1 Vegetation

3 The study area's vegetation includes a mixed

- 4 hardwood forest, conifer glades, riverbank
- 5 vegetation, and maintained areas of open
- 6 mown lawn with remnant ornamental
- vegetation. Vegetation for the study area and
- 8 Morning Star Community landscape character
- 9 area are described in this section.

10

2

- 11 The mixed hardwood forest includes
- 12 southern red oak (Quercus falcata),
- 13 hickory (Carya spp.), maple (Acer spp.), and
- 14 black locust (Robinia pseudo-acacia) as
- 15 predominant tree species. The lower canopy
- 16 is dense, particularly in lower elevations,
- 17 with mulberry (*Morus rubra*), sassafras
- 18 (Sassafras albidum), paw paw (Asimina
- 19 triloba), dogwood (Cornus florida), eastern
- 20 hophornbeam (Ostrya virginiana), and
- 21 leatherwood (Dirca palustris). Understory
- 22 plants include green brier, poison oak, and
- 23 wild grape.

24

- 25 Conifers, including Ashe's juniper (*Juniperus*
- 26 ashei) and eastern red cedar (Juniperus
- 27 *virginiana*) are on drier south facing slopes,
- 28 particularly on the higher elevations of Rush
- 29 Mountain. The Ashe's Juniper glade near
- 30 Morning Star Mine (M1) is described as a
- 31 "Special Element Natural Community"
- 32 by Arkansas Natural Heritage Commission
- 33 and is being monitored.^{3,21} Plants in this
- 34 community are unique to the glade due to
- 35 their requirements for both soil condition and
- 36 topographic aspect.

37

- 38 In areas of mining activities, the forest is in
- 39 varied stages of succession. The south facing
- 40 slope of Rush Mountain was essentially
- 41 cleared of trees during active mining. Today
- 42 the mined slope is forested by eastern red
- 44 3.21 Survey of the Morning Star Mine Interpretive Trail Unit: Botanical Survey of 67 Acres and Recommendations. 45 (Fayetteville: Hinterthuer Botanical Clearance and 46 Inventory, 2005).

- 47 cedar (Juniperus virginiana), chinkapin
- 48 oak (Quercus muehlenbergii), and bitternut
- 49 hickory (Carya cordiformis).

- 51 To the east and north of Rush Mountain.
- 52 the tree canopy is taller and more open,
- 53 presumably the forest has had a longer period
- 54 of time to regenerate since being cut in the
- 55 late 1800s/early 1900s. This forest has fewer
- 56 conifers, and includes maple, oak, and hickory.
- 57 Ferns appear on the northern slope adjacent
- 58 to Monte Cristo Mine (M10).

59

- 60 Riverbank vegetation includes cane breaks,
- 61 cottonwoods, and silver maples adjacent to
- 62 the creeks and Buffalo River.

- 64 Several areas are maintained as open mown
- 65 lawn. Rush Campground, Rush Landing
- 66 Shelter area, Rush Smelter and Morning
- 67 Star Livery Barn area, and House Row have
- 68 maintained landscapes of mown lawn. The
- 69 oldest trees in the study area are those
- 70 associated with specific buildings including
- 71 the former Courthouse site and at House
- 72 Row. These trees include southern red oak
- 73 (Quercus falcata), hickory (Carya spp.), and
- 74 southern catalpa (Catalpa bignonioides).

75

- 76 Non-native exotic plant species are associated
- 77 with areas that were historically yards,
- 78 gardens, or pastures. These were all likely
- 79 planted by the former residents. Extant
- 80 ornamental plant species include iris,
- 81 daffodils, lilac, grape hyacinth, forsythia,
- 82 Russian olive, mimosa, daylilies, and
- 83 flowering quince. Invasive exotic plant species
- 84 are those species planted by residents that
- 85 have now become problematic. These include
- 86 Japanese honeysuckle (Lonicera japonica),
- 87 Sericea lespedeza (Lespedeza cuneata),
- 88 multiflora rose (*Rosa spp.*), and yellow rocket
- 89 (Barbarea vulgaris). 3.22 Non-native exotic
- 90 grasses have been found along Rush Road

91

^{92 3.22} Botanical Survey of 67 Acres and Recommendations.



