Welcome to our Zoom Webinar Series

Watering Wisdom: Growing a Healthy Lawn with Less Water

Part 5: Winterizing Your Lawn

The webinar will begin shortly

METROPOLITAN COUNCIL

TURFGRASS SCIENCE

CLEAN WATER LAND & LEGACY AMENDMENT

Previous Webinars

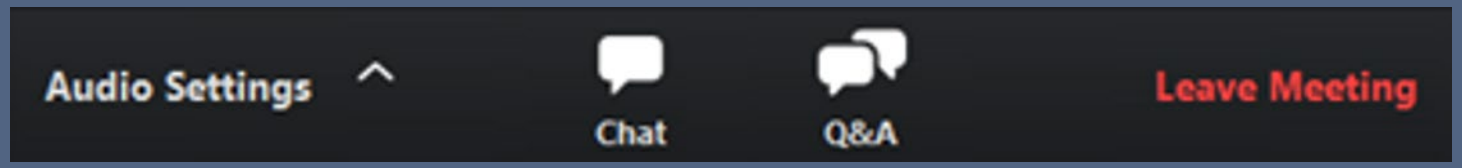
- **Outdoor Water Use in the Twin Cities: Am I Using Too Much?**
- **Learning to Control Your Irrigation Controller**
- **Turfgrass Species for Low-Input Minnesota Lawns**
- **Lawn Care Best Management Practices**

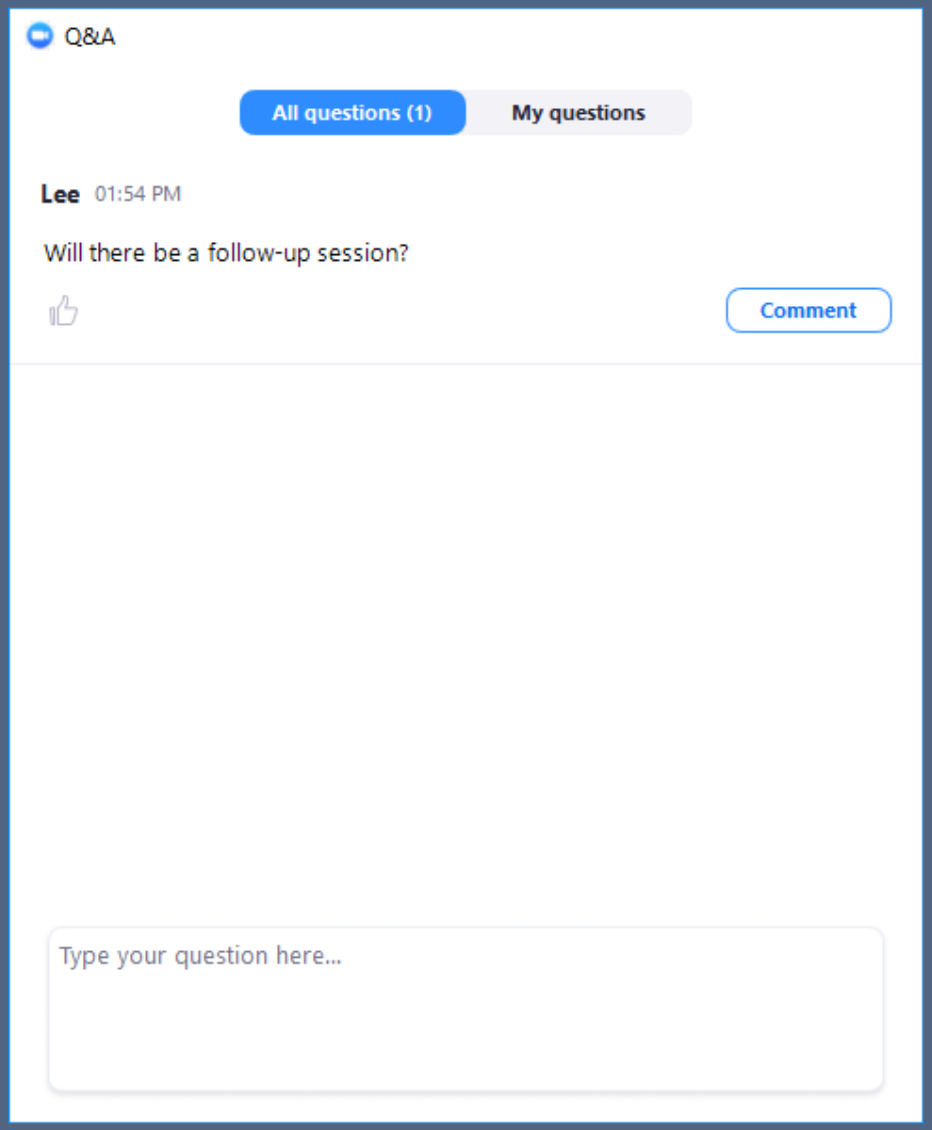
- To view these webinars and access PDF versions of each presentation please visit….

