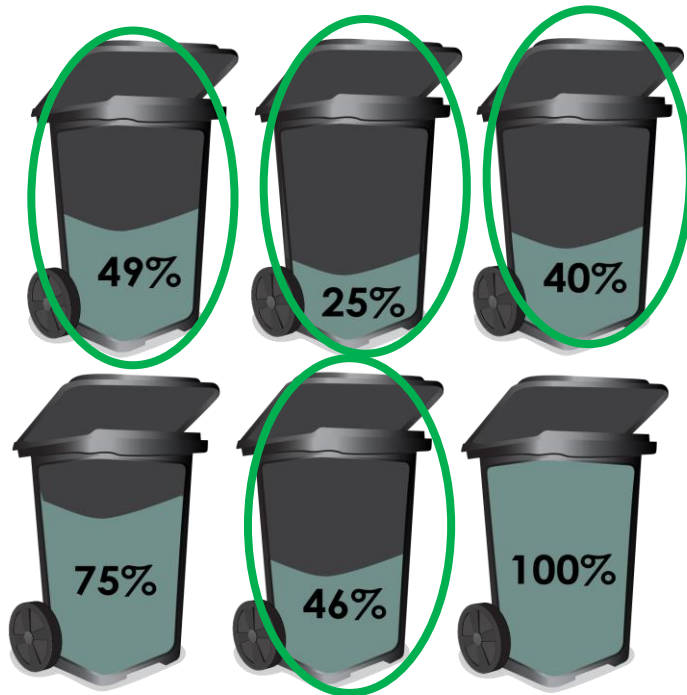
Volume of material in black carts



- Black carts are 56% full on weekly basis (on average)

Volume of waste in carts

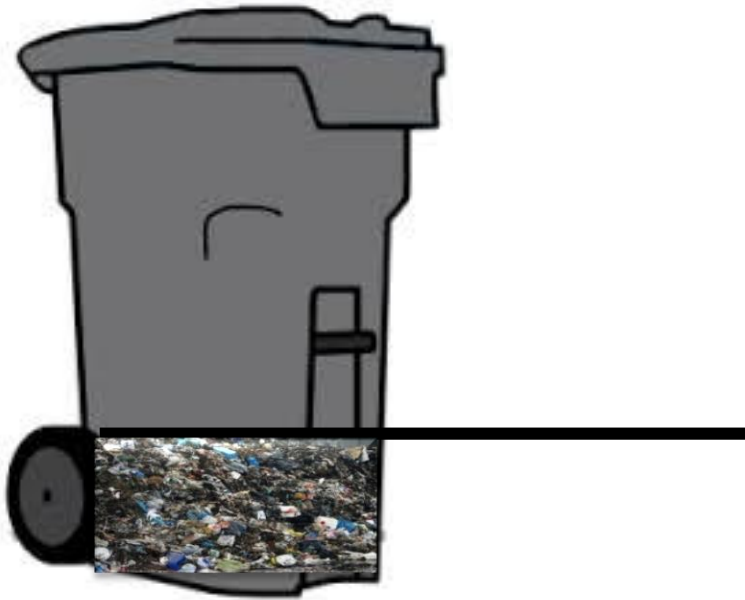
Volume of material in black carts



- Black carts are 56% full on weekly basis (on average)
- Over 50% of carts are half or less than 1/2 full

Volume of waste in carts

Volume of material in black carts



51% of material in black carts is actually organics and recyclables

If we divert all recyclables and organics the black carts would be only 27% full

Communication and Educational Activities

Council Meeting - November 2017

On November 14, 2017 and during budget deliberation council didn't approve the recommended reduction in waste collection frequency and directed administration to run a communication/educational campaign and increase general awareness on the use of the blue and green cart and to then return to Council.

Collection calendar

Town of Cochrane

2018 Collection Calendar

Waste | Recycling | Organics

Zone 1

ZONE 1 Fireside, Riversong, River Heights, Riviera, The Willows

JANUARY

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

FEBRUARY

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

MARCH

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

APRIL

Su	Mo	Tu	We	Th	Fr	Sa
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8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

MAY

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

JUNE

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

JULY

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

AUGUST

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

SEPTEMBER

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

OCTOBER

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

NOVEMBER

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

DECEMBER

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5



BLACK WASTE CART
Accepts non-hazardous household waste that cannot be diverted through the organics or blue recycling cart program.

