

**CITY COUNCIL OVERSIGHT COMMITTEE MEETING**

**CONFERENCE ROOM – MUNICIPAL BUILDING  
201 WEST GRAY**

**WEDNESDAY, MAY 8, 2013**

**5:30 P.M.**

- 1. DISCUSSION REGARDING THE USE OF NATIVE LAWN GRASSES TO FURTHER WATER CONSERVATION EFFORTS.**
- 2. MISCELLANEOUS DISCUSSION.**



**TO:** Council Oversight Committee

**FROM:** Susan Connors, Director  
Planning & Community Development

**DATE:** May 2, 2013

**RE:** Lawn Grass Alternatives

Staff was requested to compile information and produce a report regarding water conservation in relation to native grasses that can be recommended for lawns. A table is included comparing five different varieties of grasses for lawns in either commercial or residential applications. Also included is a list of local suppliers for native seed, sod, trees, shrubs and perennials. The table outlines different grass species and general characteristics; the following is a summary of the table. The City of Norman is located in plant hardiness zone 7 according to the USDA Plant Hardiness Zone Map. This map is used by gardeners and growers to determine which plants are most likely to thrive in a location. The map is attached as Exhibit A for reference.

- **Bermuda Grass:** grows easily in Norman's zone 7; can be maintained at 2 inches in height and is a full sun grass (6 to 8 hours of sunlight); is readily available locally as seed or sod; can be planted most anytime during the year; easily established; is a moderate water user; fairly drought and heat tolerant; tendency to overwater due to its response to dormancy (browning) in cycles of drought and extreme heat; is very invasive and requires control measures to keep out of landscape beds by mechanical removal or herbicides; fertilizer and herbicide applications need to be increased to keep free of weeds and increase 'the green'.
- **Fescue:** grows well in Norman's zone 7 in the shade or very semi-sun which is not more than 2 to 4 hours of morning sun and required to be maintained at 3 to 4 inches in height for survivability; is readily available locally as seed or sod and is planted in the fall months; moderate ease to establish; moderate to high water use; does not tolerate extreme heat and full sun locations; maintenance needs high for fertilizer and herbicide applications.

**Naturally occurring perennials (clover, vetch, crab grass, geranium, dandelions):** grow very easily in Norman's zone 7 and will survive in full sun to shade locations; most view these species as 'weeds' and apply herbicides to kill out these species; can survive in drought and extreme heat conditions with minimal water.

office memorandum

- **Buffalo Grass:** native short prairie grass to Oklahoma; grows easily with proper care which is basically less care and maintenance; must be maintained at 6-inches high to survive; moderate ease to establish due to soil prep and removal of Bermuda grass; becoming increasingly readily available locally as seed mix or sod; low water use—over watering will decrease resistance to infiltration of ‘weeds’; extreme tolerance to drought and heat; aesthetically resembles a short grass prairie; no fertilizer or herbicide applications required.
- **Habiturf**—developed by research team at Lady Bird Johnson Wildflower Center, Austin, TX; is a mix of three native prairie short grasses—buffalo, blue grama and curly-mesquite. It has the same characteristics as the Buffalo Grass.