https://turf.umn.edu/watering-wisdom

Using Zoom

- Use Q&A to ask questions
  - Mouse over bottom of Zoom window to access Q&A
- Chat is disabled
- Live transcript can be turned off depending on device





Watering Wisdom: Growing a Healthy Lawn with Less Water

Winterizing Your Lawn

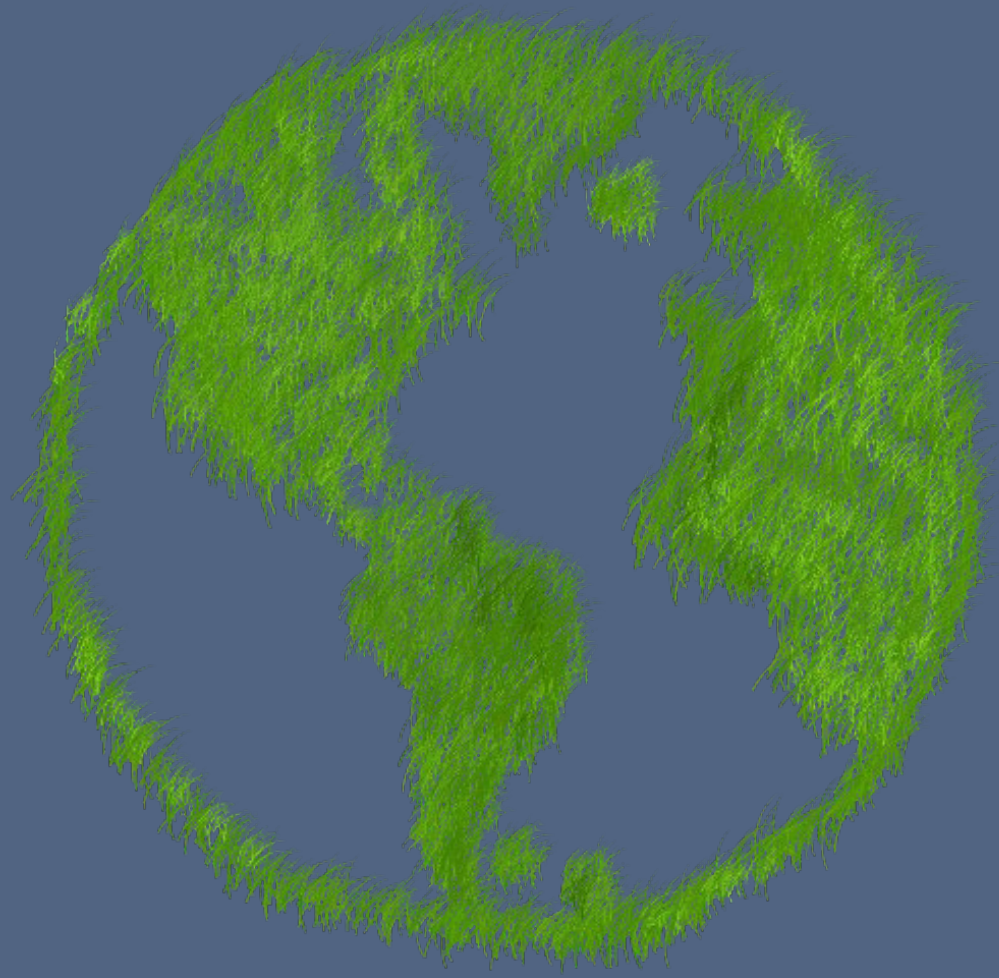
Presenter: Ryan Schwab

METROPOLITAN COUNCIL

TURFGRASS SCIENCE

CLEAN WATER LAND & LEGACY AMENDMENT

Winterizing Your Lawn



Goals:

