I want to replace my dwarf fescue lawn with a more drought tolerant grass. Native grasses are naturally drought tolerant because they evolved in a climate with wet winters and dry summers. During drought emergencies, I am willing to stop watering my lawn in the summer, but I don’t want it to die and then have to replace it in order to regain my green lawn after the drought emergency ends.

Perennial bunch grasses native to California turn green with winter rains, go dormant in the dry season (turning brown/gold), then start growing again when the rains return. This growth cycle is repeated year after year. These grasses mostly do not die in their native soil conditions.

Recently I received an invitation through my professional association to visit the California native sod growing grounds of Delta Bluegrass located on MacDonald Island west of Stockton.

I did not find a 100% solution in this visit, because these native sod products will experience 20% dieback if not irrigated during the dry season. These slides describe the products they offer, but are not meant to endorse their products.
For many years Delta Bluegrass has been growing sod for the landscape industry. In 2007, they began experimenting with native grasses to see if they could provide an attractive lawn that required less watering than their conventional lawn products and could be sold to customers in sod form.

They now offer five sod products consisting of various blends of native grass species. These sod products are described in the following slides.
NATIVE MOW FREE: A grass that can be maintained as a turf lawn or left un-mowed to create a meadow-like appearance. This blend will grow in areas that receive up to 50% daily shade, and consists of Festuca idahoensis, F. rubra and F. occidentalis.
DELTA GRASSLAND MIX: A softer feel and greener color than the Native Mow Free blend, this turf is most similar to conventional lawns when mowed. It has partial shade tolerance, and consists of Koleria macrantha, Deschampsia elongata and Festuca rubra.
NATIVE PRESERVATION MIX: A fine textured dark green grass that grows well on slopes, has partial shade tolerance, and is most suitable when an un-mowed meadow-like effect is desired. This blend consists of Koleria macrantha, Stipa pulchra, Nessella cernua and Festuca rubra.
NATIVE BENTGRASS: A medium textured grass that requires consistent mowing at 1 ½ to 2 inches and has partial shade tolerance. This turf is 100% Agrostis pallens.
BIOFILTRATION SOD: A combination of dryland and wetland species that prefer full sun, and can tolerate drought conditions and limited amounts of standing water. It is also suitable for soil stabilization and erosion control. The blend is Stipa pulchra, Festuca rubra, Hordeum californicum and H. brachyantherum.
KURAPIA GROUND COVER: This sod is not native but is what many on this visit came to see. It's a creeper that stays 1 to 3" tall, needs 60% less water than traditional sod and takes moderate traffic. Fertilize once in Spring and mow 1/3 of top growth periodically if flowers are not desired. 100% Lippia nodiflora L. ‘Kurapia’, a sterile non-invasive hybrid.
Native grasses have very deep root systems to survive annual drought conditions. Yet sod harvesting removes all but the top one inch of the roots. Planting native sod requires a one-year establishment period. Preferably plant the sod in the fall and foliar irrigate through the first dry season to establish. The sod should be installed shortly after harvesting - the quicker the better.
GENERAL CONSIDERATIONS

- All sod products tolerate all soil types.
- Native sod products have low wear tolerance and can be damaged from heavy foot traffic while dormant.
- Mow sod as low as 3” for a lawn effect unless otherwise indicated.
- No-mow applications should be mown annually in the fall to reduce thatch.
- Native sod products will have 20% dieback if not irrigated in dry season.

- Native sod products use about 50% less water than traditional lawns to remain green thru the dry season.
- Use a “cycle-soak” irrigation schedule. For example, water for 8 minutes, wait 3 hours then water again for 8 minutes. Cycle-soak reduces runoff and water percolates deeper into the soil.
In February 2017, about 600sf of the Native Mow-Free sod was installed in my backyard. The contractor said he buys regular sod at $.59/sf compared to the $2.50/sf he paid for Native Mow-Free. I have been mowing it. We’ll see how it responds to the next drought, hopefully not too soon.

EPILOGUE: “I DID IT!”