Figure 3-85. Mixed hardwood forest near the Rush Blacksmith Shop. (Mundus Bishop 2017)



Figure 3-86. Oak-Hickory forest near Monte Cristo Mine (M10). (Mundus Bishop 2017)

1 and include fescue (Lolium arundinaceum), 2 downy brome (*Bromus tectorum*), Kentucky 3 bluegrass (Poa pratensis), Johnsongrass 4 (Sorghum halepense). 5 6 Assessment of Integrity 7 Prior to active mining, the study area was 8 heavily forested. The forest was clear cut to 9 accommodate mining activities and to fuel 10 mill machinery and homes. Bare hillsides 11 surrounding the developed area are evident 12 in historic photographs. Since the end of the 13 period of significance, the hardwood forest 14 has regrown and obscured relationships 15 between historic spaces. Dense understory 16 vegetation obscures features, making it 17 difficult to discern the study area's historic 18 appearance. Overgrown vegetation obscures 19 historic foundation ruins, spoils piles, and 20 mines, making it difficult to understand 21 the size and scale of mining and building 22 development. Vegetation has not regrown in 23 some places, most notably at the tailings pile 24 below Morning Star Mill ruins. 25 26 Present-day vegetation patterns and species 27 differ from the period of significance. 28 Historic man-made clearings are overgrown, 29 diminishing historic patterns of use and 30 settlement. The dense vegetation growing in 31 formerly cleared areas does not contribute 32 to the significance of the study area. The 33 vegetation in other areas, including the 34 mixed hardwood forest, conifer glades, 35 and riverbank vegetation contribute to the 36 character of the study area. Areas of open 37 mown lawn, ornamental vegetation, and 38 extant trees associated with specific buildings 39 retain integrity and contribute to the cultural 40 landscape. 41 42 43

44 45 46



Figure 3-87. Ashe's juniper glade near Morning Star Mine (M1). (Mundus Bishop 2017)



Figure 3-88. Successional forest near Yellow Rose Mine Complex (M7) and Edith Mine Complex (M12). (Mundus Bishop 2017)

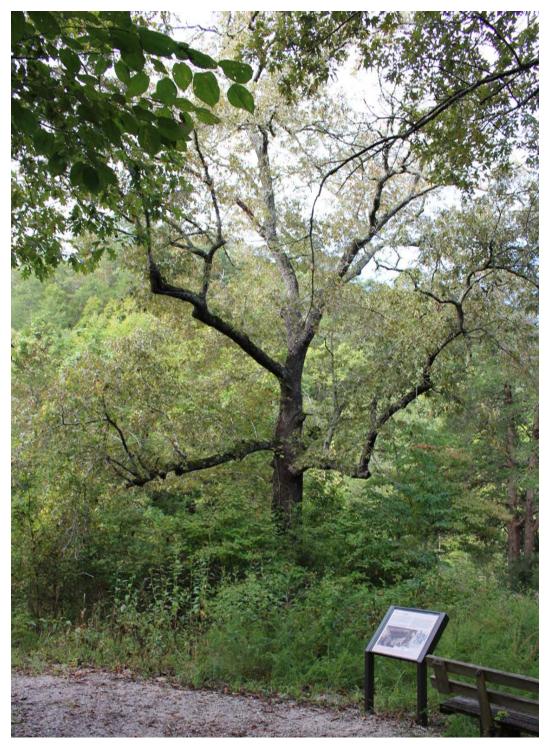


Figure 3-89. Several large oak and hickory trees are extant from the period of significance, located near extant buildings and ruins. (Mundus Bishop 2017)

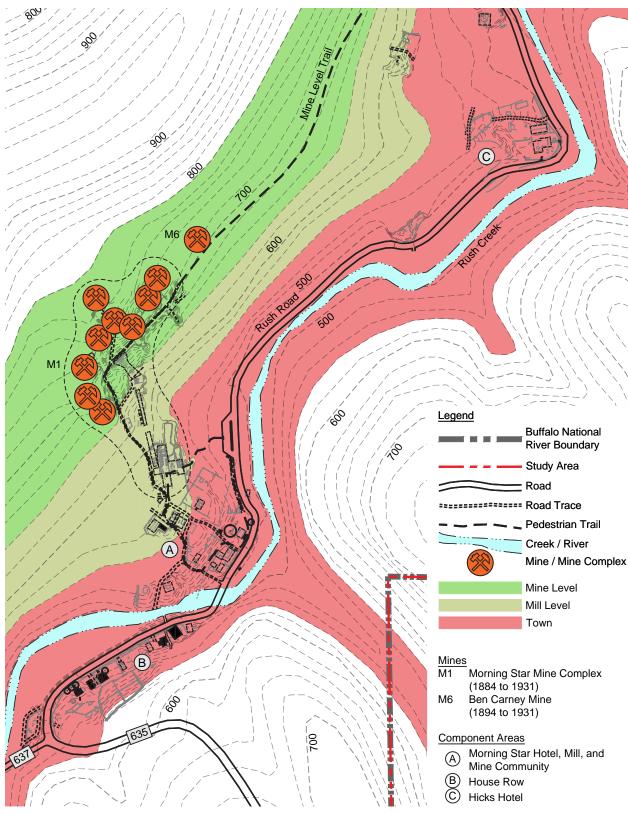
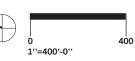


