

Bryan Square – waterSmart Demonstration Garden

Project Narrative

A. *“Right Plant, Right Place”*

“Every plant has its fitness and must be placed in its proper surrounding so as to bring out its full beauty. Therein lies the art of landscaping.” Jens Jensen, Landscape Architect.

On the north and south ends of the square, native grasses and flowering perennials are grouped together. These plantings work with the shallow soil depth and prefer the full sun they will receive. On the north side there are also dry and wet gardens. The dry garden exhibits plantings requiring no irrigation. This garden is placed on aesthetic mounding directing water flow into the wet/ bio-retention garden. Rainwater flows into the bio-retention garden from all directions. The plants placed here prefer the moisture and work with the shallow soil depth. Adjacent is the lawn exhibit which will use the bio-retention’s water for irrigation. The formal landscape exhibit uses larger native plantings requiring deeper soil depth and full sun. These plantings are correctly sized to grow in these four quadrants with or without pruning. Adjacent is the informal exhibit. The upper right areas plantings prefer some shade and will receive it over the years as the existing live oak grows. The other three informal spaces require more sun and range from no irrigation required (lower right) to moderate irrigation required (lower left). The organic garden is placed next to the cistern for convenient watering and the raised planters help define their place and needs.

A great plan is the balance between aesthetic and function; choosing the right plant and place is required within both these criteria.

B. *Plants selected and grouped according to their water needs and drought tolerance.*

Choosing a plant that is suited for its location is a good start, however grouping them together by water needs and aesthetic compatibility is where a good landscape plan can blossom. This plan creates different spaces, each having a specific use, look, and water requirement that homeowners can apply to their own residence.

The native grass / flowering perennial areas resemble a meadow and once established can thrive without water for weeks as can the dry garden area. The bio-retention area and smart lawn are placed next to one another based on their water needs. These areas will require occasional watering and this will come primarily from the below ground collection system. The formal landscape areas consist of native drought tolerant plants and once established will require minimal water. The informal squares’ five areas have slightly different water requirements with the live oak and lower right area requiring no irrigation. The organic garden requires regular watering and this will be the primary use of the adjacent cistern.

C. *Landscape designed to exist predominantly on rainfall once plants are established.*

Our interpretation of waterSmart consists of back to the basics gardening and landscaping techniques that the majority of homeowners can implement, including: proper plant locations, using native plant species, proper mulching and minimal, creative irrigation. The design contains elements to collect, cleanse, and reuse water giving visitors to the park firsthand knowledge of waterSmart techniques related to outdoor living. The reused water will irrigate the drought tolerant, low maintenance, and pest resistant plants. The smart lawn and organic garden areas (requiring the most watering) will rely on the cistern and below ground rain water collection system to supply their water needs. Ultimately, the native grasses, flowering perennials, formal and informal native plantings will require no supplemental irrigation, except during severe drought conditions.

D. Rain Water Harvesting

Three areas within Bryan Square are designed to harvest rainwater. The first on the southern end of the site is an above ground cistern. The rain water is collected on an overhead shade structure and diverted to the cistern. The cistern's primary use is for watering the organic garden. The second rainwater harvesting area is a bio-retention area located at the northern end of the site. In order to accommodate plantings and collect water, the outer edges of these areas will be gently filled to direct water to the center. Stormwater will collect in a rain garden and its plantings will cleanse the stormwater before the excess goes into an underground storage device directly below the water feature in the formal landscape area. The existing hardscape will remain in place except for a proposed permeable band at the low point of all the sidewalks. A trench drain below the sidewalk will collect any stormwater draining off the existing hardscape adding to the underground storage device.

E. Ideas for residential gardeners

When we sat down to design this square our primary goal was to keep the demonstration areas simple enough so homeowners could implement them.

Starting with the organic garden demonstration, here we concentrated a higher water use for a purpose; growing edible plants in small raised planters. The outdoor classroom uses the raised planters as seat walls and shows how hardscape areas can be highly pervious. The above ground cistern and composting exhibits display ideas for the home gardener along with informational placards with installation instructions. Smart irrigation is likely the most inexpensive and easiest way of saving water and money by adding moisture sensors to an irrigation system. Native grasses show a low maintenance and drought tolerant alternate to traditional lawn area.

The southern middle square exhibits several ideas. The first (upper left) shows native drought tolerant alternates for traditional non-native plantings. The second (upper right) shows woodland native groupings that can be used in the residential landscape. Using the right mulch or installing mulch correctly is another easy way of saving water and money and this is displayed underneath the existing live oak. The bottom two quadrants display native drought tolerant plant groupings. The adjacent square exhibits formal landscapes that a homeowner can create with native plantings. On the northern side there are bio-retention/rain garden plantings that thrive in areas that receive runoff and retain moisture. A dry garden shows groupings of grasses and perennials that require no irrigation once established.

This walk thru is designed to engage the five senses while giving visitors firsthand knowledge of waterSmart techniques and how they can apply them.



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