Attachment J

Cultural Overviews of the Site 48SU4000 District and Sand Draw

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The Site 48SU4000 Archaeological District

The Site 48SU4000 Archaeological District (also known as the Rocks District or Site 48SU4000 District and previously known as the Vlcek Archaeological District) is made up of approximately 38 individual prehistoric sites associated with a system of sandstone/conglomerate outcroppings, and a large, flat-top ridge (Figure 1). “A district is a grouping of sites, buildings, structures, or objects that are linked historically by function, theme, or physical development or aesthetically by plan. The properties within a district are usually contiguous” (Little et al., 2000). The Site 48SU4000 District is considered a unique complex of culturally-affiliated site localities associated with a distinct geographical feature.

A 400-acre block inventory was conducted in Sections 12 and 13, T29N, R108W, to identify and document the nature and extent of the cultural materials associated with the area (Miner, 2001). The original inventory was concentrated along the sandstone outcrops. Most of the inner basin has not been completely inventoried at a Class III level (Current, 2011). More work will be needed and further Tribal Consultation will be needed within the Site 48SU4000 District on a case by case basis according to the existing Jonah Programmatic Agreement (PA). The Site 48SU4000 District is determined eligible to the National Register of Historic Places (NRHP) with State Historic Preservation Office (SHPO) concurrence. Sites within the Site 48SU4000 District have NRHP eligibility recommendations/determinations independent of the Site 48SU4000 District, and range from eligible to non-contributing to not eligible.

The Site 48SU4000 District is located on the divide separating the Sand Wash and Bull Draw drainages, drained primarily by ephemeral tributaries of Sand Draw. The area is characterized by discontinuous narrow sandstone outcrop ridges, monoliths, and boulders bordering and enclosing sand-filled pockets. The valleys separating the ridges exhibit surfaces formed on colluvium, alluvium, and residuum. The Site 48SU4000 District is bounded on the southwest by the scrap of a broad flat-topped ridge. Sediments consist primarily of coarse-grained sand eroded from the sandstone conglomerate bedrock. These sediments form shallow sheet deposits on the adjacent slopes, with localized areas of deeper eolian deposits located on the lee sides of ridges, monoliths, and boulders. Deeper deposits also occur under more sheltered overhangs and in alcoves.

Sites within the Site 48SU4000 District are usually associated with the areas adjacent to outcrop ridges, monoliths, and boulders. Relatively continuous bands of site localities are separated from other site localities by broad areas across the intervening valleys which are largely devoid of cultural materials. “If sites have a direct relationship through cultural affiliation, related elements of a pattern of land use, or historical development, but they are not contiguous and the space between the sites is not significant, then the property is best described as a discontiguous district” (Little et.al., 2000).

Cultural materials associated with the Site 48SU4000 District range from Paleoindian projectile points to ceramics and trade beads to Euro-American historic artifacts; and site types include lithic scatters, lithic landscapes, open camps, quarries, house pits, stone circles, cairns, rock shelters, and historic trash scatters. The cultural chronology spans the Paleoindian period, the Archaic period, the Late Prehistoric period, the Protohistoric period, and the Historic period.