Figure 3-90. Morning Star Community landscape character area is set in the valley of Rush Creek. The town was developed on relatively flat bottomland, with Morning Star Mill set on a terrace on Rush Mountain. The mines were located further up the hill. The area includes standing buildings including the Rush Smelter, Taylor-Medley General Store, Rush Blacksmith Shop, and numerous ruins including the Morning Star Mill ruins, and Hicks General Store ruins.



(Mundus Bishop 2017, USGS 2013 - National Geographic Society, Arkansas GIS, Google Maps 2017, Historic Resource Documentation Morning Star Mines Interpretive Area, Cultural Landscapes Inventory 2012)

Morning Star Community Landscape Character Area

- 1 Morning Star Community landscape character
- 2 area represents the most intensely developed
- 3 area in Rush Historic District. Built primarily
- 4 between the late 1880s and 1930s, the
- 5 community developed due to the prosperous
- 6 Morning Star Mine (M1). Major features
- 7 include Morning Star Mine, the Morning Star
- 8 Mill, Rush Blacksmith Shop, Rush Smelter,
- 9 buildings at House Row, Hicks Hotel, and
- 10 Hicks General Store.
- 11
- 12 This section describes the existing condition
- 13 of the Morning Star Community landscape
- 14 character area, and analyzes its integrity. It
- 15 is organized to describe the entire landscape
- 16 character area as a whole, followed by
- 17 descriptions of three component areas.
- 18
- 19 Morning Star Hotel, Mill, and Mine
- 20 Community
- 21 House Row
- 22 Hicks Hotel
- 23
- 24 Spatial organization, circulation, and
- 25 vegetation is described for the Morning
- 26 Star Community landscape character area
- 27 as a whole, and is presented first. The three
- 28 component areas are described separately
- 29 and are presented last.
- 30

31 Spatial Organization

- 32
- 33 Morning Star Community landscape character
- 34 area is set in the valley floor of Rush Creek
- 35 with steep hillsides to the north and south.
- 36 Rush Creek and Rush Road define a central
- 37 spine through the community from which
- 38 buildings and developments are offset.
- 39 The Morning Star Community landscape
- 40 character area consists of House Row to
- 41 the east, Morning Star Hotel, Mill, and Mine
- 42 Community in the middle, and Hicks Hotel on
- 43 the west.

- 44 House Row is situated on the east side of Rush
- 45 Creek, set parallel to Rush Road. Structures
- 46 face the road in an open area framed by
- 47 dense forest. House Row is distinct from the
- 48 remainder of the Morning Star Community
- 49 landscape character area, separated by Rush
- 50 Creek and dense vegetation.
- 51
- 52 Morning Star Hotel, Mill, and Mine are on a
- 53 terrace and hillside of Rush Mountain. An
- 54 open lawn is in front of, and surrounding, the
- 55 extant Rush Smelter and foundation of the
- 56 non-extant Morning Star Livery Barn. Forest
- 57 vegetation covers the sites of the Post Office
- 58 ruins, Courthouse site, Barn Ruins, Doctor's/
- 59 maxey House Ruins, Morning Star Hotel ruins,
- 60 Lyons House Ruins, Warehouse ruins, Chase
- 61 and Mulholland Store ruins, and Morning Star
- 62 Mine Office ruins. Morning Star Mill ruins are
- 63 set on a level terrace above the rest of these
- 64 structures.
- 65
- 66 Hicks Hotel is on the east side of the
- 67 landscape character area, set on an elevated
- 68 terrace above a bend in Rush Road. It is
- 69 physically distinct from the other component
- 70 areas, separated by topography.
- 71
- 72 Assessment of Integrity
- 73 Historically the three component areas were
- 74 visually and physically connected. Forest
- 75 vegetation was kept to a minimum during
- 76 the period of significance and open pastures
- 77 and yard spaces allowed for lines of sight
- 78 and views across the landscape. Circulation
- 79 routes physically connected the Morning
- 80 Star Community landscape character area,
- 81 including Rush Road and other vehicular
- 82 routes through the Morning Star Hotel, Mill,
- 83 and Mine Community.
- 84
- 85 Few changes have been made to the spatial
- 86 organization since the end of the period



