

**EXECUTIVE SUMMARY**  
**Final Wilderness Character Inventory Evaluation**  
**June 26, 2001**

**INVENTORY AREA: Vermillion Basin**

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**FINDINGS SUMMARY:** The Vermillion Basin inventory area cumulatively contains 81,028 acres of BLM-administered public land in five separate inventory units. Most of the area (77,067 acres) has wilderness character. Sixteen specific locations within the inventory area (totaling 3,961 acres) are not natural appearing in the landscape and lack wilderness characteristics. Table 1 shows these wilderness character acreage findings - by specific inventory unit and for the Vermillion Basin inventory area as a whole.

**Table 1- Wilderness Character Acreage Findings**

Inventory Unit	Total Acres With/Without Wilderness Character		Grand Total Acres
	With Wilderness Character	With No Wilderness Character	
1	41,752	3,812	<b>45,564</b>

2	7,377	0	7,377
3	10,195	9	10,204
4	11,329	129	11,458
5	6,414	11	6,425
<b>Grand Total Acres</b>	<b>77,067</b>	<b>3,961</b>	<b>81,028</b>

**INVENTORY AREA LOCATION AND SETTING:** The Vermillion Basin inventory area is located in northwest Moffat County, approximately 80 miles northwest of Craig, and about eight miles south of the Colorado-Wyoming state line. Dinosaur National Monument is six miles to the southwest at its closest point. While both state and privately owned lands are excluded from this wilderness character inventory, there are 1,923 acres of state land and 626 acres of private land within the inventory area's exterior boundary. The boundaries of the five separate inventory units follow a combination of roads and state/private property lines. Seventeen roads are cherry-stemmed out of the inventory area.

#### **EVALUATION CRITERIA AND UNIT ANALYSIS:**

**Size Criteria:** Determine if the area "...has at least 5,000 acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition."

**Finding:** Each of the five separate inventory units meets the 5,000-acre size criteria threshold. See Table 1 for unit-by-unit acreage totals.

**Naturalness Criteria:** Determine if the area "...generally appears to have been affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable."

**Finding:** Each of the five separate inventory units meets the naturalness criteria on at least 5,000 acres. See Table 2 for a unit-by-unit acreage breakdown tied to the naturalness characteristic.

**Inventory Unit 1:** Most of Unit 1 (41,752 acres) appears to have been affected primarily by the forces of nature and retains its natural character. Human impacts are substantially unnoticeable in this portion of the unit and, for the most part, the unit's narrow ridgelines, steep draws, sandstone cliffs, and threadlike canyons with their confined valley floors have not experienced much in the way of human-caused surface disturbance. The few ways present on the ridgetops and wash/valley bottoms are widely scattered and have become substantially unnoticeable in the landscape. Today, most are little more than parallel tire-track routes. Remnants of old seismograph line routes can also be found. These ways and traces of old seismograph line routes do not substantially impact the overall naturalness of the inventory unit. Several

factors contribute to this condition. First, minimal construction was used in their initial development. And second, they have received very little use, show the effects of natural erosion, and are often hidden by vegetative regrowth and/or screening. Several livestock reservoirs and fences are widely dispersed and inconspicuous. Many of these reservoirs have not been maintained on a regular basis, or at all, in recent years. Some are silted in with vegetation growing in the bottom, while others have been breached or hold little water, and have revegetated on one or both sides of their earthen berms. These conditions reduce greatly any visual impact they may present to visitors. A few of these reservoirs were constructed so long ago that there is little indication of the original routes leading to them. The four oil/gas well pads within Unit 1 are grown over with vegetation and difficult to find. One small wildlife guzzler, located just off Moffat County Road 10W in Irish Canyon, is hidden for the most part by vegetation and is not substantially noticeable in the landscape. Although there are minor scattered impacts noticeable from some locations within the inventory unit, this 41,752-acre portion of Unit 1 still retains its natural character. However, substantially noticeable and extensive impacts totaling 3,812 acres exist on eight specific areas within inventory Unit 1. These are unnatural in appearance due to the presence of range developments, a small portion of a cultivated pasture area, utility line poles/conductors, fence lines, and old bulldozed routes and vehicle ways.