1. Have healthy grass to increase survivability of lawn
2. Minimize environmental damage

Fall Lawn Care

P = Preferable time to do management practice
A = Acceptable time to do management practice

PRACTICE	SEPT	OCT	NOV
Fertilizing	P P P P	P P	
Mowing	A A A A	A A A A	A
Watering	A A A A	A A A	
Aeration	P P P P	A A	
Dethatching	P P P P		
Broadleaf Weed Control	P P P P	P P P	
Seeding	P P P		A A
Sodding	P P P P	P P P	

https://extension.umn.edu/planting-and-growing-guides/lawn-care-calendar

Overview

- Mowing Practices
- Fertilization
- Winterizing Irrigation
- Dormant Seeding
- Salt Damage

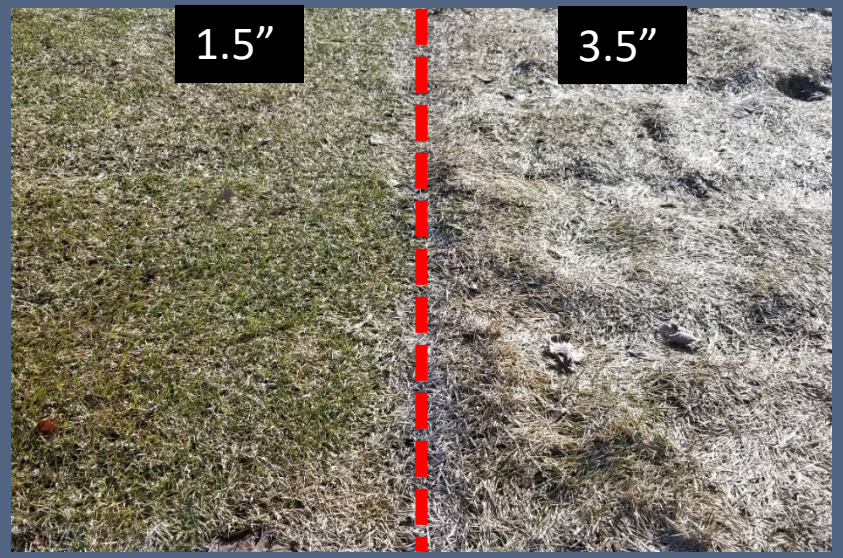
Mowing Practices: Lower Mowing Height

- Gradually lower mowing height of the lawn
- Maintain at a height that doesn’t damage the lawn
  - Use the rule of 1/3
- Best mowing practices covered in Part 4

Photo credit: Sam Bauer

Mowing Practices: Lower Mowing Height

Reduce potential for snow mold



Reduce habitat for voles

Photo credit: Kristine Moncada

Mowing Practices: Managing Leaves

- Leaves may stay on lawn

- Benefits of mulching leaves:

