WATER-WISE LANDSCAPING

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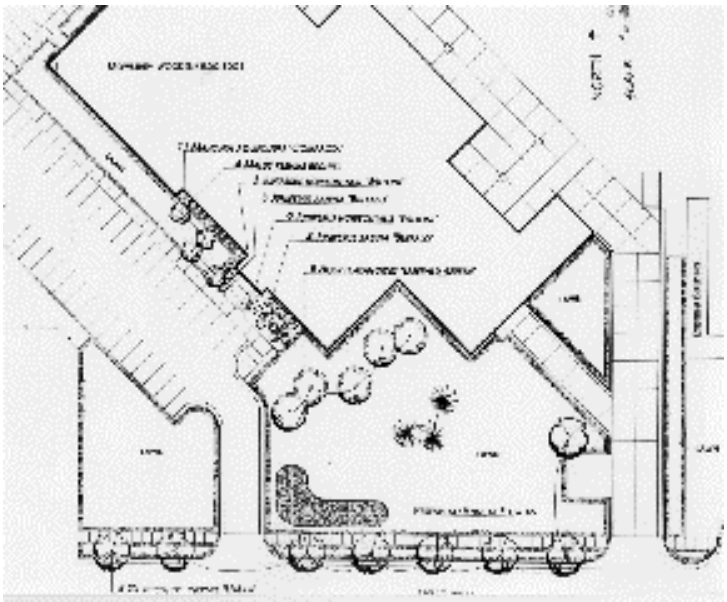
A water-wise landscape is one that is functional, attractive, and easily maintained in its natural surroundings. A water-wise landscape also helps to conserve water. If you live in Utah, you have undoubtedly heard that Utah is one of the driest states in the nation, second only to Nevada. This fact, along with our relatively high level of water consumption and our population growth, has brought water conservation to the forefront of those natural resource issues currently facing the state. In Utah, approximately 65% of our annual culinary water consumption is applied to landscapes. Our irrigated landscapes provide us with many benefits that include beautiful surroundings, natural cooling, and the cleansing of our environment. However, Utah landscapes are often over-irrigated and a great deal of water conservation may be achieved by keeping a few water-wise landscaping principles in mind as we design, install, and manage our landscapes.

1. Planning and Design. The planning and design stage of landscaping provides you with the opportunity to consider and prepare for every aspect of your future landscape's use. Consider what you would like to achieve with your landscape. For example, will you need a play area for children and pets? Would you like to have a vegetable garden? Also consider the natural attributes (or problem areas) of your property. Are there extremely sunny or shady areas? Are there very wet or dry areas? If so, choose plants that will thrive in these locations. When choosing plants, also remember that different plants have different water



requirements and you should group them accordingly. These groupings of plants are known as hydrozones.

2. Soil Preparation. The most basic component of your landscape is the soil and many landscape problems can be avoided if an adequate amount of time is spent on properly preparing the soil before the landscape is installed. The types of plants that you are growing will have a bearing on the characteristics you require from a soil, but there are some general guidelines to follow. Two major concerns are adequate depth of topsoil and the quality of topsoil. A depth of 8-12" is ideal and will solve many problems in the future. For topsoil quality guidelines, consult the USU Extension bulletin "Topsoil Quality Guidelines for Landscaping" by Rich Koenig and Von Isaman.