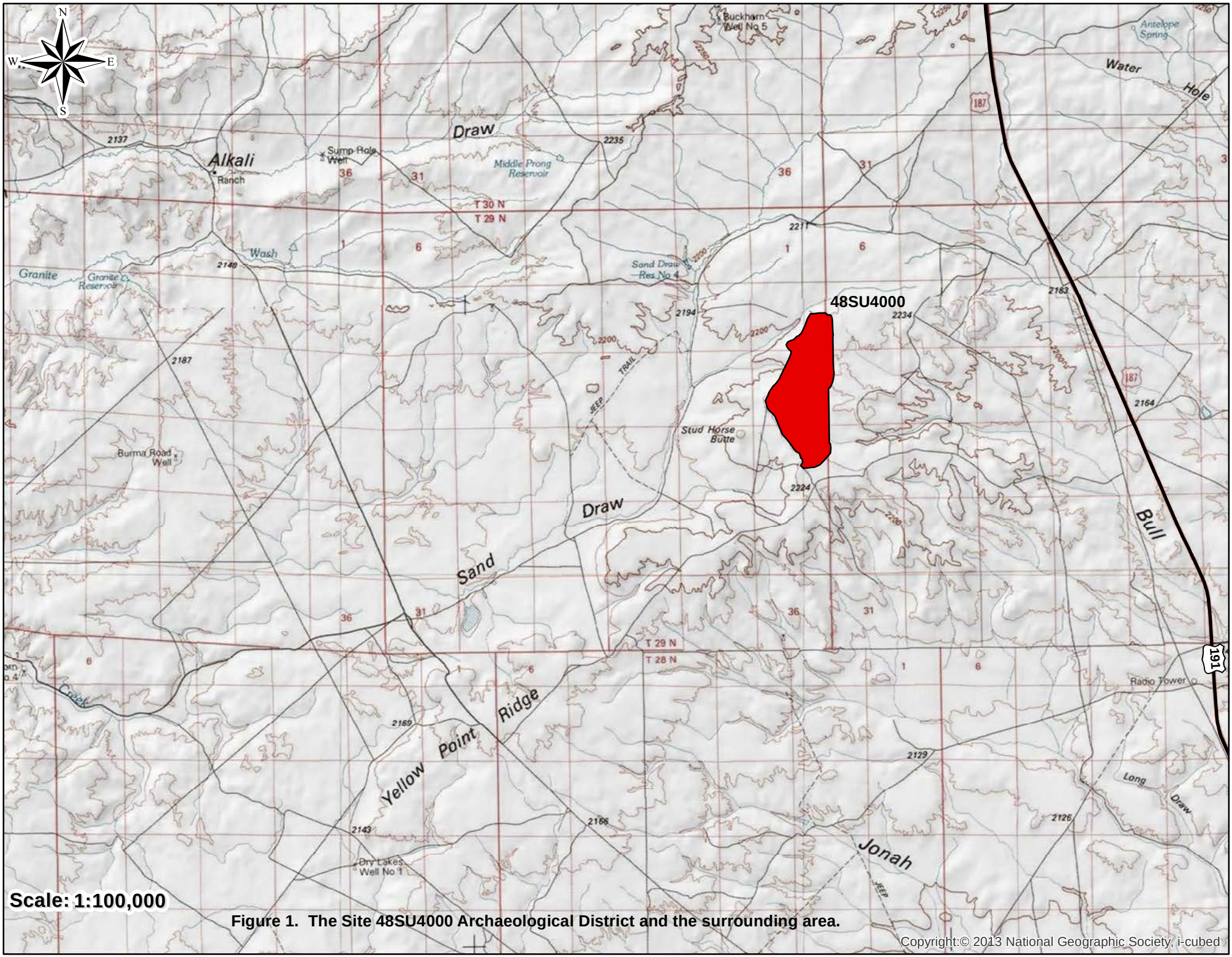

Figure 1. The Site 48SU4000 Archaeological District and the surrounding area.

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Although no human burials have been identified within the Site 48SU4000 District (District), tribal representatives have expressed concerns that burials may be present.

The Site 48SU4000 District has been specifically identified as sensitive by tribal representatives of the Shoshone and Ute. Based on Native American consultation for the Jonah PA, the site was designated as sensitive to Native Americans and placed within Cultural Management Area (CMA)-4 (Bureau of Land Management - BLM, 2015). CMA-4 is a cultural management area consisting of the highly visible and fragile cultural resources of the District (Figure 2). However, no specific management plans were outlined for the District. Instead, management of the District was based on the implication of no further development in the District. In addition, no documentation addressing government-to-government consultation between the BLM and the tribes exits (Drucker, 2016). In the years following the PA's signing, development was allowed within the District. Early development was mitigated by conducting an excavation at the Raven's Nest Site (48SU3871, 48SU3872, and 48SU3873) outside the disturbance areas. However, this was not approved through the appropriate BLM system and was not documented as a "Jonah Squares" funded site excavation as outlined in the PA. The data from the excavation is not available. More recent development (e.g., Humphreys, 2014a and 2014b) was allowed through the standard Section 106 process.