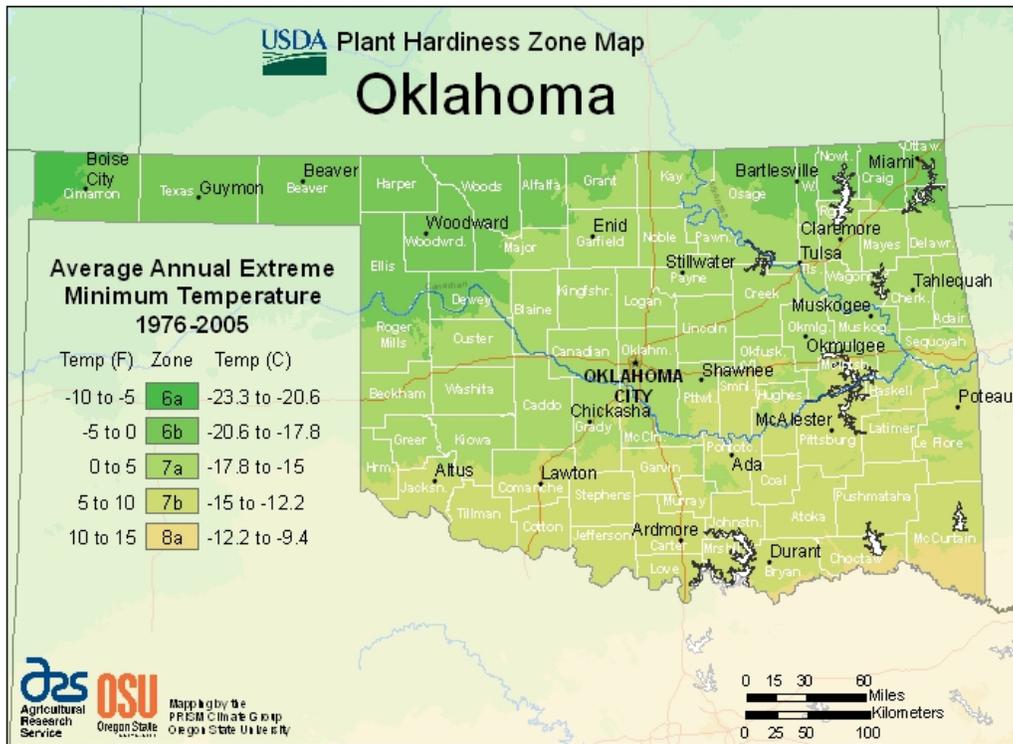
## Lawn Grass Species Comparison

<u>Species</u>	<u>Availability</u>	<u>Characteristics</u>	<u>Establishment</u>	<u>Care</u>	<u>Water Consumption</u>
Bermuda, seed/sod	Readily/locally	Full sun, invasive	Easily	2”ht., High maintenance	Moderate-High
Fescue, seed/sod	Readily/locally	Semi-sun, non-invasive	Moderate	4”ht., High maintenance	Moderate-High
Native perennials, naturally occurring; vetch, clover, crab grass, geranium(weeds)	Naturally occurring	Sun to shade very adaptive, invasive	Naturalized	Ht. Varies Controlled based on preference	Adaptive to natural habitat
Buffalo Grass, seed/sod	Moderate/ locally	Full sun, native	Need Site prep, Moderate	4-6”ht., Low maintenance	Low, adaptive
<i>Habiturf</i> , seed (native short grass prairie mix of buffalo, blue grama, curly-mesquite)	Regionally	Full sun, native	Need Site prep, Moderate	4-6”ht., Low maintenance	Low, adaptive

OKLAHOMA NATIVE PLANT AND SEED SOURCES: Many local nurseries are slowly beginning to carry and produce native plants. If yours does not, let them know you wish them to carry more native plants. When ordering seeds, ask about the seed source; seed grown out of state or out of the region is less likely to be adapted to Oklahoma's varied climate. Also, when comparing prices, the purity and germination rate of the seed should be considered. The following is a link to Oklahoma State University Horticulture College that provides local and regional resources and educational material regarding Oklahoma native species and overall general horticultural information; <http://www.hortla.okstate.edu>. Provided below is a list of current local native plant and seed producers: inclusion on the lists carries no official endorsement. For a complete list of local and regional native plant suppliers go to: <http://www.hortla.okstate.edu/images/oknative.pdf> .

Abbot-Epco (Tulsa representative) PO Box 551329 Dallas, TX 75355-1329 800/525-1379 Wholesale perennials	Clear Creek Farms (The Bowers) PO Box 89 Peggs, OK 74452-0089 918/598-3782 Trees, shrubs, wildflowers, herbs
Grasslander (Chuck Grimes) Rt. 1 Box 56 Hennessey, OK 73742 405/853-2607 Grass and wildflower seeds	Guy's Seed Company (Rodney Guy) 2520 Main St. Woodward, OK 73801 405/254-2926 Grass and wildflower seeds
Hortco 10901 NE 23rd Choctaw, OK 73141 405/769-2678 Wholesale perennials	Johnston Seeds (Ed Shovanec) P.O. Box 1392 Enid, OK 73702 405/233-5800 Grass and wildflower seeds
Lorenz OK Seeds (Freddie Lorenz) Rt. 2 Box 3 Okeene, OK 73763 800/826-3655 Grass and wildflower seeds	Northcutt's Nursery 9501 Duffy Rd. Lexington, OK 73501 800/682-6671 Trees, shrubs, wildflowers
Satterlee's Nursery 6922 N. May Ave. Oklahoma City, OK 73116 405/848-6228 Trees, shrubs, wildflowers	Seasonal Colorworks 12817 E. 71st Broken Arrow, OK 918/250-9140 Perennial wildflowers
Steve's Sod 1120 S. Broadway Edmond, OK 73034 405/341-2552 Hybrid buffalo grass sod	Sunshine Nursery (The Bierberichs) Rt. 1 Box 4030 Clinton, OK 73601 405/323-6529 Trees, shrubs, wildflowers
Tulsa Grass and Sod 10717 S. Delaware Tulsa, OK 74137 918/299-7737 Hybrid buffalo grass sod	Warren's Nursery 10901 NE 23rd Oklahoma City, OK 73141 405/769-2678 Trees, shrubs, wildflowers

EXHIBIT A



USDA Plant Hardiness Zone Map: The 2012 USDA Plant Hardiness Zone Map is the standard by which gardeners and growers can determine which plants are most likely to thrive at a location. The map is based on the average annual minimum winter temperature, divided into 10-degree F zones.

**Information Provided Above See:** <http://planthardiness.ars.usda.gov/PHZMWeb/>