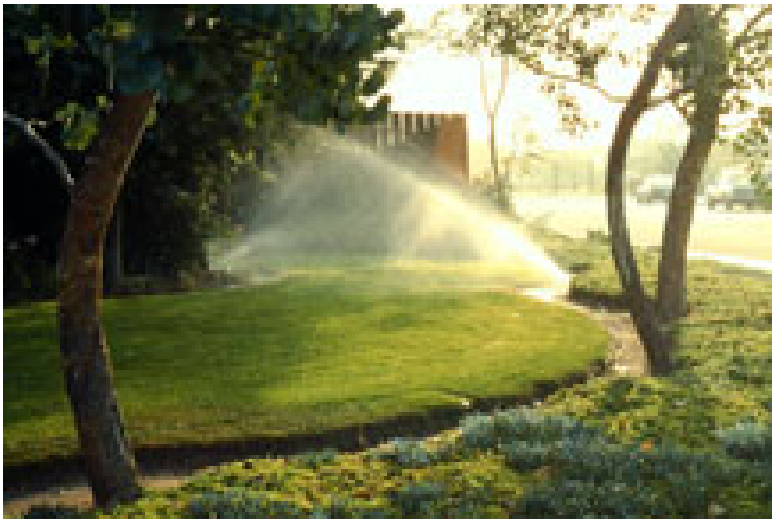
3. Plant Selection. One of the most pleasurable aspects of landscaping is choosing the plants that appeal to you. Whether aesthetically, as with flowering plants, or practically, as with vegetables, plant selection is indicative of your personal taste. Recall from the Planning and Design section that your plants should be grouped into hydrozones according to their water requirements. In water-wise landscaping, this is a key principle. Also, consider plants that will do well in Utah's climate. By choosing plants that are adapted to your climate, you will save water and will spend less time trying to manipulate your landscape to suit them. However, higher water use plants do not have to be completely excluded from a water-wise landscape. They do need to be grouped together in locations that suit their needs recognizing that more water and attention will be required to maintain them.

4. Practical Turfgrass Areas. Turfgrass is the plant that covers the majority of the landscaped area in Utah. It is important in our landscapes for play and recreation and is an important design component of some landscapes. Turfgrass is also the plant that is most often over-irrigated in Utah landscapes. For that reason, it is important to consider the practicality of turfgrass areas. Avoid using turfgrass in areas that are hard to irrigate such as steep slopes or odd-shaped and narrow spaces. Always be aware of the use of the turfgrass area. If the area only receives traffic when it is mowed, perhaps another plant choice is more appropriate.

5. Mulch. Mulching is one of the easiest and best things that you can do in your landscape. By mulching around trees and planting beds, moisture is retained in the soil and weeds are discouraged. In addition, mulch tends to regulate the soil temperature making it a more stable environment for plant roots. There are many mulches available including organic mulches like bark, inorganic mulches like stone, and even some plastic and paper mulches. You can even mulch your turfgrass areas by returning the clippings when you mow. One benefit of organic mulches is that they improve the organic matter content of the soil as they decay. This may be undesirable, however, for plants that require excellent drainage and dislike wetter soil conditions.

6. Irrigation Planning. By arranging your plants into hydrozones according to their water requirements, you have already begun the first steps in irrigation planning. Once your plants are arranged into hydrozones, you should plan your irrigation schedule to apply the appropriate amount of water to each of the zones. You can learn a great deal about plant-water requirements simply by observation. Signs, such as wilting, will let you know when many landscape plants require watering, but be careful not to overdo it. Plant roots need just as much air as water and you don't want to drown them. If you are using an automatic irrigation timer, be

sure to adjust it seasonally as the weather changes. A great deal of water is wasted when automatic irrigation systems are continually programmed for the hottest part of the summer without adjusting for times when temperatures are cooler and more natural precipitation is occurring. Another important aspect of irrigation planning includes routine maintenance of the system. Monthly examination of the irrigation system, while in use, will help you to find and repair any broken, misaligned, or clogged sprinkler heads and keep your system running efficiently.



7. Landscape Maintenance. One of the most important components of a beautiful and lasting landscape is maintenance. Proper maintenance will keep your plants healthy and will also help to conserve water. For example, by weeding regularly, your landscape plants will not have to compete with weeds for water. Also consider the fertility requirements of the plants in your landscape. Apply an adequate amount of nutrients, but do not over apply fertilizers since that will create excessive growth that will increase your maintenance requirements. Excessive fertilization may also leave plants more susceptible to insects and diseases.

These seven principals provide the basis for creating a water-wise landscape of your own. For more detailed information on each of these water-wise guidelines will be provided in future fact sheets.

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