

Conejo Recreation & Park District's
Use of Herbicide "Glyphosate" to Convert Portions of Parks from Turf
to Drought Tolerant/Alternative Landscaping (i.e. woodchips/mulch)
(July 2, 2015)

The drought is a reality that CRPD takes very seriously.

Due to both the immediate drought emergency as well as the longer term reasons like state regulations, water supply availability and cost increases, CRPD must use less water, now and into the future.

The good news is that we know we can create aesthetically appealing and functional public parks while using less water. This transition will take time and money.

What is the most effective way to complete this transition?

A useful tool to quickly eliminate turf in preparation for this transition is glyphosate (aka "Round-Up"). Glyphosate has been routinely used to control and spot treat weeds in the parks. Glyphosate is an EPA regulated herbicide which is applied by licensed or trained CRPD staff that are supervised by certified employees in accordance with manufacture recommendations, its labeling, and law.

Over time, CRPD will modify irrigation in these areas to water existing trees and plant drought tolerant trees and plants which use significantly less water than grass.

By actively working on the transition, staff believes it can convert a park in 4-6 weeks and result in CRPD receiving a "cash for grass" rebate check to help pay for mulch, trees and irrigation modifications. (These rebates have ranged from \$25,000 to \$150,000)

How does CRPD staff apply the glyphosate during the turf removal process?

At its Oakbrook Service Yard, CRPD staff dilutes 1.5 oz. - 2 oz. of concentrated glyphosate per gallon of water (1.17% - 1.56% of total solution) in a 50-gallon tank on the Pest Control Operator's truck.

Upon arrival at the facility, a crew member stakes and barricades the area to be sprayed with signs cautioning patrons that an application will be occurring in this area.

Mostly utilizing the 100-foot hose (depending on topography, the truck's boom can be used) located on the rear of the truck, the applicator applies the solution.

Upon completion of the designated area, the stakes, barricades, and signage is left up and removed the following day.

Since glyphosate is inactive on contact with soil, the area will be ready for planting of drought tolerant trees and plants within 48 hours.

What are factors to consider prior to application of glyphosate?

The ideal application is on dry grass with open stoma at a time when winds are light to non-existent (below 5 mph) and temperatures are between 12 degrees Celsius (53.6 degrees Fahrenheit) and 25 degrees Celsius (77 degrees Fahrenheit). Typically early morning (before it gets hot or windy) when the grass is dry (little/no dew) and there is no rain forecast within 6 hours after application.

Why doesn't CRPD simply cut off the water and let the grass die back over the coming hot summer months?

This approach may work in the short term, however, in the longer-term, staff believes this approach will bring unintended and reasonably foreseeable negative consequences.

By allowing the turf to die on its own, the transition period could take months, with a visibly deteriorating appearance, with a need to spot treat any remaining turf and weeds with an herbicide before any transition could be initiated, which may take too long for the qualifying "cash for grass" rebate period.

Some anticipated negative consequences of this approach:

- Park aesthetics will suffer.
- Residents will raise concerns that park appearance negatively impacts their property values.
- As areas dry out, significant weed germination and growth (affecting not only remaining grassy park area, but nearby properties).
- Many weed varieties have thorns and are extremely difficult to eradicate without glyphosate.
- As areas dry out, dust will be a recurring concern (natural winds, plus running mowers to keep down weed growth will kick up dust clouds).
- Inability to initiate transitions to 40 plus parks prior to rainy season if we wait until September or October (when most of landscape would have dried out).
- "Cash for Grass" rebates are finite and based on first come first served. Should CRPD wait too long to complete the qualifying landscape conversions, CRPD may miss out on hundreds of thousands of dollars to be used to beautify the parks.
- District staff will receive high call volume regarding park issues/appearance taking time/attention away from other tasks.

Why not just put wood chips/mulch over untreated and unwatered grass to get the rebate?

From direct experience at Wildflower Playfield, without systemically killing the grass and weeds, a significant amount of vegetation will regrow through the mulch creating an unacceptable aesthetic appearance. (At Wildflower Playfield, in order to solve the problem of the "regrowth" of grass/weeds through the mulch, CRPD treated the regrowth with glyphosate).

Why not remove turf with alternate methods?

Mechanical removal - utilizing a sod cutter, is not effective with Bermuda grass. The roots and stolons are still viable and will resprout. It is very time consuming and CRPD staff plans to remove approximately 40 acres.

Smothering – utilizing cardboard, plastic sheeting, or other smothering methods would not be time or cost effective for the approximately 40 acres.

Propane torch - the danger and environmental reasons scorching the top layer is not effective or efficient method in killing the turf of any species. The torch also kills any surface dwelling insects, bacteria and fungus.

"Natural" Herbicides – one common method proposed is vinegar with 20% acetic acid and table salt. Acetic acid, is corrosive and non-discriminatory and will kill more than plants such as beneficial insects, worms, fungus bacteria and the good soil fauna. Table salt is also corrosive, and does not become inert and will sterilize the soil.