BLUE RECYCLING CART
Accepts mixed recyclables such as paper/cardboard products, aluminum, tin, glass and rigid plastic containers.



GREEN ORGANICS CART
Accepts yard waste, food scraps and organic material like soiled paper products.



CHRISTMAS TREE PICK UP
Please remove all lights, decorations, tinsel and netting.

cochrane.ca/Waste | 403-851-2277

cochrane
HOW THE WEST IS NOW



Working with schools



Elementary Schools

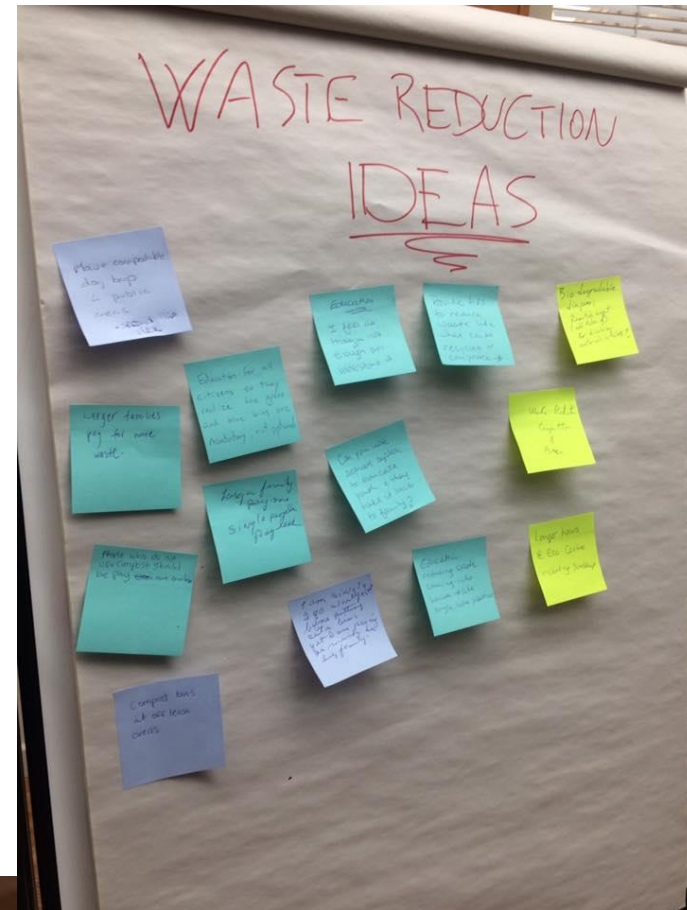


Daycares

Focus Groups



Let's talk Cochrane



Green Corner



Zero Wastey



Educational Tags



We noticed something about your cart:

- ☐ OVERFILLED CART/OVER WEIGHT
- ☐ WASTE NOT PROPERLY CONTAINED (MUST BE BAGGED)
- ☐ RECYCLING NOT PROPERLY PREPARED (MUST BE LOOSE)
- ☐ PROHIBITED MATERIAL:
- ☐ OTHER:

See reverse for tips on preparing your cart for collection.
For more information, please visit cochrane.ca/Waste or get in touch:
Waste & Recycling Hotline, 403-851-2277
facebook.com/CochraneEcoCentre



You are awesome because:

- ☐ YOU CORRECTED THE COLLECTION ISSUE WE ASKED YOU TO.
- ☐ YOU CONSISTENTLY USE YOUR CARTS CORRECTLY.

We appreciate your effort!

For more information please contact
Cochrane's Waste & Recycling Hotline
at 403-851-2277 or visit www.cochrane.ca



Please remember to roll your carts out before 7am on your collection day and store them back on your property — not in alleyways — by 7pm.