Figure 3-91. House Row contains the highest number of extant buildings in the study area. It is situated on the east side of Rush Creek, set parallel to Rush Road. An open lawn area surrounds the five extant buildings, framed by dense forest and shade trees that date to the period of significance. Former yard and pasture areas were located behind the buildings. (Mundus Bishop 2017)



Figure 3-92. Morning Star Trail at the Rush Blacksmith Shop and site of the Morning Star Mine Office ruins. (Mundus Bishop 2017)

- 1 of significance, except for loss of visual
- 2 connections. Vegetation growth has resulted
- 3 in loss of connections between spaces.
- 4 The spatial organization of Morning Star
- 5 Community landscape character area retains
- 6 integrity and is a contributing feature of the
- 7 study area.

8

9 Circulation

10

- 11 M within the Morning Star Community
- 12 landscape character area includes Rush Road
- 13 as the main vehicular route, abandoned
- 14 roads to Morning Star Mill, and Hicks Hill
- 15 Road Trace. Pedestrian circulation includes
- 16 Morning Star Trail that connects to the Mine
- 17 Level Trail (described previously under Study
- 18 Area).

19

- 20 Rush Road is the central spine of the
- 21 landscape, and is the only circulation route
- 22 for House Row, where it is wide enough for
- 23 parallel parking adjacent the structures. Slight
- 24 grade changes between some of the houses
- 25 indicate former driveways.

26

- 27 At Morning Star Hotel, Mill, and Mine
- 28 Community, Rush Road is the only vehicular
- 29 route. Two road traces connect to Rush
- 30 Road on either side of the Morning Star
- 31 Hotel ruins. These routes are separated
- 32 from Rush Road by a change in grade and
- 33 are mostly overgrown with vegetation. The
- 34 route furthest east continues north, uphill
- 35 towards Morning Star Mine Office ruins. The
- 36 west route continues north uphill where
- 37 it connects to an east-west route below
- 38 Chase and Mulholland Store Ruins. Based on
- 39 historic maps, this road once crossed Rush
- 40 Creek, further north and west of the existing
- 41 crossing. This portion of the route was not
- 42 verified during field investigations. The
- 43 network of roads at Morning Star Hotel, Mill,
- 44 and Mine Community form a grid, connecting
- 45 Rush Road with buildings on the hillside and
- 46 the mine. These routes are overgrown with

- 47 young vegetation but are legible as former
- 48 routes.

49

- 50 Vehicular circulation at Hicks Hotel is
- 51 provided by Rush Road and a road trace to the
- 52 east of Hicks General Store ruins. This route
- 53 is not legible at the intersection with Rush
- 54 Road, but becomes more evident as it ascends
- 55 the hillside north of the store. Although
- 56 overgrown with young trees it is visible as a
- 57 slight trace.

58

- 59 Pedestrian circulation includes Morning Star
- 60 Trail. This trail makes a loop through Morning
- 61 Star Hotel, Mill, and Mine Community. It
- 62 begins at the parking at Rush Road, below
- 63 Morning Star Mill ruins. The trail follows
- 64 the remnant historic roads for a portion of
- 65 its length. It crosses behind Morning Star
- 66 Hotel ruins, and at Morning Star Mill ruins
- 67 it becomes a new route across the historic
- 68 retaining wall to descend the hillside.

69

- 70 Morning Star Trail connects to the longer
- 71 Mine Level Trail on the hillside above
- 72 the Morning Star Hotel, Mill, and Mine
- 73 Community on Rush Mountain. The Mine
- 74 Level Trail follows the alignment of the
- 75 former trail and tramway that led to Morning
- 76 Star Mine (M1), used by miners during the
- 77 period of significance.

78

- 79 Assessment of Integrity
- 80 The current vehicular circulation within
- 81 Morning Star Community landscape
- 82 character area follows the same configuration
- 83 as during the period of significance.
- 84 Historically, pedestrian circulation took
- 85 place on roadways. The Morning Star Trail
- 86 provides visitor access and waysides convey
- 87 interpretive information, but they both
- 88 disrupt historic spatial patterns and are not
- 89 contributing features.