A revised PA has been proposed by the BLM to clarify the management of cultural resources in the Jonah Field. The current boundaries of the Site 48SU4000 District may not accurately contain all components of the District. As documented to date, the District is focused in Sections 12 and 13, T29N, R108W, with some portions expanding into sections to the east and south (see Figure 1). However, tribal representatives have indicated that the boundary is inaccurate and could potentially encompass a much larger area (Drucker, 2016). Further inventory may be proposed to properly define the Site 48SU4000 District boundaries and further Native American consultation may be necessary to address tribal concerns and expectations. In the meantime, under the existing PA, if certain types of sites are encountered (e.g., cairns, stone circles, medicine wheels, rock art, fire hearths, burials, etc.) as applications are submitted to the BLM, the BLM would consult Native American groups.

Sand Draw

Sand Draw is a drainage that flows through the center of the Jonah Gas Field (Figure 3). Sand Draw heads to the northeast on an upland ridge in the South Anticline, and then flows in an S-shaped curve form north to southwest through the Jonah Gas Field, before flowing into the South Desert to the west (McNeese et al., 2006).

The sediments along Sand Draw consist of ancient alluvial fan and terrace deposits that exhibit an oxidized clay-enriched sandy loam Bt horizon over coarse sand (Eckerle and Taddie, 1997). A high number of buried cultural features and components have been discovered in the sediments along Sand Draw as a result of gas field development in the Jonah Gas Field. As a result of the initial discoveries, Eckerle and Taddie (1997) developed an archaeological sensitivity model based on the Burma Road Soil Survey. The coarse-grained sandy sediments were initially described as "San Arcacio Soils", but recent developments have suggested that name is not accurate and further work is necessary to determine the genesis of the sediments (Eckerle, 2015). However, these sediments have proven to be very archaeologically sensitive and site density along Sand Draw is extremely high.

