

# This presentation premiered at WaterSmart Innovations

[watersmartinnovations.com](http://watersmartinnovations.com)



*You can't play soccer in a  
perennial bed...  
The case for turf in a  
sustainable landscape*

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*But first,  
a public service  
announcement...*

Megan Washington  
(TED.com)



# Urban landscapes provide ecosystem services



Environmental,  
health, & social  
benefits



# Connecting people



Day on the Quad at Utah State University



Turfgrass literally touches millions of lives daily in physical and social ways.



And yet...

*“The grasses are the least noticed of the flowering plants. They seem to be taken for granted like air and sunlight, and the general run of people never give them a thought.”*

Hitchcock, 1931



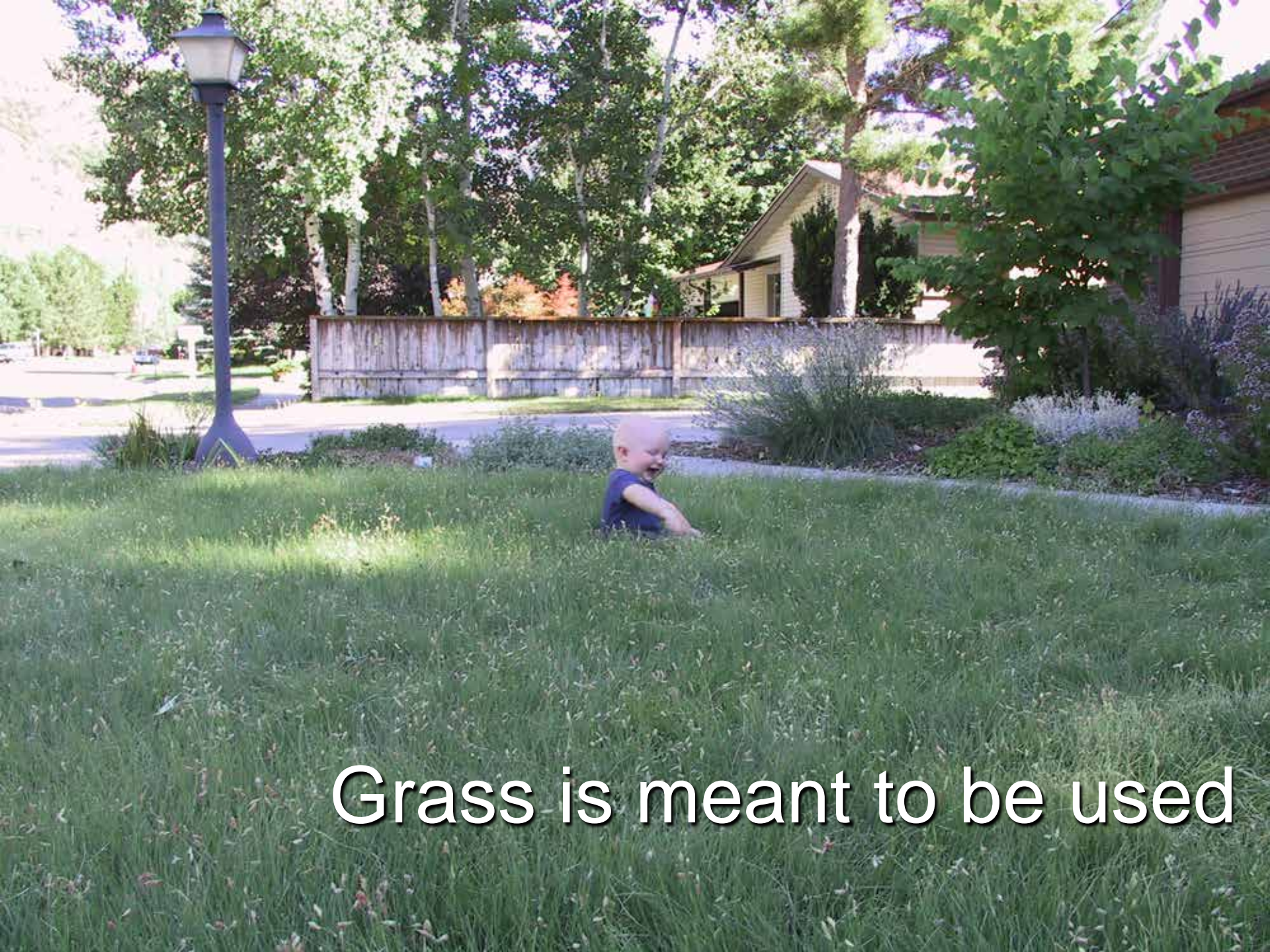
# Wallace Stegner

*“Lawns, for instance, those marvelous green naps so lovely to roll on, so cool to bare feet, so sweet smelling when just mown.*

*...But when we arrived, I had never seen a lawn, or imagined one. Front yards in my experience had been weeds and bare dirt*

*...On the farm the yard had been an alkali flat...Here, the miracle of turf impressed me for the first time with the sheer comfort of the earth.”*





Grass is meant to be used



Not this...





I hate these signs...





Growth and urbanization will increase need for human-managed landscapes...

...and the demands applied to them.



# Dilemma for some native landscapes and low-maintenance turf

- People enjoy grasslands and native plants for beauty and diversity
- ...and sometimes want a natural look
- May want only native species
- but...





# But...

- They want it relatively short,
- ...don't want the critters,
- ...or a fire hazard,
- They want it to look tidy,
- ...tolerate traffic.
- ...and they don't want to irrigate,
- It has to grow where its wanted
- “Canyon plants are prettier than basin plants”
- ...

# Unique and challenging conditions for growth

- Soil
  - Disturbed, variable, compacted...
  - Microclimates—often hotter
- Dense population
  - Traffic
- Expectations for the area
- ...Not a natural environment







One of the few plants that can handle trampling and recover