All the carts were collected even when a yellow tag was issued

Educational Tags – Summer 2018

- Over 9000 black carts audited (9100 total)
- Approx. 1700 yellow tags left on carts
- Over 200 Green tags left on carts
- Approx. 140 carts identified as “NO EFFORT IN DIVERTING”



Educational Tags – Summer 2018

Approx. 200 carts that received a yellow tag were revisited again after a few weeks to evaluate improvements:

- 30% showed some improvement
- 25% were completely compliant with the Bylaw

Educational Tags – Summer 2018

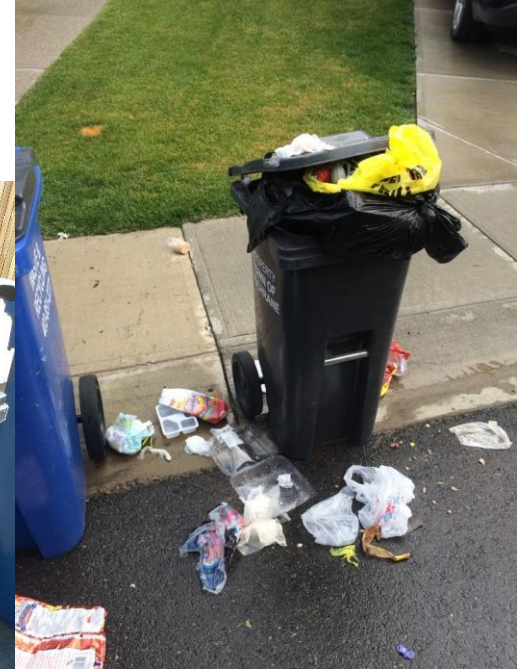
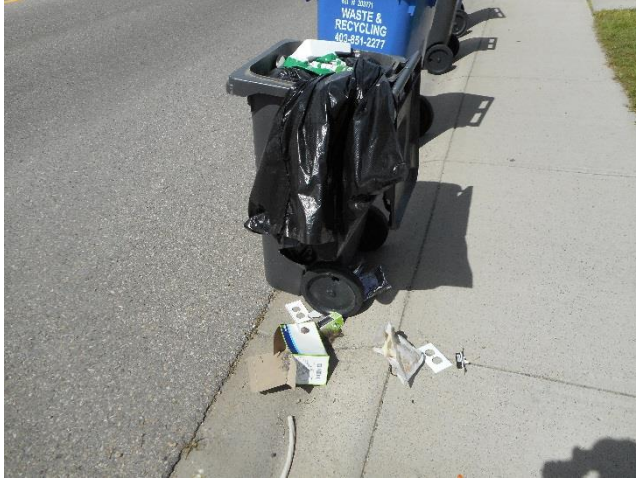
THE BAD

94 carts that received a yellow tag for “NO EFFORT IN DIVERTING” were revisited after a few weeks to evaluate improvements:

- Only 17 (18%) carts showed improvements
- 77 carts (82%) showed no improvements at all

Educational Tags – Summer 2018

THE UGLY



Educational Tags – Summer 2018

THE UGLY



Educational Tags – Summer 2018

THE INDIFFERENCE



Surveys

2 surveys on waste collection frequency (before and after the communication/educational campaign)

- Assess the general use of the 3 carts
- Evaluate specific challenges/barriers
- Ask for feedback
- Assess behavioral changes after communication/educational campaign

Total of 890 surveys completed

Surveys

- 71% of the respondents are aware of the goal set by the Town of Cochrane to divert 80% of waste from landfill by 2020
- 68% of the respondents are concern about the amount of waste Cochrane households send to landfill
- 58% of the respondents have seen the Cochrane Waste and Recycling education videos
- 25% of the respondents have received a green or yellow waste audit tag on their waste cart

83% of the respondents has been reached by at least one form of communication/educational program implemented by the Town

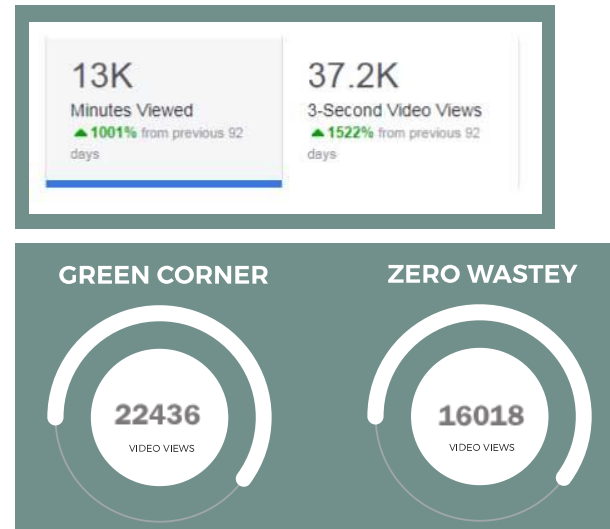
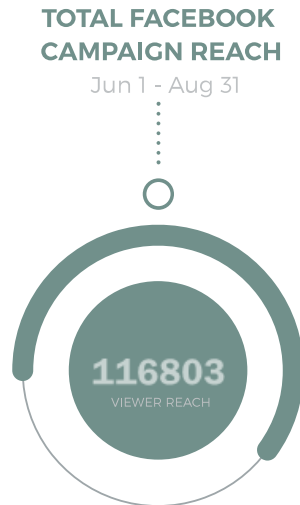
Surveys