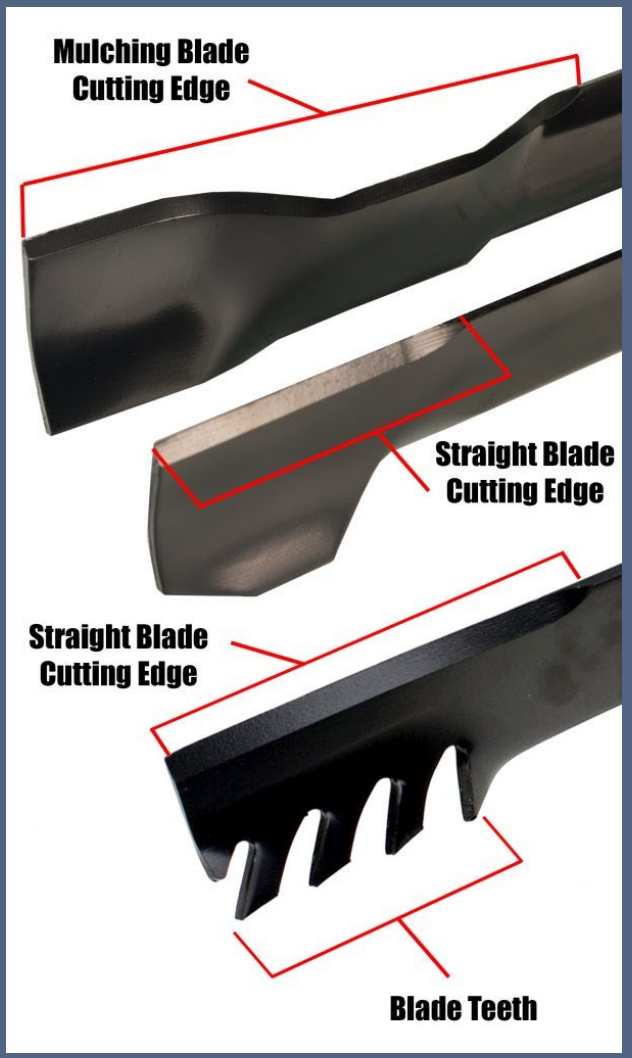
    1. Adds nutrients and organic matter to soil

    2. Some evidence of reducing spring weeds

Mowing Practices: Managing Leaves

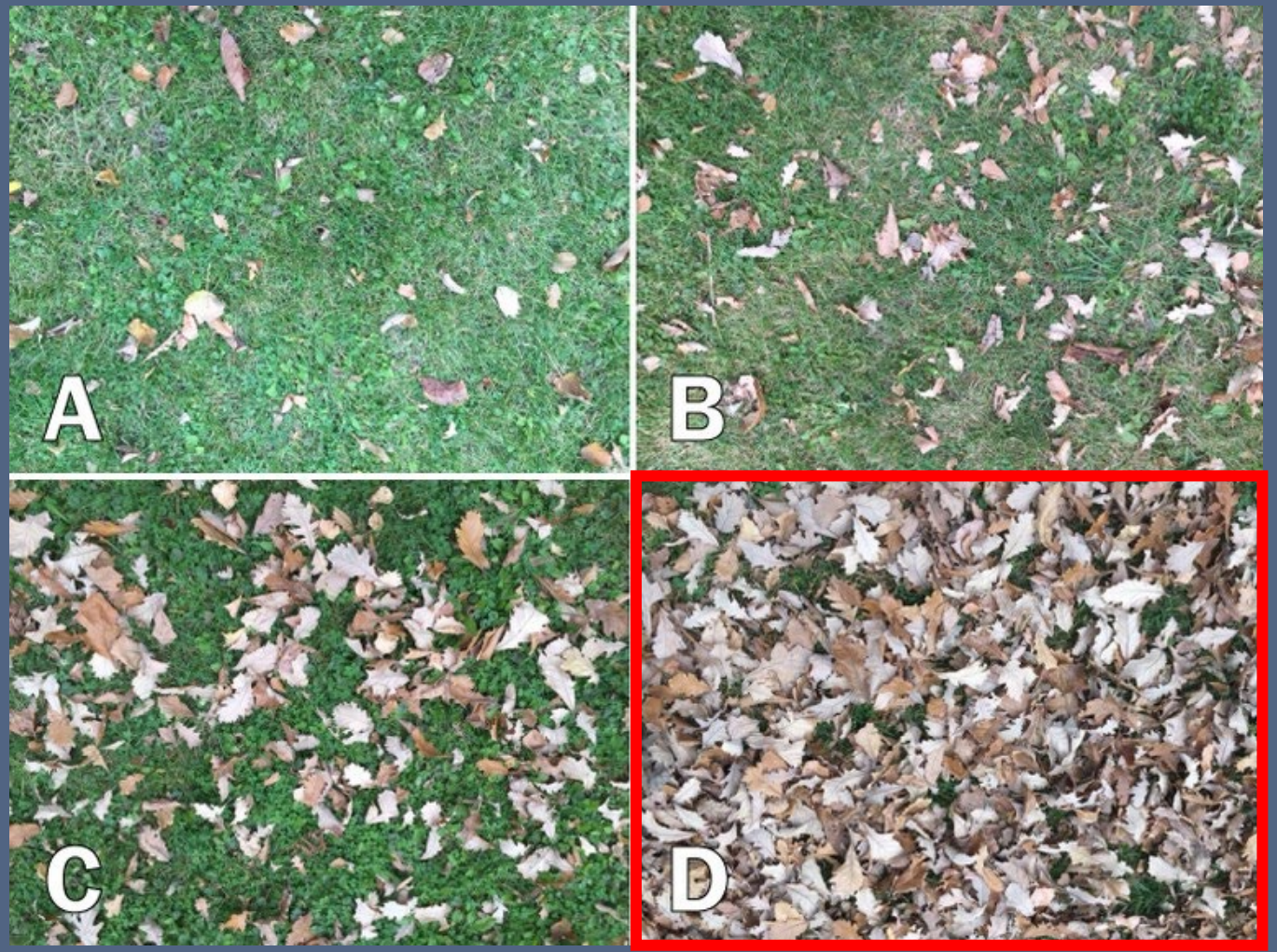
Mulching options:

