

### BASELINE DOCUMENTATION REPORT

Date: July 25, 2019

### **DESCRIPTION:**

The Museum of Northern Arizona (landowner) prepared this *Baseline Documentation Report* for a 90-acre tract commonly known as the "Colton Meadows." The landowner's aspiration is to preserve all or as much of the 90-acre tract as possible, if not all, through generous donations from preservation-minded individuals, entities and communities.

To solicit donors, the landowner has identified five, approximately 18-acre tracts for preservation. If the landowner is able to secure donations adequate to preserve the five 18-acre tracts, the entire 90-acre tract shall be preserved.

If the landowner is unable to secure donations adequate to preserve each of the 18-acre tracts, at the landowner's sole discretion, the landowner may sell the remaining unpreserved portions of the 90-acre tract. Such lands would be exempted from and not subject to the findings of this report.

This Baseline Document Report applies specifically to Parcel "C". Once the landowner and easement holder authorize and acknowledge the findings of this report, and the landowner is in receipt of the donor's donation, a deed of open space and conservation easement shall be recorded over Parcel "C".

This document describes the conservation values protected by the easement and the relevant conditions of Parcel "C" as necessary to monitor and enforce the easement.

### **ASPIRATION:**

With a commanding view of the San Francisco Peaks and the Dry Lake Hills, this landscape of mountain meadow grasslands and ponderosa pine forest embodies the values inherent in the mission of the Museum of Northern Arizona to "inspire a sense of love and responsibility for the beauty and diversity of the Colorado Plateau through collecting, studying, interpreting, and preserving the region's natural and cultural heritage." From its founding in 1928, the museum has been organized around a set of clearly defined activities that include research, education, collections, conservation, and "place." The 90-acre Colton Meadows tract provides opportunities for the museum to express its mission in all of these domains.

### WILDLIFE and WILDLIFE CORRIDOR

To support animal populations, wildlife managers advocate maintaining as many land connections as possible within and between Flagstaff's mountains (The Peaks, Dry Lake Hills, and Elden) and lower-elevation wildlands. Elk, deer, mountain lion and other animals migrate through the 90 acres to reach the region's Rio de Flag wildlife corridor and the A-1 Mountain corridor, through which they move down to pinyon-juniper country in late fall and back up again in spring. Elk, deer, mountain lion, and other animals utilize all parts of the 90 acres; migrating elk, in herd sizes as large as over 100, are often observed beddingdown in the parcel's meadows. Osprey nest and fledge young in the Switzer drainage along the tract's eastern boundary; owls and hawks prey here, and bald eagles are roosting here. Gunnison's prairie dogs, a declining species of concern in the Four Corners Region, were abundant on the tract prior to a major 1990s flood; they are again moving onto the parcel. It should be noted, as well, that conservation of meadow habitats is critical for native pollinators, many of which are in danger of extinction. (See map number 1.)

## **RECREATIONAL FEATURES**

A long-existing "social trail," used today by recreational horseback riders, hikers and bicyclists, runs along the Switzer drainage. Recreational opportunities throughout the 90-acre tract include bird-watching, nature walks, and amateur astronomy. (See map number 2.)

## **CULTURAL SITES**

Archaeological Features. This 90-acre tract includes prehistoric habitation sites, field houses, an apparent irrigation channel and an artifact concentration. These features, along with adjacent features on the opposite side of Mt. Elden Lookout Road, comprise one of the best extant examples of the Rio de Flag Phase of the Sinagua Culture (A.D. 850-1050). Known sites of this cultural phase are fewer than those of the later Elden Phase, for many Rio de Flag Phase sites were buried by the eruption of Sunset Crater or other geological processes, and by modern urban development. (See map number 3.)

**Historic Features**. The historic 1858 Beale Road alignment runs along the north edge of the tract and Elden Lookout Road. A concentration of historic artifacts that lies within the 90 acres and dates to 1875-85 is notable, for historic sites of the period prior to 1890 are rare in the Flagstaff area.

# OPEN SPACE, DARK SKY and VIEWSHED

The conservation of open space and dark skies are expressed goals in the Coconino County Comprehensive Plan and City of Flagstaff Regional Plan 2030 documents. Open space is required by animals that need to see predators from a distance, or need to travel fast/easily without being encumbered by trees or shrubs. Open space also supports dark skies, and darkness is vital for the activities of bats, raccoons, skunks, and many other vertebrates; for birds such as owls, nighthawks and poor wills, and for invertebrates as well—the great majority of which are nocturnal.

And in both daylight and moonlight, the mountain views in these meadows are an irreplaceable asset to the Museum of Northern Arizona and its Harold S. Colton Research Center, and to the Flagstaff community as a whole.

### WATERSHED

Shultz Creek, a major tributary of the Rio de Flag, runs along the western edge of the 90-acre tract. The creek's flood-plain extends well into the parcel, where alluvial soil meadows function as a natural "sponge." The meadow soils (alluvium) consist of organic matter accumulated over millennia, combined with fine-sized volcanic and clay sediments that wash down from the surrounding mountain slopes and hills. The meadows absorb stream runoff and—during the heaviest rains, erosional events, or rapid snowmelt—floodwaters. This helps protect downstream properties (including creek-side properties in the Coyote Springs Subdivision) from the flooding and sediment transfer that could occur during 50- or 100-year floods. Switzer Canyon, a secondary tributary to the Rio, runs through the parcel's eastern portion. Additionally, several nearby private properties obtain their water from shallow wells in the meadows' alluvium. (See map number 4.)

### **HABITAT**

From the parcel's ground cover up through its tallest trees, this tract contains an extensive diversity of habitats that support ~280 species of vascular plants, ~124 birds, 41 mammals, reptiles and amphibians, and several thousand species of arthropods (insects, spiders and other invertebrates). Meadowlands comprise much the parcel while ponderosa pine forest and oak woodland habitats dominate the ridges. The treed areas include large old-growth yellow pines and snags, rocky mountain juniper, old-growth oak, and rejuvenated oak from a 1950s fire. Portions of the meadow area are covered by an ecologically-healthy biological soil crust that is becoming rare in our region. This soil crust supports native grasses and forbs, mycorrhizal fungi and ecologically helpful micro-organisms. Other soil areas, disturbed by past grazing and cultivation, contain both native and non-native vegetation. (See map number 5.)