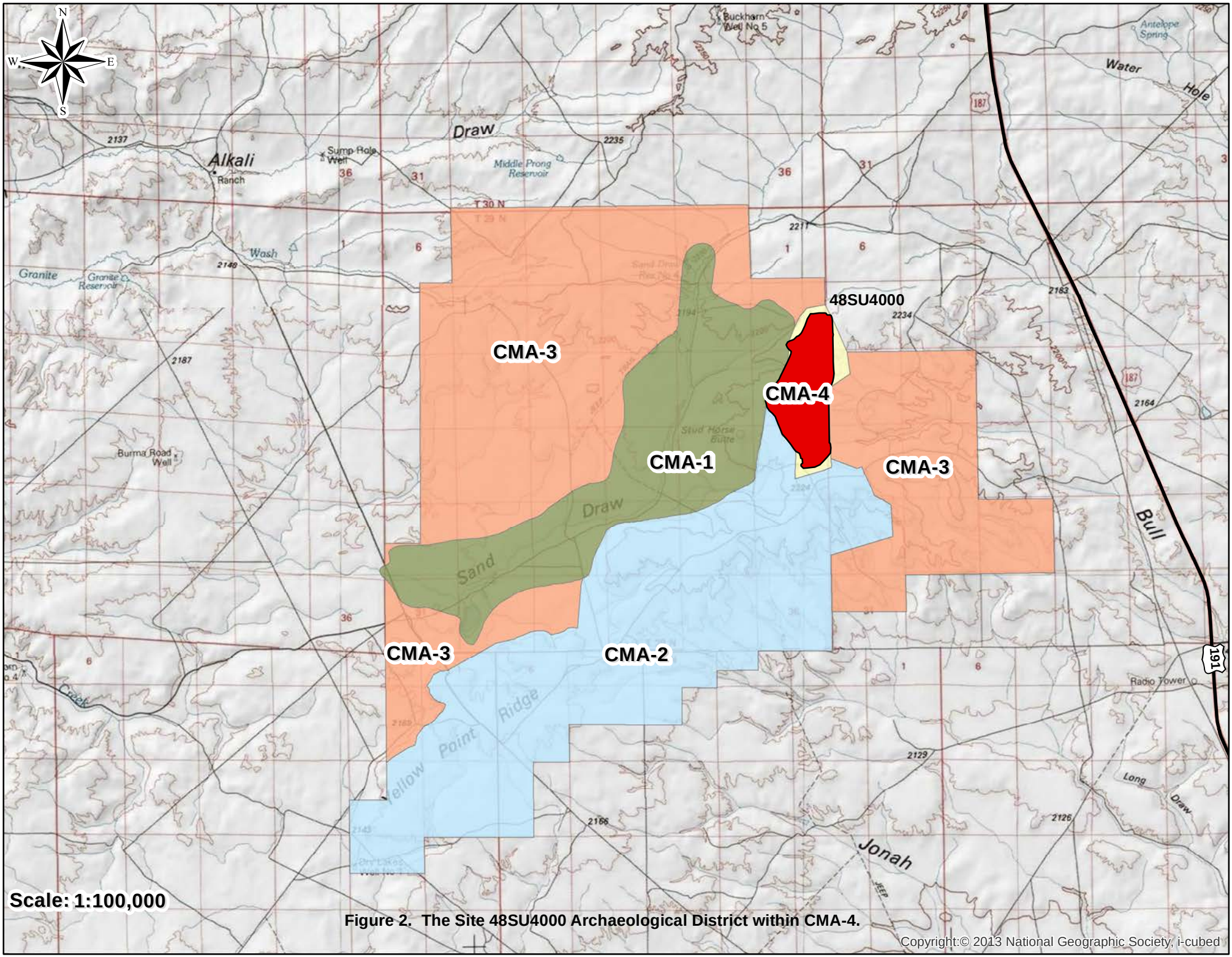

Figure 2. The Site 48SU4000 Archaeological District within CMA-4.

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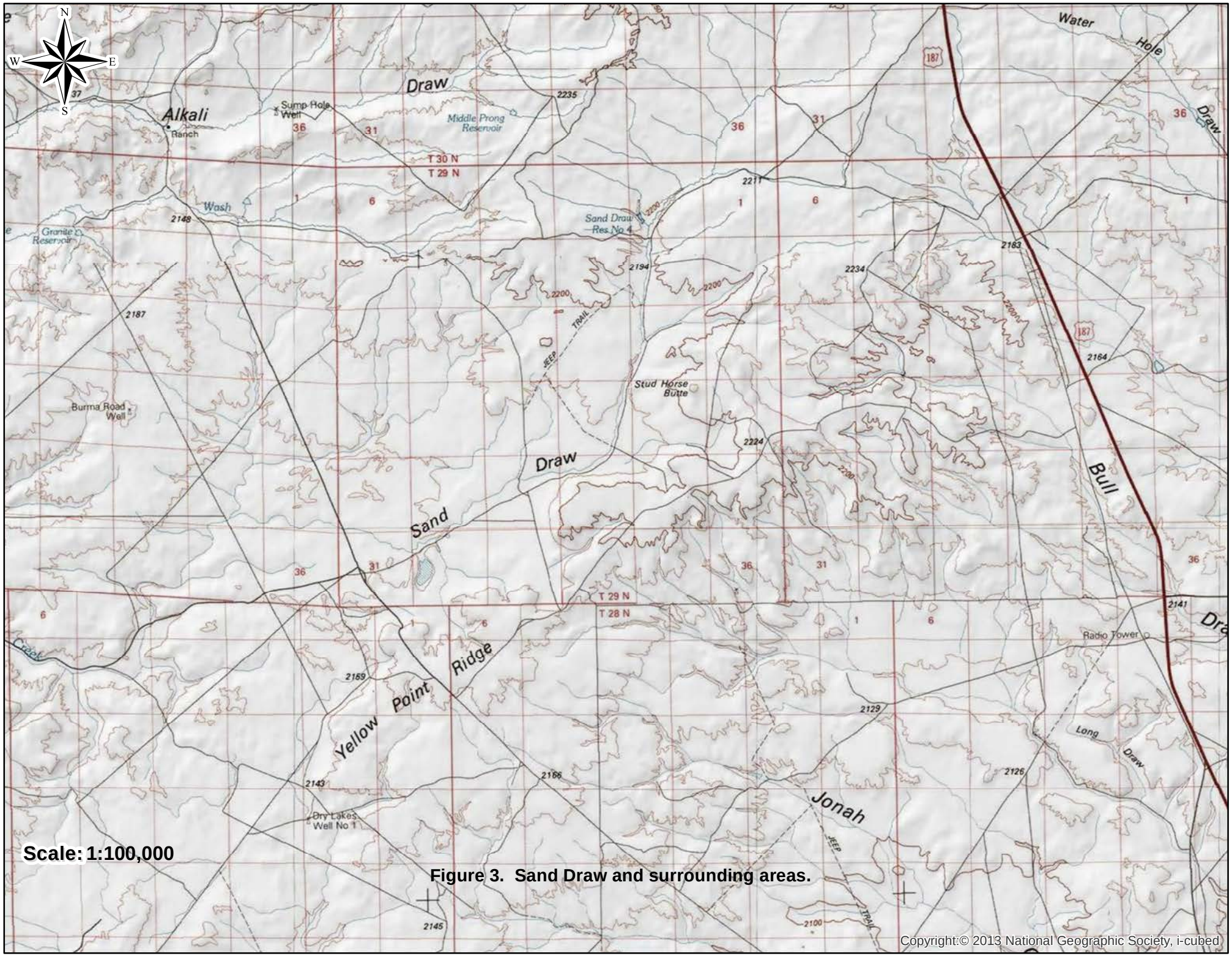