- Mulching attachment
- Mulching blades
- Side chute



(USA Mower Blades, 2020)

How much is too much?



(The Washington Post, 2016)

Consider removing a portion

Leaves removed in fall
Heavy leaf cover all winter

Mowing Practices: Timing

- Mow until grass stops growing
- Do not mow frost-covered grass

Photo credit: Gary Deters

Fertilization

- Supply what your soil lacks
  - Soil test report (soiltest.cfans.umn.edu)
- Fertilization most appropriate in fall
  - Until mid-October

University of Minnesota
Soil Testing Laboratory

SOIL TEST REPORT
Lawn and Garden

Client Copy
Department of Soil, Water, and Climate
Minnesota Extension Service
Agricultural Experiment Station

Page 1
Report No. 56967
Laboratory No. 118346
Date Received 08/02/13
Date Reported 08/12/13

Sample/Field Number: 1330

SOIL TEST RESULTS

Estimated Soil Texture	Organic Matter %	Soluble Salts mmhos/cm	pH	Buffer Index	Nitrate NO3-N ppm	Olsen Phosphorus ppm P	Bray 1 Phosphorus ppm P	Potassium ppm K	Sulfur SO4 -S ppm	Zinc ppm	Iron ppm	Manganese ppm	Copper ppm	Boron ppm	Calcium ppm	Magnesium ppm	Lead ppm
Coarse	4.1	0.3	7.6			5	6	132									

INTERPRETATION OF SOIL TEST RESULTS

Phosphorus (P) PPPPPP
5 10 15 20 25
Low Medium High V. High

Potassium (K) KKKKKKKKKKKKKKK
25 75 125 175 225
Low Medium High V. High

pH
3.0 4.0 5.0 6.0 7.0 8.0 9.0
Acid Optimum Alkaline

Soluble Salts ***
0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0
Satisfactory Possible Problem Excessive Salts

RECOMMENDATIONS FOR: Home Lawn

LIME RECOMMENDATION: 0 LBS/1,000 SQ.FT.
Grass watered Clippings not removed
TOTAL AMOUNT OF EACH NUTRIENT TO APPLY PER YEAR:*

NITROGEN	PHOSPHATE	POTASH
2 LBS/1,000 SQ.FT.	1 LBS/1,000 SQ.FT.	1 LBS/1,000 SQ.FT.

