Background: The Kings Deer development is made up of two subdivisions, Classic and Highlands. With some exceptions, Classic homeowners are allocated annually .38 acre feet of water or 123, 824 gallons. Highland's homeowners are allocated .42 acre feet or 136, 532 gallons. The annual water usage total is outlined in your well permit. Total water usage (internal and external) for Kings Deer residents must stay within these limitations.

Water Conservation Tips

Monitor your water use during the winter months; this will give you some understanding of your family's <u>internal water usage</u>. Based on your monthly average multiplied by twelve, you can then adequately plan for how much water you will likely be able to use externally during the spring and summer time. Of course you will still need to monitor your monthly use to ensure adherence to your plan. For your awareness, literature on the Colorado Division of Water Resources website indicate target annual water usage for a family of four for <u>internal use only</u> is .3 acre feet which is 97,755 gallons or approximately 67 gallons per person, per day. If your family exceeds the state's target or if you have more than four people in your family thereby being more likely to exceed the target for water use, we would suggest you look into more efficient water fixtures such as toilets, faucets, and shower heads. More efficient water fixtures can reduce your per capita use.

According to the U.S. Environmental Protection Agency (EPA), toilets are by far the main source of water use in the home, accounting for nearly 30 percent of residential indoor water consumption. Toilets also happen to be a major source of wasted water due to leaks and/or inefficiency. There are high efficiency models available in the market place. Older model toilets can use 3.5 gallons per flush. High efficiency models can reduce that number to 1.28 gallons. This change could provide an annual water savings of 16,200 gallons for a family of four. (Source: Douglas County Water Resources Planning Office)

Water leaks in the home are normally obvious and require immediate attention of the homeowner to fix. Leaks on the outside of the home are generally found within your sprinkler or drip systems. Many of those are noticeable, such as muddy spots or a patch of greener grass around sprinklers or underground drip lines. Other leaks can be more difficult to find such as drip lines under decorative berms around the yard. To enhance your ability to identify and fix water leaks in your sprinkler and drip systems, we recommend you inspect them frequently and have them professionally serviced in the spring and fall. If you are monitoring your water meter monthly during the spring and summer time, you should see an abnormal spike in water use when a leak presents itself. That should begin your investigative process.

The most frequent reason why Kings Deer residents exceed their water use is because of outdoor use. Resident's water usage is limited by their well permit which is issued by the State. The language in Both Classic and Highland's well permits stipulate that residents can irrigate not more than 3000 square feet of home lawn and gardens (see covenants, para 11a). The State of Colorado literature online indicates residents require .2 acre feet or 65,170 gallons of water to irrigate 3000 square feet of lawn. Douglas County Water Resources Planning Office indicates outside consumption for residential properties who irrigate 3000 square feet of lawn can easily be up to .4

acre feet or 130, 340 gallons. Obviously 130, 340 gallons of water would exceed many of the Kings Deer residents' total annual water allotment. We recommend the following outdoor water saving tips we are provided by the Douglas County Water Resources Planning Office:

- Water your lawn only when it needs it. Typically, in Colorado during the summer, most lawns only require water two to three times a week.
- o Check outdoor faucets for leaks and repair them immediately.
- Check your sprinkler system for leaks and broken sprinkler heads and have them repaired immediately. Often outdoor leaks are hidden or difficult to find, and add no benefit to your lawn and garden.
- o Sweep your driveway and sidewalks instead of using the hose.
- Install rain gauges on your irrigation system.
- o Check sprinkler heads to ensure equal distribution and rate of flow. Replace as necessary.
- Program the irrigation to rotate through zones a few times with each zone operating only a few minutes per rotation.
- o Avoid watering your lawn when it's windy.
- Water your lawn early in the morning or late at night to avoid high evaporation and encourage root zone infiltration.
- Collect rain water by using rain barrels approved for use by the State. Be aware that rain water collection is limited to 150 gallons per year and there are HOA restrictions on the type and placement of rain barrels.

NOTE: If you implement these changes and are still using too much water, residents need to take a look at how much you are watering (i.e., lawn size, ornamentals, trees) and make calculated reductions. That can mean returning irrigated lawn to prairie grass, reducing the frequency and duration of your outside watering, or eliminating outside watering altogether.

If you are reading your meter monthly and notice no water use or spikes in use, it could be you have a faulty meter. This is especially true if there appears to be no reasonable explanation. If this occurs, we suggest you call a plumber to test your water meter and replace it if necessary. If you have a water meter replaced, make sure you notify the Kings Deer HOA office to ensure new, lower readings are understood.