Calgary

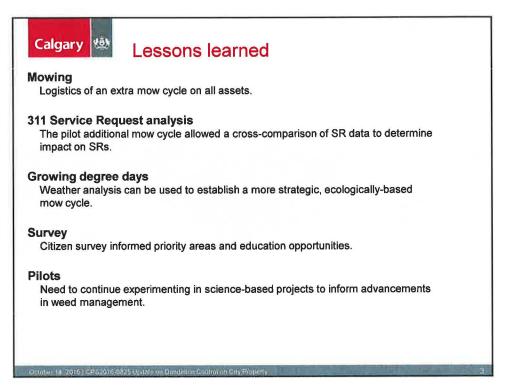
Update on Dandelion Control on City Property



CPS2016-0825 SPC on Community and Protective Services 2016 October 14

October 14, 2016 (ICPS2016/0825 Update on Dandelion Control on City Property

Calgary 🧐 Council Direct	ion	
NM2015-12 (Dandelion Control on City	Property)	
On 2015 June 15, Council directed Administ dandelion control for the entire City including Council no later than October 2015.	ADVENUE DEVELO FEDERAL EDITO CON EXCLUSIVE DELL'ADDRE DEDEVELOP DE DEVELOPMENT DE DEVELOPMENT DE DEVELOPMENT DE	
CPS2015-0738 (Dandelion Control on C	City Property)	
On 2015 September 28, Council approved \$1.7 million in one-time operating for a short-term dandelion suppression program and Administration was to report back no later than October 2016 on the program's effectiveness and costs, and on long-term recommendations for best practices on pest management including weed and dandelion control.		
	CITY OF CALGARY RECEIVED IN COUNCIL CHAMBER	
	OCT 1 4 2016	
	ITEM: 3.4 CPS2016-0825	
October 14, 2018 CF 32016/0825 Update on Dundmison Control on City Pi	CITY CLERK'S DEPARTMENT	





Normal mowing cycles

Wat

Calgary

- Roadway boulevards 5 times per year (780 hectares).
- Calgary Parks has a 14-day mowing cycle (3100 hectares).
- Both Calgary Parks and Roads mobilized to use funding during the first peak dandelion flowering period in May.

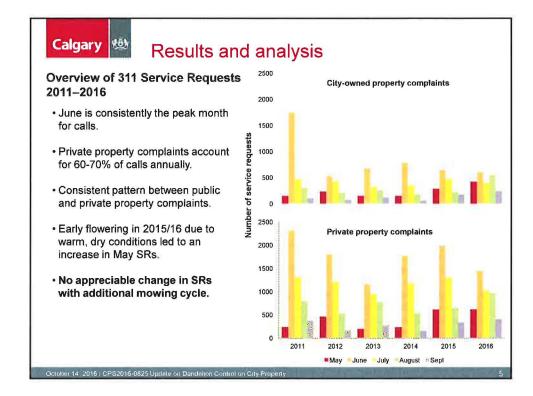
2016 weather overview

 Dry, warm spring favoured dandelion growth over grass growth – selecting a starting date was a challenge.

Pilot mowing program costs



	One-time operating received (000s)	Year-to-date spending (000s)	Remaining (000s)
Calgary Parks	\$1,100	\$496 (mowing) \$50 (summer students, public opInIon survey)	\$554
Roads	\$600	\$279 (mowing) \$95 (summer students/technician)	\$226
Total	\$1,700	\$920	\$780



Results and analysis

Growing Degree Day accumulation

Calgary

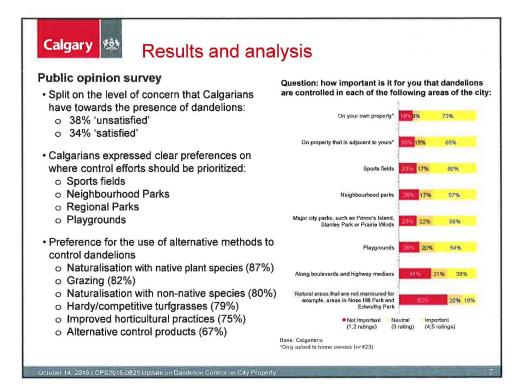
- Growing Degree Days (GDD) is a measure of heat accumulation which can be used to predict flowering dates.
- Days in which the average temperature is above 5°C can be considered as days in which contribute to growing conditions for dandelions.

$$GDD = \frac{Temp max}{Temp min} - 5^{\circ}C$$

- Example: A day with an average temperature of 7°C will contribute 2 GDD of heat accumulation.
- Weather analysis can be used to establish a more strategic, seasonally-based mow cycle.

October 14, 2016 (CPS2016-0825 Update on Dandelion Control on City Pro

Year	Potential start of growth for dandelions
2011	May 24–30
2012	May 16–20
2013	May 15–17
2014	May 22–23
2015	April 29–May 4
2016	May 2–3



Long-term Recommendations

Continue to invest in turf health management

 Turf management is the best long-term strategy for healthy turf.

Integrated Pest Management Plan revision

- Update weed control strategies and build a priority framework.
- Communication and outreach about weed control alternatives.
- · Consider results of public opinion survey.

Weather Modelling and Strategic Mowing

 Use of Growing-Degree Day model to inform spring mowing start.

Continue alternative control pilots

· Continuation of grazing pilot.

184

Calgary

- Amendments to relevant bylaws to allow grazing for weed management.
- · Trialing alternative control products and cover species.
- Continue to naturalize select parks/roadways.

October 14 2016 | CPS2016-0825 Update on Dandelion Control on City Property

· Soil health and consideration of community geography.