90

- 91 All vehicular routes retain integrity and
- 92 contribute to the cultural landscape. Rush



Figure 3-93. The opening in the woodland vegetation marks the foundation of Morning Star Livery Barn and provides a view from Rush Road into the formerly developed area. (Mundus Bishop 2017)



Figure 3-94. Morning Star Mill ruins include a series of concrete and stone piers, a stone retaining wall at the northern slope, a concrete platform for the engine, and a stone and brick boiler room. The mill is set on a level terrace above the remainder of Morning Star Hotel, Mill, and Mine Community. (Mundus Bishop 2017)

1	Road retains the original alignment and	47 Community landscape character area. Overall
	remains the major route through Morning	48 vegetation was much sparser than it is today,
	Star Community landscape character area. A	49 particularly the forests. By the 1950s and
	newer parking lot below Morning Star Mill	50 1960s, hillsides reforested naturally making
	ruins was established by the NPS in 1988 and	51 Morning Star Community landscape character
	does not contribute to the cultural landscape.	52 area overgrown with trees and underbrush.
7	Mining Company roads are in fair to poor	53 Extant large trees that date from the period
8	condition but retain original alignments	54 of significance, ornamental vegetation,
	and integrity. Since the end of the period of	55 and open lawn areas around House Row
	significance, roads other than Rush Road have	56 and Rush Smelter assist in maintaining the
	been closed off and are in various states of	57 historic character of the landscape character
	deterioration.	58 area. These latter vegetation patterns retain
13		59 integrity and contribute to the cultural
14	Vegetation	60 landscape.
15		61
16	Morning Star Community landscape character	62
	area's vegetation consists of oak hickory	63
	forest on the hillsides of Rush Mountain,	64
	and cleared areas around building clusters.	65
	Grasses are mown around the structures	66
21	at House Row, and Rush Smelter and the	67
22	Morning Star Livery Barn ruins. A row of trees	68
	lines Rush Road at House Row. Evidence of	69
24	historic gardens and perennial plantings is	70
	extant including iris, daffodils and roses at	71
	House Row. Historic trees, evidenced by their	72
	large size, are near the former Courthouse	73
28	site and Morning Star Livery Barn ruins.	74
29	Ornamental plantings including daffodils,	75
30	daylilies, and flowering quince, are extant	76
31	at Hicks Hotel. Other historic plantings may	77
32	include roses, lilac, grape hyacinths, forsythia,	78
33	Russian olive, and mimosa. ^{3,23}	79
34		80
35	Assessment of Integrity	81
36	During the period of significance, vegetation	82
37	was maintained around buildings and	83
38	structures. Forest vegetation was cleared	84
39	on the hillsides, and gardens, lawns, and	85
40	shade trees were planted and maintained as	86
41	residential landscapes.	87
42		88
43	Through the 1930s, vegetation was kept	89
44	low and to a minimum within Morning Star	90
45		91
46	3.23 Botanical Survey of 67 Acres and Recommendations.	92