- Based on survey responses, on a average black carts are 56% full on weekly basis
- Over 50% of respondents have the black bin half or less than half full every week
- Out of these respondents over 50% are comprised of families of 3 members or more (18 families of 5 members, 1 family of 6 members and 1 family of 7 members)

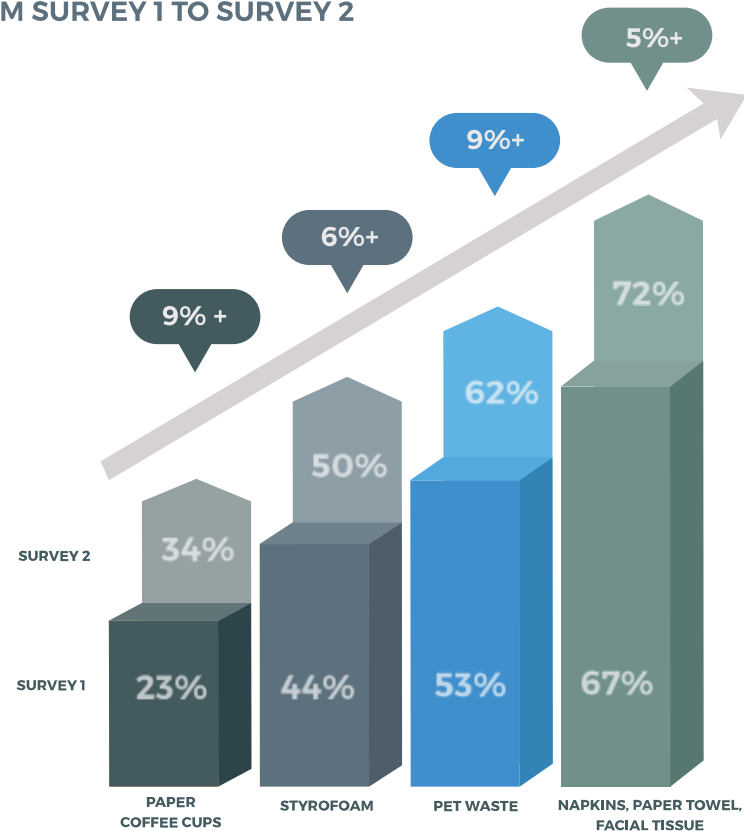
Assess behavioral changes after campaign

VIDEO VIEWS



Assess behavioral changes after campaign

CORRECT DIVERSION RESULTS
INCREASE FROM SURVEY 1 TO SURVEY 2



Assess behavioral changes after campaign

FACEBOOK COMMENTS FROM VIDEO CAMPAIGN

I would like to thank the EcoCentre for the great little clips of locals showing us how to recycle. I am enjoying them and learning from them. Your productions are appreciated.

Really appreciate all these tips. Thx

Thanks for the video. I had no idea about the cups being compostable

Love these quick videos, super helpful!!

Thanks. It all is a bit confusing so thanks for clarifying!

These videos are very helpful. Had no idea straws and lids were too small to capture

I didn't know paper plates went in organics. Thanks for all your great videos, they've been really helpful!

The video is really helpful

I think these videos are a great idea! Can I make a suggestion? When telling where to put items, can you also explain why for people like me who need to know the details. It will also help us to connect similar items, so we can do a better overall job in sorting. I'm a teacher and my students are always asking why. I've learned to include that in my lessons. Thanks again for the videos! Keep them coming!

Ok, thanks for telling us to bundle!! L

Love these video's - thanks Valerie!

