Santa Lucia Conservancy

BOARD OF GOVERNORS MEETING JUNE 2, 2017

BOARD ACTION BRIEF – SLC Cattle herd growth

Question: Should the Conservancy increase its herd size to 150 animals over the next 5 years?

Background

Cattle were removed from The Preserve shortly after its purchase by the Partnership, and the grasslands experienced a period of ecological recovery. The previously degraded grazing areas were characterized by a striking increase in wildflowers and native bunch grasses also experienced a resurgence. Following these early years, however, a gradual but steep decline in grassland health has been noted. Negative changes include the spread of weeds such as French broom and thistle, the loss of 'key indicator' species including American badger, burrowing owl, and CA tiger salamander, and dense thatch (dead organic material) smothering native plants and aggravating brush and weed encroachment.

Soon after her arrival in 2011, Christy Fischer initiated an assessment of grassland health, and regional experts confirmed these findings and noted that sharply reducing thatch and managing weed encroachment was essential for recovering and sustaining biodiversity, improving aquifer recharge and reducing wildfire risk. In 2012, the Conservancy completed a rigorous assessment of the status of ecological health on The Preserve using both in-house and outside expertise. The product of this effort, called a "Biodiversity Management Needs Assessment" identified the Preserve's ~5,500 acres of grasslands as one of its most ecologically significant assets and also its gravest management challenge. In 2013, the Conservancy expanded its small pilot grazing program through a partnership with Dorrance Ranch and simultaneously developed grant funding to support a sustainable grazing program as well as expanded brush mowing and weeds spraying. Leslie Dorrance was brought onto the team to pioneer a unique 'conservation grazing program' focused on restoring grassland health.

The rugged topography, habitat diversity, integrated human community and scale of the Preserve present difficult challenges and limit our options: prescribed burning, mowing and herbicide spraying are the traditional tools, each of which carry significant costs and risks, and in many areas are infeasible. These factors also limit the suitability of a traditional 'cattle lease' approach to grazing. Based on 5 years of experience under Leslie's leadership, the Conservancy's grazing program is proving to be the most effective and sustainable approach to reducing thatch, slowing weed encroachment, and improving conditions for grassland plants and wildlife To achieve these goals, the Conservancy's program is necessarily different from commercial grazing in several ways:

1) The express goals of the program are restoring biodiversity and natural processes, reducing wildfire risk, and ensuring the health and humane treatment of the animals in our care.
2) To protect vistas, wildlife corridors, and watershed functions, we employ temporary electric fencing and portable water troughs. This requires staff members to interact with the cattle and assess grasslands daily.

3) Cattle are moved 'on foot' and must respect both people and electric fencing. Ensuring that each animal is manageable is essential for the safety of staff and Preserve members and program sustainability.
4) There is no profit motive: cattle are managed for good health and habitat objectives, not weight gain or market value.

Reflecting our commitment to science-based management, the Conservancy has integrated and maintained a robust monitoring program. Outside experts assess thatch levels, native plant response and rangeland health annually, while our staff scientists monitor wildlife, habitat health and other ecological goals. Early results have been positive: better native plant abundance, significant reductions in thatch, thistle and wild mustard, and returning wildlife in the grazed areas. However, the extent and frequency of grazing we have accomplished to date in many of these areas have been insufficient to stem the tide of invasive weeds and brush encroachment.

Preliminary Results

Both preliminary in-house monitoring results and the annual review and guidance of outside grassland experts indicate that our cattle grazing methods and activities are having a positive impact on maintaining and improving grasslands health by reducing thatch and invasive species density. However, a closer look at the data, as well as consultation with our grazing and grasslands experts, indicate that this improvement is only observed when the grazing activities are frequent and intense enough to meaningfully meet these goals. In the past two years, as we have expanded the grazing area from ~1800 to ~2800 acres, the beneficial effects of our efforts appear to be diminished. Weeds and brush are once again expanding. In order to provide lasting long-term results on the full ~5,000 acres of Preserve grasslands, we need to have sufficient herd size to graze each of these areas at least twice a year, and with enough impact to meet our vegetation management goals.

Preferred Alternative:

To achieve this effect, we propose to increase our year-round "core" herd to 150 cattle over the next 5 years. Currently the Santa Lucia Conservancy owns 42 cows. Over the past several years, Dorrance Ranches has 'loaned' the Conservancy ~50 of their replacement heifers during winter and spring, to cover as much land as possible. Even with these added numbers, the maximum area effectively grazed by cattle in a year since 2013 has not exceed 1800 acres. Attempting to expand this grazed area has resulted in a reduction in observable benefits in priority pastures including Peñon Peak, the Mesa area, Rancho San Carlos and Black Mountain. Increasing our herd size will allow us to graze between 4000 and 5000 acres of grasslands at least once a year in normal rainfall years with in-house resources, and to target priority areas for additional grazing frequency. This increased core herd size, in combination with continued partnership with the Dorrance Ranches and potentially other local partners, will provide the flexibility to graze several areas simultaneously in key periods, particularly spring. This will also allow us to lighten the impact on Preserve grasslands during drought years without damaging grasslands or creating financial impacts to partner ranches.

This approach will also provide flexibility to use other tools when warranted, such as targeted goat grazing and prescribed burns during specific time windows.

Projected Costs:

The projected gross cost for building the herd to 150 head over the next five years is $100,000 per year, for a total cost of ~$500,000. As noted in the attached spreadsheet, this estimate is inclusive of all additional program costs, including an additional field laborer, an additional vehicle, and a combination of purchasing

young cows and breeding our mature animals. This combination would allow us to reach our goals in a manner that is efficient and cost-effective (purchasing heifers will 'jump start' our numbers in years 1 and 2, while breeding is far more cost effective in the long run). This model assumes calf production in years 2-5, which would then taper off to periodic breeding to maintain herd numbers.

Consistent with Conservancy policy and the advice of our Senior Grazing Program Advisor, Leslie Dorrance, suitable female calves would be incorporated into the herd, and the remaining calves (males/steers and unsuitable females/heifers) would be sold 12-18 months later, to ensure a highly manageable herd. Sales of stock could return an estimated $100,000 to offset program costs.

Risks:

Increasing the herd size represents a corresponding increase in the complexity and effort involved in the program, with associated increased potential for property damage, livestock health issues and related liabilities. Livestock sales would also present a continued 'reputational' risk of concerns and criticisms by Preserve members who are not supportive of this approach. Both types of risk are integral to the program and cannot be completely eliminated. The proposed budget includes increased staff resources to ensure a high level of responsibility in the field and increased capacity for community outreach and engagement in the program.