Figure 3. Sand Draw and surrounding areas.

A large number of sites are located along Sand Draw, especially along the lower and central stretches. Many sites were found on the surface during Class III inventories; however, several buried sites, which exhibit no surface manifestations, have been discovered during construction. Site types include, open camps, lithic scatters, isolated features, possible house structures, and a human burial. Most discoveries in the Sand Draw area contain nondescript basin-shaped hearth features with few associated artifacts. However, a few discoveries containing a large number of individual and clustered features and several possible house structures have been discovered. Radiocarbon samples from sites along Sand Draw have provided dates ranging from the Terminal Paleoindian period to the Late Prehistoric Period. However, the majority of dates (especially the house structure sites) fall within the Early and Middle Archaic periods. Recent excavation at Sites 48SU2326 has produced a radiocarbon date of 8600 years B.P. (Buenger, n.d.-a) and a Paleoindian Scottsbluff projectile point was found in a feature during excavation at 48SU3993 (Buenger, n-d.b).

Several possible house structures have been reported and excavated along Sand Draw. Formal block excavations have occurred at the J. David Love site (48SU4479), McKeva Ryka site (48SU2094), and Jonah's House site (48SU2324) while salvage excavations have occurred at the Stud Horse Butte Housepit site (48SU3835), Site 48SU3519, Site 48SU2317, and Site 48SU3291. Human skeletal remains representing the secondary internment of an elderly woman were found in a basin in the floor of one of the structures at the J. David Love site. No other human internments have been found along Sand Draw. Unfortunately, no final data for these sites are available.

The possible house structures along Sand Draw are characterized as "housepits" and "surface structures". Both are relatively shallow and relatively amorphously shaped. In addition, the possible structures contained several interior features and exhibited perimeter postmolds. The morphological characteristics of the possible Sand Draw structures are significantly different than typical house structures in the Wyoming Basin (Larson, 1997; Shields, 1998; Smith, 2003; Smith and McNees, 2003; McNees, 2005; Buenger, 2011; Pastor et al., 2015). More recent excavations at Sites 48SU2326 and 48SU3993 (Buenger, n.d.-a; Buenger, n.d.-b) encountered similar manifestations previously attributed as house structures. Data from these sites indicates that the remains are more representative of activity areas rather than house structures. Recent data has suggested that features previously identified as postmolds may be actually represent the remnants of prehistoric range fires (Drucker, 2016).

Because the Sand Draw area is considered archaeologically sensitive, the PA (BLM, 2015) places the area within CMA-1 (Figure 4). Additional identification efforts beyond Class III inventory may be required in CMA-1. These include, but are not limited to, subsurface evaluation such as backhoe testing, shovel testing, remote sensing, or construction monitoring. A series of backhoe testing projects along Sand Draw was conducted under the PA. Backhoe trenches were excavated at several proposed well pads and pipelines, and units were excavated at many sites. Unfortunately, most of the data regarding these projects is not available. Many of the trenches and excavation units are still open and Title 54 compliance is incomplete. Recent testing at two of the open sites (48SU3975 and 48SU6636) has resulted in eligibility recommendations and assessment of effects, and provided the BLM the data required for Title 54 compliance (Murray, 2015a; Murray, 2015b).

