

Decision Document

1/10/2021

Issue: For many years, the forest health in the Reserve of the Ranch Community has been rapidly diminishing and it is time to actively implement tree and shrub planting to regain an ecologically-healthy, visually appealing environment.

Background: For at least 80 years, the Reserve area of the Ranch Community consisted of an overstory forest of cottonwood trees and a large variety of understory shrubs and plants. This area is over ten acres in size and is a valuable asset for the Ranch. Many residents either walk themselves or with their dogs on the trails in the Reserve. It is bordered on the south side by Hermosa Creek which greatly adds to the beauty of the area. In fact, overflowing of the creek is the mechanism for periodic renewing of the cottonwood forest and historically, it also kept the area moist enough to maintain the riverine ecosystem.

Decades ago, an 8-10-foot-tall berm was built on the north side of Hermosa Creek along the western one third of that creek adjacent to the Reserve. This was done to stop the flooding in the Reserve. This action was successful in meeting its purpose, but the unintended consequence was that the soils of cottonwood forest began to dry out. Forest renewal due to flooding stopped, at least on the western half of the Reserve. The consequence is death for the majority of the cottonwood trees and the western part has turned into an unsightly, brushy area. There are a handful of scattered spruce trees and some boxelder shrubs but little else of a forest is left. Fortunately, the lower, eastern half of the cottonwood stand remains mostly intact. The problem is that the stand has reached a decadent condition as cottonwood trees are characterized as pioneer trees (naturally established after disturbance) and their forests typically don't remain vibrant and healthy past 80+ years without disturbance. Unfortunately, the stand of trees is about that age and therefore annually, trees are dying and falling there, basically due to old age.

The Sustainable Landscape Committee under the Maintenance Chair for the Ranch Board has taken on the task of assessing the current status of the Reserve and developing a plan to rehabilitate the Reserve. Members of the Committee have reviewed the entire Reserve area and consulted with Luke Dittrich, a Forester with the Colorado State Forest Service (CSFS). Luke is based in Durango and is familiar with the Animas Valley and this forest type. His advice is to begin in 2021 to plant forest trees and fruit bearing shrubs, useful to wildlife, in a widely spaced manner to create a mainly-conifer overstory of trees with the shrub understory. He that we plant in the fall unless we have irrigation. Once the forest has started to regain control of the Reserve then native plants will once again naturally seed-in the area. Luke gave a list of mainly native trees and shrubs that he recommends and are also available to buy through the CSFS nursery at a very reasonable price. He also recommended that we plant a few acres of the area

each year with a mixture of several different tree species and shrub species. This is the reason that the effort may take up to five years to complete or mainly complete.

One of our Committee members, Sam Foster, is a forester and has experience in this type of reforestation. He will be able to serve as a volunteer to help with the details and logistics of the project. The seedlings cost \$1.20-3 each and we need to plant roughly 125 plants per acre. The cost of the seedlings per acre should be about \$150-375 per acre depending on species. Planting tools are inexpensive and the planting can be accomplished by Sam Foster and other residents. If we plant 1-2 acres per year then we should be able to plant the area in the western half of the Reserve in about 3-5 years. Given that the eastern half of the Reserve is beginning to break up, we will experiment with some underplanting of seedlings there to learn if this will be successful. If it is, then the Committee can return to the Board with a recommendation about rehabilitating that area also.

Recommendation: The Sustainable Landscape Committee recommends that the Ranch Board approves the Committee to move forward and implement actions to rehabilitate the Reserve beginning in 2021 and proceeding for at least five years.