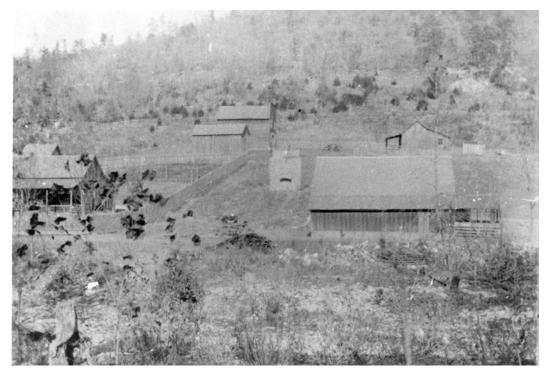
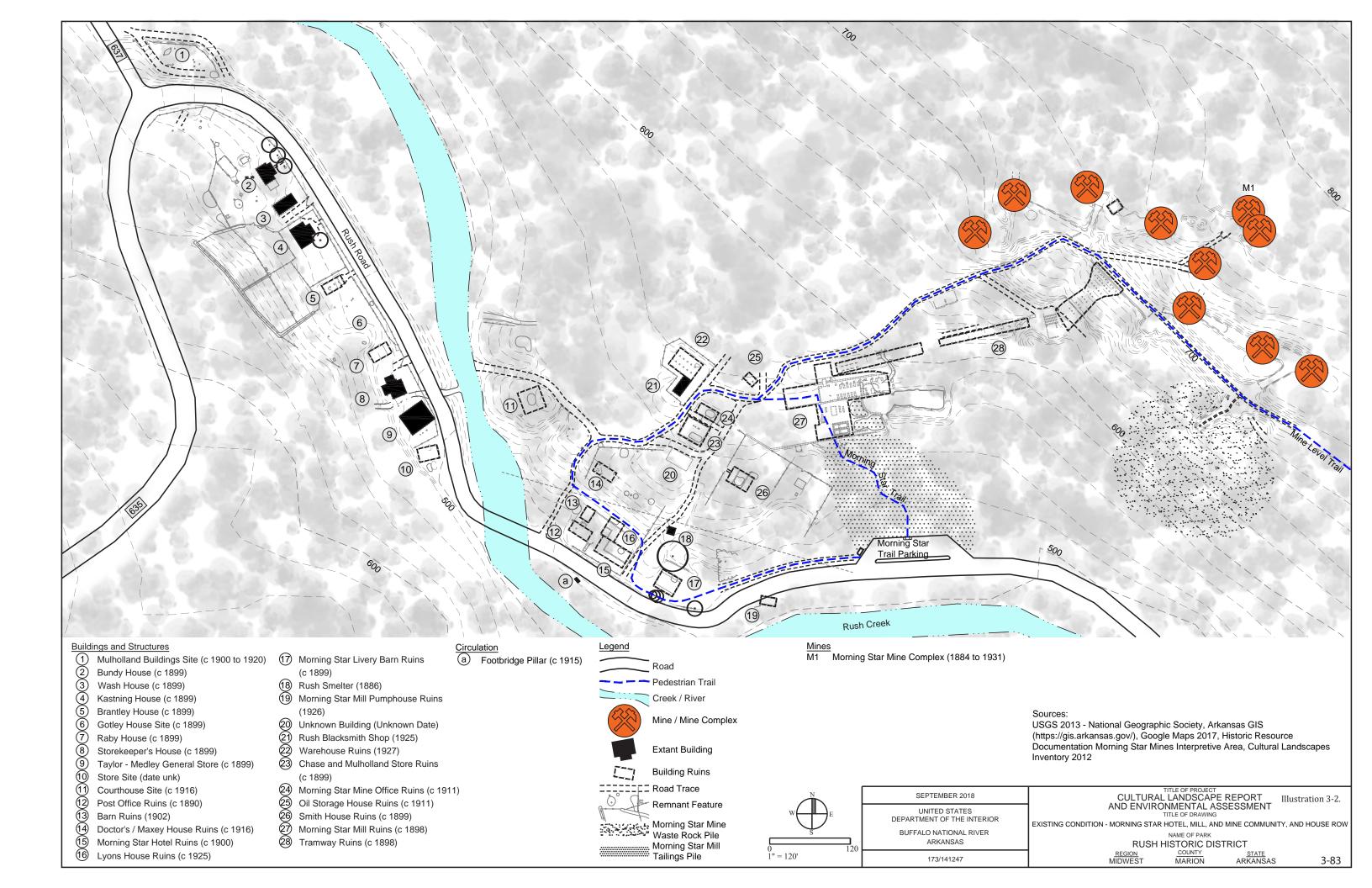


Figure 3-95. Morning Star Hotel, Mill, and Mine Community includes the ruins of several buildings and structures. Left to right, Morning Star Hotel, Chase and Mulholland Store, Morning Star Mine Office, Rush Smelter, Morning Star Livery Barn, and Smith House. (BUFF Archives)



Figure 3-96. Extant trees and ornamental vegetation at Hicks Hotel assist in maintaining the historic character of the landscape character area. (Mundus Bishop 2017)