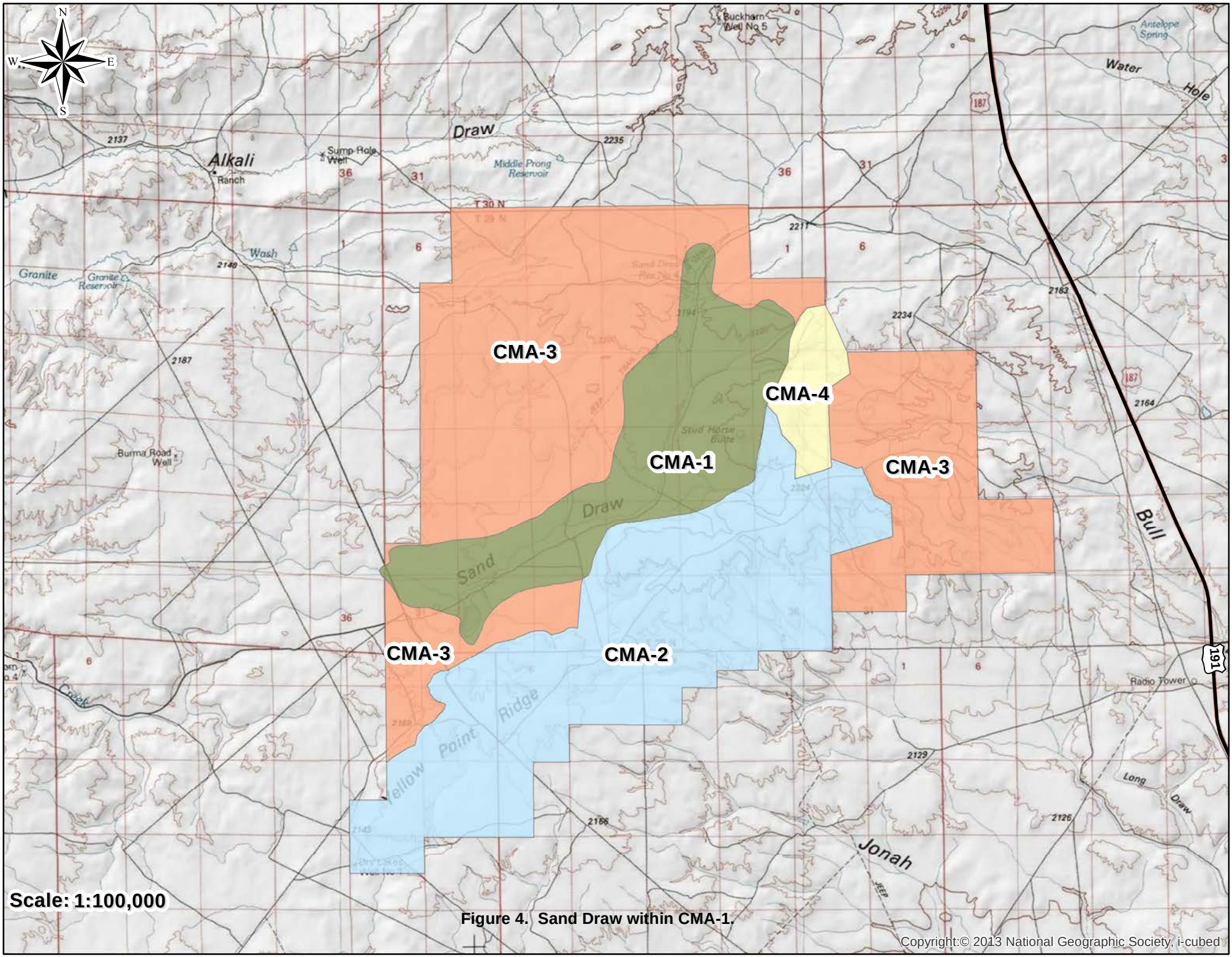

Figure 4. Sand Draw within CMA-1.

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A revised PA has been proposed by the BLM to clarify the management of cultural resources in the Jonah area. To date, only two sites with open trenches and units have been investigated. Several more areas along Sand Draw contain open trenches and units. The identification of open trenches and excavation units, and the completion of evaluating sites and assessing effects may be proposed to address concerns related to unfinished Title 54 work along Sand Draw.

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