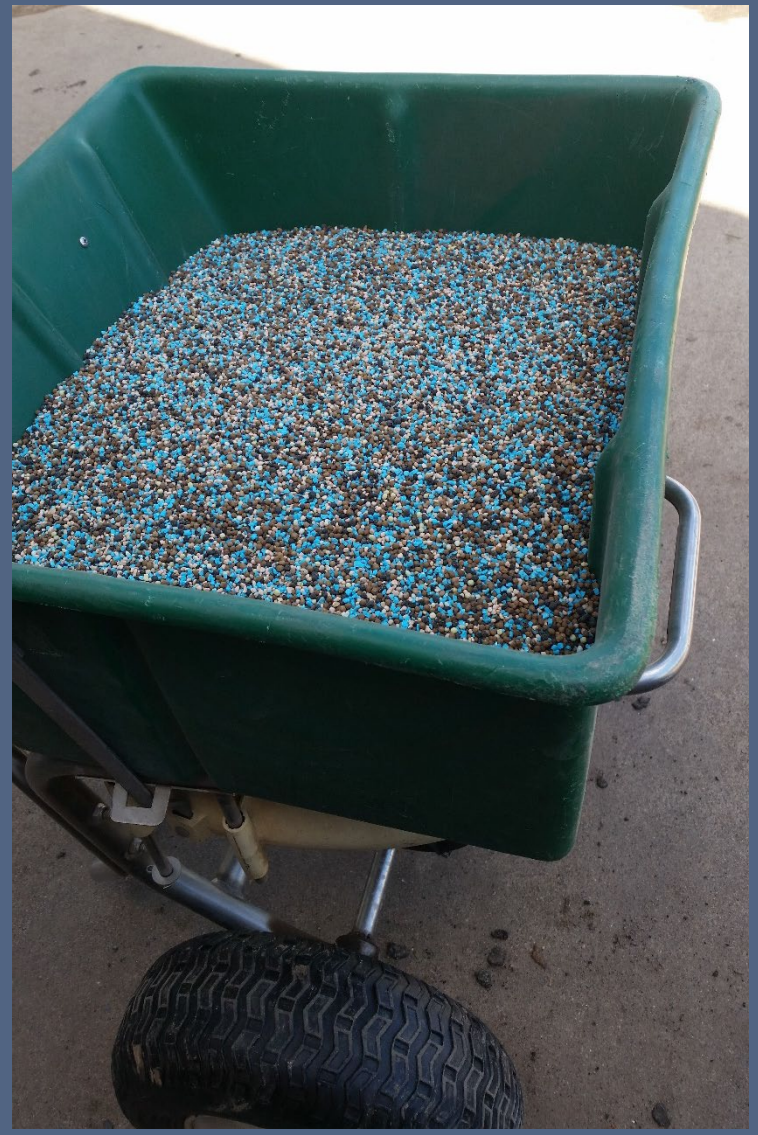
THE APPROXIMATE RATIO OR PROPORTION OF THESE NUTRIENTS IS: 20-10-10

Use a fertilizer with the percentage of nutrients closest to the above ratio. Apply according to the instructions on the fertilizer bag or container, or determine the amount

Photo credit: Sam Bauer

Fertilization

- Make sure grass is not nutrient deficient going into winter
- Avoid late fall applications to reduce nutrient pollution
- Best fertilization practices covered in Part 4



Fertilization

"Winterizer" fertilizers

- Moderate to high potassium content (e.g. 10-0-14, 32-0-10, 18-0-12, 18-0-18)

- Generally not needed

Winterizing Irrigation

When to shut off the water?

- Grass stops growing
- Frequent freezing temperatures

Drain hoses/nozzles

Winterizing Irrigation: Irrigation System Blowout

- Removes water from irrigation pipe, valves, and heads
- Avoid freezing damage

Photo credit: Gary Deters

Winterizing Irrigation: Irrigation System Blowout

Most commonly done by a professional

- Larger air compressor
- $50-$150, depending on zones
- Quick

Photo credit: Sam Bauer

Dormant Seeding

- Seed before soil freezes, and too cold for seed to germinate
  - Mid-late November
- Take advantage of snowmelt
- Germination before annual weeds

Dormant Seeding

Erosion control is recommended, especially on sloped surfaces

Salt Damage

How to minimize salt damage:

1) Establish salt tolerant turfgrass species – Fine fescues
2) Mechanically remove as much ice as possible prior to salt use

Photo credit: Matt Cavanaugh

Salt Damage

How to minimize salt damage:

3) Use salt where needed and when needed
4) Use rock salt alternatives
   - Sand
   - Red quartzite “Cherry grit”
   - Calcium magnesium acetate (CMA)
   - Calcium chloride ($CaCl_2$)
   - Potassium chloride (KCl)

Other Considerations: Make a List

- What worked/didn't work
- Suggestions for next growing season
- Repairs/services/products needed

Questions?

Please use the Q & A feature in Zoom to ask any questions you have

Past webinars can be viewed here:

https://turf.umn.edu/watering-wisdom

Ryan Schwab

schw1396@umn.edu