GOODLAND IRRIGATION FACT SHEET by Dr. Robert E. Moon:

Fact 1 – Water Efficient Landscaping: The landscaping at Goodland is a major part of the overall plan of the community. Plants on the approved plant list are water efficient, well adapted, native Texas plants that perform well in north Texas climatic conditions. Planting techniques such as soil preparation, drip and spray irrigation and mulching are designed to provide optimum plant growth with reduced irrigation. Reducing water use in the landscape is a vital part of the overall planning, design and strategy for Goodland residents. Most homeowners overwater their yard, killing their plants with too much water. In the Goodland clay soils, it is very easy to overwater.

Fact 2 – Water and Oxygen: All plants need water and oxygen in the root zone to survive. It is important to balance the use of adequate water for plant growth but also allow time for soil to breathe between watering so soil does not become water-logged. In Texas, more plants are killed from overwatering rather than not enough water.

Fact 3 – Watering Needs: Plant water needs vary depending on direct sun exposure, amount of shade, temperature, humidity, wind, soil and rain. The best way to determine water needs is to watch for plant stress – wilting of leaves and/or yellowing of leaves. You can also determine water needs by probing the soil to a depth of 2 to 4 inches with your fingers to check for soil moisture. Smart irrigation controllers are available for purchase that schedule watering based on the items above.

Fact 4 – Optimum Water Use: It is best to water in the early morning hours to avoid plant disease and when water loss through evaporation is minimal. Do not water between the hours of 10 a.m. and 7 p.m. When watering, apply water with multiple run times to avoid runoff into streets. Water as infrequently as possible, but water thoroughly at each application. Soak the soil to encourage deep root system growth to help plants better tolerate drought conditions and stress due to hot temperatures. Well-rooted plants will use water efficiently stored in the soil.

Fact 5 – Watering of New Landscape: How new plants are watered will affect how plants survive. Water guidelines for new plantings should be as follows:

- Thoroughly water plants after planting.
- Make sure all plantings are mulched to reduce evaporation of water from around root balls.
- Water all newly planted landscaping every other day for the first four weeks. Run times will vary in each yard due to location and amount of sun or shade. Soils should be kept moist to a depth of 6 to 12 inches or throughout the root zone for plant establishment.
- Transition watering from every other day to two times per week after 4 weeks. Transition to watering for established landscape as soon as possible.
- Caution! Developers set irrigation controllers for establishment. As soon as the plants are established, watering needs to be reduced. Traditionally, homeowners forget this important step.

Fact 6 – Watering of Established Landscape: Water guidelines for established plantings should be as follows:

- Landscape water use depends upon the climatic conditions and soil moisture.
- Replenish mulch yearly to reduce evaporation and water use around root systems and planting beds.
- Water so soil is moist to a depth of 6 to 12 inches so plants are more resilient to drought conditions and stress due to hot temperatures.
- Check irrigation settings and soil moisture throughout the year and make adjustments as needed depending on plant's water needs.
- Refer to the following chart for monthly Controller Settings and Run Times.
- Clay soils are very tricky in determining water needs, so also monitor the signs of the plants themselves.

GOODLAND IRRIGATION CONTROLLER MONTHLY SETTINGS

The irrigation system will be switched to the OFF position October through May and the following run times in those months will only apply during periods of drought.

These suggested settings and run times are general guidelines and may need to be adjusted for individual landscape conditions, soils, rainfall and climatic conditions. Run times can be broken into multiple run times to prevent runoff.

Month	Run Times	Controller Setting
January	Spray Heads – 12 -20 minutes Rotor Heads – 30-45 minutes Bubbler Heads – 5-10 minutes Drip – 30-45 minutes	Turn Controller Off
February	Spray Heads – 12 -20 minutes Rotor Heads – 30-45 minutes Bubbler Heads – 5-10 minutes Drip – 30-45 minutes	Set to run one time every 2 weeks in times of drought
March	Spray Heads – 12 -20 minutes Rotor Heads – 30-45 minutes Bubbler Heads – 5-10 minutes Drip – 30-45 minutes	Set to run one time every 10 days in times of drought
April	Spray Heads – 12 -20 minutes Rotor Heads – 30-45 minutes Bubbler Heads – 5-10 minutes Drip – 30-45 minutes	Set to run one time every 7-10 days in times of drought
May	Spray Heads – 12 -20 minutes Rotor Heads – 30-45 minutes Bubbler Heads – 5-10 minutes Drip – 30-45 minutes	Set to run one time every 7-10 days
June	Spray Heads – 12 -20 minutes Rotor Heads – 30-45 minutes Bubbler Heads – 5-10 minutes Drip – 30-45 minutes	Set to run 1 or 2 times per week
July	Spray Heads – 12 -20 minutes Rotor Heads – 30-45 minutes Bubbler Heads – 5-10 minutes Drip – 30-45 minutes	Set to run 2 times per week
August	Spray Heads – 12 -20 minutes Rotor Heads – 30-45 minutes Bubbler Heads – 5-10 minutes Drip – 30-45 minutes	Set to run 1 or 2 times per week
September	Spray Heads – 12 -20 minutes Rotor Heads – 30-45 minutes Bubbler Heads – 5-10 minutes Drip – 30-45 minutes	Set to run 1 time per week
October	Spray Heads – 12 -20 minutes Rotor Heads – 30-45 minutes Bubbler Heads – 5-10 minutes Drip – 30-45 minutes	Turn Controller Off Set to run one time every 7-10 days in times of drought
November	Spray Heads – 12 -20 minutes Rotor Heads – 30-45 minutes Bubbler Heads – 5-10 minutes Drip – 30-45 minutes	Set to run 1 time every 2 weeks in times of drought
December	Spray Heads – 12 -20 minutes Rotor Heads – 30-45 minutes Bubbler Heads – 5-10 minutes Drip – 30-45 minutes	Turn Controller Off

Note: The above guidelines are suggestions for a starting point. Continue to monitor your soil by probing for adequate soil moisture. If you experience wet or dry areas in your yard, adjust your irrigation system accordingly.