# and deal with horrible soil conditions

Places any farmer in their right mind wouldn't try to grow a crop, but we expect the grass and other plants to be perfect!



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utahgolf.com

# Easy, inexpensive

- Simple to maintain and provides stable, beneficial conditions.
- Inexpensive





*Special plants for special conditions,  
but many misconceptions about what turf  
needs to survive and thrive*

*“Grass grows in  
spite of us”*

Dr. D.B. White





# Species

- Many species can be grown as turf
- But few can tolerate significant traffic
- Density
- Color during growing season

Western wheatgrass (*Pascopyrum smithii*)



# Cool season Grasses

- Kentucky bluegrass, perennial ryegrass, tall fescue, fine fescue...
- Long season of growth and recovery  
(March to November)
- Thrives in spring and fall  
"sleep" in summer



# Warm season grasses

- Buffalograss, Blue grama, zoysiagrass, bermudagrass...
- Short season of growth and recovery  
(April/May to Sept/Oct)
- Dormant spring and fall  
Thrives in summer



A person wearing red rubber boots is standing on a wet lawn. The grass is dark green and the ground is wet, reflecting light. The person's legs are visible from the knees down, wearing light-colored pants and red rubber boots. The background is a blurred view of the lawn and sky.

# Turfgrasses are not aquatic plants... So why do they get watered so much!

- Tolerant of overwatering.
- “Insurance”
- Irrigation systems...
- Forcing growth
- *It's a people problem, not a grass problem*
- Drier is often better





*Nothing better for the soil than a  
perennial grass cover.*

- Turfgrasses included
- Build organic matter—second to none
- Extensive microorganism populations
- Stop erosion



# A definition of sustainable turfgrass management

(Royal and Ancient Golf Club)

- “optimizing the function of turfgrass in urban settings in harmony with the conservation of the natural **environment** under **economically sound** and **socially responsible** management.”







# Conclusion

- Turfgrass is important in urban areas.
- Adapted to and provides benefits in unique & demanding conditions.
- Can be very environmentally friendly.
  - Many lawn areas are over-managed.
- Plant and landscape choice requires agronomic and social implications.