1 Morning Star Hotel, Mill, and Mine 47 organization since the end of the period 2 Community 48 of significance. In 1988 the NPS added the 49 Morning Star Trail that forms a loop through **4 Spatial Organization** 50 the Morning Star Hotel and Mill. The trail 51 crosses Morning Star Mill ruins and Morning 6 Morning Star Hotel, Mill, and Mine 52 Star Mill Stone Retaining Wall, dividing the 7 Community is set on the north side of Rush 53 space. This diminishes the sense of the size 8 Creek on the slope of Rush Mountain. The 54 of the terrace and mill operation. In another 9 ruins of the Morning Star Hotel, Post Office, 55 location, the trail crosses a former yard space 10 Courthouse, and Morning Star Livery Barn 56 behind Morning Star Hotel ruins. Together, 11 are located closest to Rush Road. Uphill 57 the trail and dense vegetation diminish the 12 and in a small cleared area is the extant 58 historic spatial relationships. 13 Rush Blacksmith Shop, and the ruins of 59 14 the Morning Star Mine Office, Chase and 60 The growth of vegetation over time has 61 diminished the setting and feeling as it 15 Mulholland Store, and Warehouse. The 16 Morning Star Mill ruins are on a level terrace 62 obscures the scale of the historic mining 17 west and uphill of the Morning Star Mine 63 operations. The extent of the community is no 18 Office ruins. Morning Star Mine (M1) is 64 longer evident due to the loss of buildings and 19 located further uphill of Morning Star Mill 65 overgrown vegetation. This acts to visually 20 ruins. 66 separate the mill ruins from the adjacent 21 67 community. 22 An open lawn surrounds the extant Rush 68 23 Smelter. This opening in the woodland 69 Buildings and Structures/Ruins 24 vegetation marks the foundation of Morning 70 25 Star Livery Barn ruins and provides a view 71 The only standing buildings and structures 26 from Rush Road into the formerly developed 72 are the Rush Blacksmith Shop and Rush 27 area. Forest vegetation covers the ruins of 73 Smelter. These date from the period of 28 Morning Star Hotel, Courthouse, and Post 74 significance and retain integrity. Most 29 Office. 75 buildings and structures are ruins, including 76 Morning Star Hotel, Morning Star Mine 30 77 Office, Morning Star Livery Barn, Post Office, 31 The extant Rush Blacksmith Shop and ruins of 32 the Warehouse. Chase and Mulholland Store. 78 Courthouse, Chase and Mulholland Store. 33 and Morning Star Mine Office are separated 79 and Warehouse. In some cases, foundations, 34 by dense vegetation and topography from 80 footings, chimneys, and other evidence of 35 Morning Star Hotel ruins. 81 buildings are visible on the surface. Other 82 resources likely remain below-grade. 37 Morning Star Mill is set on a level terrace 83 38 slightly uphill and east of Morning Star Mine 84 After the period of significance buildings 39 Office. Mill ruins are oriented parallel to the 85 were abandoned. Some were dismantled 86 by the Morning Star Mine Company, i.e., the 40 hillside contours. Above the mill is Morning 41 Star Mine (M1). Directly to the south and 87 Chase and Mulholland Store and Morning 42 downhill is the mill's tailings pile that is 88 Star Mine Office that was demolished in the 43 sparsely vegetated and extends to Rush Road. 89 1960s. Others either collapsed or burned 90 later. Overgrown vegetation growth obscures

45 Assessment of Integrity

46 Few changes have been made to the spatial

91 many building locations, making it difficult

92 to discern the mass, scale and extent of the



Figure 3-97. Morning Star Hotel, date unknown. (BUFF Archives)



Figure 3-98. Stone retaining wall rubble near Morning Star Hotel ruins, Lyons House ruins, Post Office ruins, and Barn ruins area. (Mundus Bishop 2017)

1 historic development of Morning Star Hotel, 47 the open cut conceals its full length. Morning 2 Mill, and Mine Community. 48 Star Mine also includes at least 6 adits at the 49 same elevation that extend into the rock face 4 Morning Star Mill 50 west of the open cut. The overhang on most 51 portals are cracked and some are collapsed. 5 6 Morning Star Mill was built in 1898 and was 52 Additional adits extend into the hillside above 7 connected to Morning Star Mine (M1), Ben 53 with no obvious portal. Morning Star Mine 8 Carney Mine, and Capps Mine (M11) by an 54 open cut and adits are revegetated. The mines 9 elevated tramway. Today mill ruins include a 55 are not easily seen from the Mine Level Trail 10 series of parallel concrete and stone piers, a 56 due to the overgrown vegetation. Chainlink 11 stone retaining wall at the northern slope, a 57 fencing secures the main entrance into 12 concrete platform for the engine and a stone 58 Morning Star Mine open cut and adits. Portals 13 and brick boiler room. A stone retaining 59 also have metal grates. An enormous spoils 14 wall extends east to west along the hillside 60 pile extends south downhill from Morning 15 providing level space for mill building and 61 Star Mine to the edge of Rush Road. Today 16 operations. A large retention basin is extant to 62 the spoils pile is covered with trees, making it 17 the south, excavated into the earth and fed by 63 difficult to discern its immense size. 18 a small natural drainage from Rush Mountain. 64 19 Tailings piles are to the south and downhill of 65 Assessment of Integrity 66 The Morning Star Mine (M1) retains historic 20 the mill. The mass and scale of this building 21 and its relationship to other mine features 67 integrity and contributes to the cultural 22 is not discernible today due to overgrown 68 landscape. 23 vegetation. 69 24 70 Small Scale Features 25 Assessment of Integrity 26 The Rush Blacksmith Shop and Rush Smelter 72 Contributing small scale features include 27 retain historic integrity and contribute to the 73 stone retaining walls, a concrete pier possibly 28 cultural landscape. Non-extant buildings from 74 for a footbridge adjacent Rush Creek, a scale 75 pit, cellar depressions, and trash pits. A dry-29 the period of significance are evident as ruins. 76 stacked stone retaining wall extends at the 30 Their absence diminishes the integrity of the 31 study area. 77 edge of the tramway, varying in height at the 78 lower edge of the tramway. This dates from 32 79 the period of significance. The scale pit is 33 Mines 80 between the former Chase and Mulholland 34 35 *Morning Star Mine (M1) (1884 to 1935)* 81 Store and Morning Star Mine Office. The 82 scale pit was used to weigh the ore once 36 Morning Star Mine (M1) was active from 1884 37 to 1935. It was the first and most famous 83 it left the mill. Today the pit is visible as a 38 mine in Rush Historic District. 84 clear depression between the two building 39 85 foundations. 40 A portion of the Morning Star Mine (M1) 86 41 consists of an open-pit mine – a long narrow 87 Historic photographs indicate that during the 42 open cut, approximately 400 feet long, 100 88 period of significance small scale features 43 feet wide and 50 feet deep. The open cut 89 were limited to fences, retaining walls, 44 is the most obvious feature of the mine, 90 garbage pits, and the scale pit. Fences appear