Cost for services

2018 (current)

- Waste (weekly curbside collection)
- Recycling (weekly curbside collection)
- Organics curbside (weekly in summer; every two weeks in winter)

Total cost for residents: \$21.55/HH/month

Cost for services

2019: Contractual costs to maintain current level of service

- Waste collection - Weekly curbside collection: +1%
 - Landfill fees : +2%
- Recycling collection - Weekly curbside collection: +3%
- Organics collection - Weekly in summer, every two weeks in winter): +3%

Total cost for 2019: +2.3% for all families

Options

Can we avoid increasing utility bills for residents?

Can we meet the goal set in the Zero Waste Framework?

Can we become the first community in Canada to divert 80% of waste from landfill?

Options

We can move waste collection from weekly to every second week and maintain current infrastructure while improving efficiency of waste collection service:

- Waste collection with 120L carts every two weeks (starting May 2019)
- Recycling collection with 240L carts every week
- Organics collection with 120/240L collection carts every week in summer and every second week in winter

Benefits of every second week waste collection

- Off sets contractual cost increases and maintain cost for residents at \$21.55/HH/month in 2019 (same than 2018)
= NO COST INCREASE FOR WASTE, RECYCLING AND ORGANICS COLLECTION
- Encourage behavioral changes to allow families to divert their waste to the green and blue bins.
- Continue building the capital reserve for replacement of current carts and future development

Benefits of every second week waste collection

Pay-as-you-throw waste disposal system

- Basic cost for single families in Cochrane would pay \$21.55/month and would include:
 - Waste collection with 120L carts **every two weeks** (starting May 2019) + weekly recycling and organics collection
 - **Several options available for extra waste**

Options for extra waste

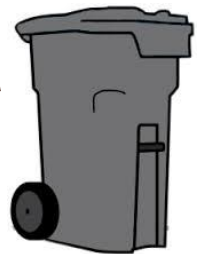
- In excess waste bags (with Town logo) on collection day or at Eco Centre (currently \$3/bag) – only when needed



- In clear bag at Eco Centre Tuesday-Saturday (\$3/bag of garbage) – only when needed



- Extra (120L) garbage cart (\$45 upfront + extra \$13/month)



Benefits of every second week waste collection

Pay-as-you-throw waste disposal system

- Does not penalize residents who are using (or want to use) the programs in place properly (Blue and green carts, Eco Centre)
- It's up to residents and to their the choices how much to pay for waste, recycling and organics collection

51% of waste currently in black bin can be diverted to the blue and green bin

If we divert all recyclables and organics the black carts would be only 27% full

Care and compassion program

Exemption for Children in Diapers

Based on feedback received by residents, administration will adopt a **care and compassion** option to recognize families that may not be able to temporarily meet new requirements.



Care and compassion program

Exemption for Medical Reasons

Adopt a **care and compassion** option to recognize families that may not be able to meet new requirements because of waste temporarily generated from a medical or health related situation.



Benefits of every second week waste collection

Potential Large Item Pickup Program



Benefits of moving to every second week waste collection

Being the first community in Canada to divert 80% of waste from landfill and become a role model in the nation

Challenges to waste collection reduction

- Concerns about odour (e.g. Calgary)
- Concerns about costs (all families can avoid paying more)
https://www.youtube.com/watch?v=9xP6D2qy_PI
- Illegal dumping (communication, infrastructure, enforcement)

Communication/education campaign (Dec 2018-May 2019)

- Diversion = \$ savings
- Staff to help families at their homes to set up the system
- Work with champion families (large families, teenagers, etc.)
- Help residents feel they are contributing to positive change
- Strong communication campaign against illegal dumping

Keeping the status quo

No change in waste collection frequency means:

- Goal of 80% waste diverted from landfill won't be achieved
- All residents will pay more for the service (even when is not needed)
- More trucks on our roads
- Environmental impacts
- Risk of being rejected at landfills (landfills in Canada are banning recyclables and organics)
- Fewer options for waste disposal in the future (potential higher cost for future waste collection contracts)
- No large item pickup program

OPTIONS

- **Option 1:** That Council gives First Reading to Waste Management Bylaw 31/2018 to include every two weeks waste collection.
- **Option 2:** That Council provides administration with further direction.

Implications: Bylaw 08/2018 would not be amended and residential waste collection will remain as once per week; costs per household in 2019 will increase as a result of increased contract costs.