

CASE STUDY

TRILOGY AT REDMOND RIDGE

Transition to Sustainable Lawn Care Practices



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**GREEN
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Seattle
 Public
Utilities

 Local Hazardous Waste
Management Program
in King County

Overview

Trilogy at Redmond Ridge study 2014-2016

Transitioned in 2015 to sustainable lawn management:

- Mulch mowing
- Reducing fertilization (4 applications down to 3)

Evaluation:

- Cost comparison
- Resident evaluation of appearance
- Test plot results



*Participants: Seattle Public Utilities, Washington State University, Trilogy at Redmond Ridge,
and Pacific Landscape Management*
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What is “mulch-mowing”?

Leaving clippings on lawn, to decompose and feed soil.

- Modern mulching decks/blades chop clippings finely and blow them down to soil, so not left on surface.
- Clumping’s a problem if mowing too much at once, or too wet – mow back over to break up clumps.
- Mowers with a little more power and easily adjusted mowing heights do a cleaner job in varying conditions.

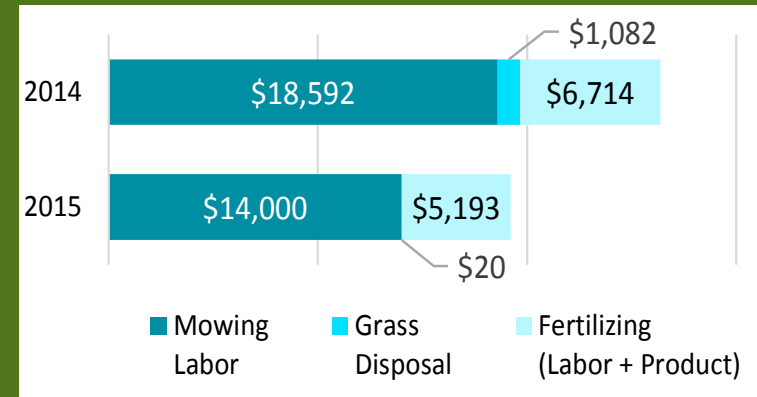
University trials have shown that mulch mowing:

- Can reduce fertilizer needs by 25-50%
- Reduces mowing time (no bagging & disposal)
- Does not cause thatch buildup
- Thickens turf cover, improves appearance
- Improves soil moisture and nutrient capacity



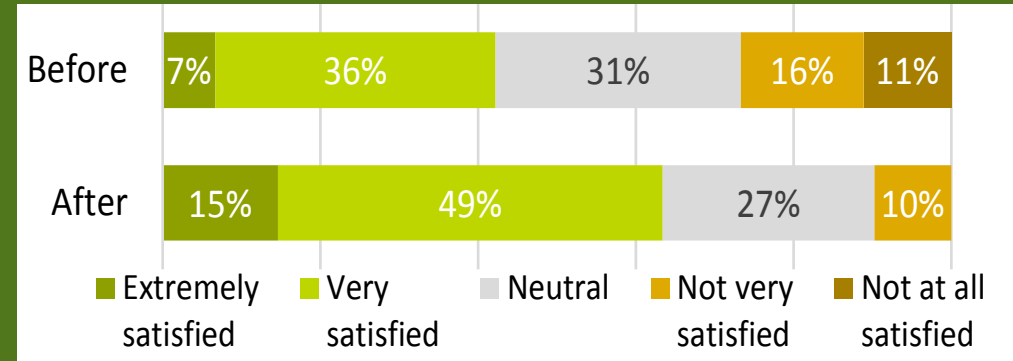
Study results: Bottom-Line Cost Savings = \$7,200 in 2015

- Trilogy saved nearly \$7,200 in 2015
- Mulch mowing cut labor by \$4,600 and grass disposal by \$1,000 for a total decrease of \$5,600
- Fertilizing costs decreased by \$1,500



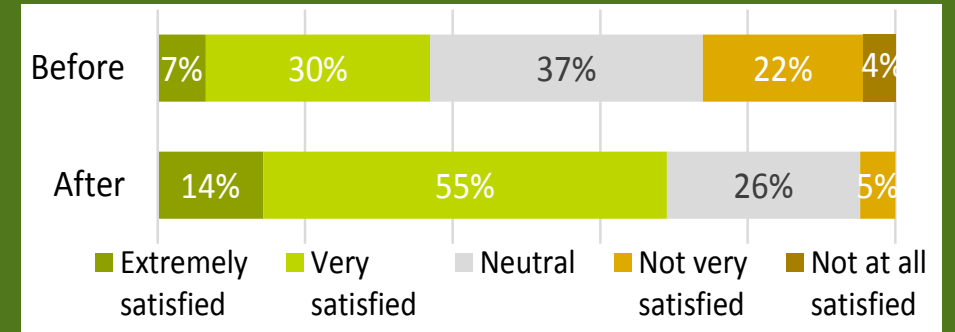
Residents More Satisfied with Lawn Appearance

- More residents were satisfied with lawn appearance after the transition (42% before and 63% after)
- Dissatisfaction fell from 27% to 10%



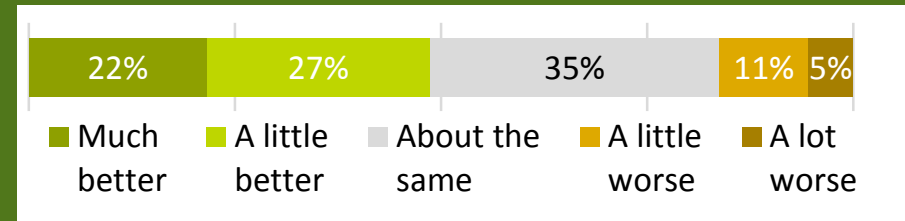
Residents More Satisfied with Lawn Color

- More residents were satisfied with lawn color after the transition (37% before and 69% after).
- Dissatisfied residents mainly mentioned uneven color, brown patches, and moss.



Residents Thought Lawn Looked Better Compared to Previous Year

- 61% did not notice any difference
- When asked to compare to last year, 49% said it looked better, 35% the same, 16% worse.



Test Plot Study

- Slight increase in lawn ground cover on all plots
- Slight to no change in organic matter and pH on all plots

	Mulch mow	Fertilizing Frequency
Plot #1 (control)	No	Four times per year
Plot #2	Yes	Three times per year
Plot #3	Yes	Two times per year



Lessons Learned

- Switch to mulch mowing with reduced fertilization reduces overall costs and improves lawn appearance
- Mulch mowing can begin as early as April and continue through September.
- First mow of season was bagged. Did not bag again until leaves started dropping on lawn.
- Excessive irrigation makes mulch mowing slow and sloppy.
- Mulch mowing allowed crews to have more time for value-added services (pruning, encroachments, blackberry) and saved on disposal costs.
- Thanks to the profile of this project and in cooperation with the new management company, the contract for 2017 Common Area and Homesites will allow for mulch mowing between July and October.
- Educating clients is essential.



Thank you to:

- Washington State University for guidance and data analysis
- Trilogy at Redmond Ridge for staff and resident participation
- Pacific Landscape Management for guidance, implementation and data collection

Resources

www.seattle.gov/util/landscapeprofessionals

<http://www.puyallup.wsu.edu/turf>

<http://gardening.wsu.edu/lawns>



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