45 although it is not readily visible from the

46 Mine Level Trail. Rock fall within a portion of

91 to have been wood post with horizontal wood

92 rails. These are not extant.



Figure 3-99. Morning Star Livery Barn, 1926. (BUFF Archives)



Figure 3-100. Morning Star Livery Barn ruins. (Mundus Bishop 2017)

1	Assessment of Integrity	47 By the 1960s, after buildings were
2	Since the period of significance features	48 abandoned, this area reforested naturally
3	have deteriorated and it is likely that many	49 and the once sparsely vegetated area became
4	have been lost, or exist as archeological	50 overgrown with trees and understory species.
5	remains. Additions made after the period of	51 This vegetation does not contribute to the
	significance include contemporary fences,	52 study area and due to the dense vegetation it
		53 is difficult to discern the community spaces.
	contributing.	54
9	J	55 Extant large trees near the former Courthouse
10	Vegetation	56 site and Morning Star Livery Barn ruins date
11		57 from the period of significance and contribute
12	Vegetation at Morning Star Hotel, Mill, and	58 to the cultural landscape. The open area
	Mine Community includes oak hickory forest	59 of mown grasses at the Rush Smelter also
	and grasses are around buildings. Mown	60 contributes to the study area, as this area has
	grasses are at the Rush Smelter and Morning	61 historically grassed with few trees.
	Star Livery Barn ruins. Grasses and low	62
	shrubs occur at the Morning Star Mine Office	63
	ruins, obscuring the foundation. Vegetation	64
	at Morning Star Mill ruins is limited to young	65
	trees, grasses, and smaller shrubs including	66
	smooth sumac (<i>Rhus glabra</i>). Groves of	67
	eastern red cedar grow over the mill boiler	68
	room, engine room, retaining walls, and	69
	retention basins.	70
25		71
	Extant historic trees are near the former	72
	Courthouse site and Morning Star Livery Barn	73
	ruins. These include large oak, hickory, and	74
	catalpa trees. Dense vegetation covers the	75
	sites of the Morning Star Hotel ruins, Post	76
	Office ruins, Courthouse site, Smith House	77
	ruins, and Oil Storage House ruins.	78
33	,	79
34	Assessment of Integrity	80
	During the period of significance, the area	81
	was largely cleared of trees except for a few	82
	that provided shade at buildings. Historic	83
	photos from the 1900s indicate a fenced lawn	84
	at the Morning Star Hotel, encompassing the	85
	hotel, post office, and barn. A fenced lawn was	86
	also at the Smith House. Shade trees edged	87
	the perimeter of the lawn and at building	88
	entrances. A fenced pasture surrounded the	89
	Morning Star Livery Barn. Trees had been cut	90
	on the slope around the mill and mines.	91
46	•	92



Figure 3-101. Oil Storage House ruins. (Mundus Bishop 2017)



Figure 3-102. Stone retaining wall at Chase and Mulholland Store. (Mundus Bishop 2017)