**Inventory Unit 2:** All of Unit 2 (7,377 acres) appears to have been affected primarily by the forces of nature and retains its natural character. Human impacts are substantially unnoticeable and, for the most part, are confined to the relatively narrow mesa tops and ridge noses separating the unit's two rugged draws. The ways which are present traverse these narrow mesa tops before dropping down the steep ridge noses toward Dry Creek. These have become substantially unnoticeable in the landscape and today, little more than parallel tire-track routes exist. These ways do not substantially impact the overall naturalness of the inventory unit. Several factors contribute to this condition. First, minimal construction was used in their initial development. And second, they have received very little use, show the effects of natural erosion, and are often hidden by vegetative regrowth. Several livestock reservoirs are widely dispersed and inconspicuous. These reservoirs have not been maintained on a regular basis, or at all, in recent years. Some are silted in with vegetation growing in the bottom, while others have been breached or hold little water, and have revegetated on one or both sides of their earthen berms. These conditions reduce greatly any visual impact they may present to visitors. A few of these reservoirs were constructed so long ago that there is little indication of the original routes leading to them. Although there are minor scattered impacts noticeable from some locations within the inventory unit, on a landscape-level basis, Unit 2 still retains its natural character.

**Table 2 - Naturalness Characteristic Acreage by Inventory Unit**

Inventory Unit	Naturalness Characteristic		
	Acreage Affected Primarily by the Forces of Nature	Acreage Where Man's Work is Substantially Noticeable	
		Acreage	Condition Affecting Naturalness
<b>1</b>	41,752	1,991	Multiple ways, utility lines, fences
<b>Acreage Subtotal</b>		19	Utility lines
		313	Multiple ways, woodcutting
		1	Range development (windmill site)

		17	Cultivated pasture area, vehicle ways
		1,053	An accumulation of old bulldozed routes
		221	Major fenceline and vehicle ways
		197	Major fenceline and vehicle ways
	<b>41,752</b>	<b>3,812</b>	
<b>2</b>	7,377	0	None found
<b>Acreage Subtotal</b>	<b>7,377</b>	<b>0</b>	
<b>3</b>	10,195	2	Range development (stock reservoir)
		3	Range development (windmill site)
<b>Acreage Subtotal</b>		4	Range development (windmill site)
	<b>10,195</b>	<b>9</b>	
<b>4</b>	11,329	32	Range development (13 stock reservoirs)
		93	Wild horse herd fence, ways, abandoned oil/gas drill pad
		1	Range development (stock reservoir)
<b>Acreage Subtotal</b>		3	Range development (windmill site)
	<b>11,329</b>	<b>129</b>	
<b>5</b>	6,414	11	Proximity of vehicle way to unit boundary
<b>Acreage Subtotal</b>	<b>6,414</b>	<b>11</b>	
<b>Acreage Grand Total</b>	<b>77,067</b>	<b>3,961</b>	

**Inventory Unit 3:** Most of Unit 3 (10,195 acres) appears to have been affected primarily by the forces of nature and retains its natural character. Human impacts are substantially unnoticeable in this portion of the unit and, for the most part, the unit's narrow ridgelines, steep draws, threadlike canyons with their confined valley floors, and badlands have not experienced much in the way of human-caused surface disturbance. The few ways present are widely scattered and have become substantially unnoticeable in the landscape. Today, most are little more than parallel tire-track routes. Remnants of old seismograph line routes can also be found. These ways and traces of old seismograph line routes do not substantially impact the overall naturalness of the inventory unit. Several factors contribute to this condition. First, minimal construction was used in their initial development. And second, they have received very little use, show the effects of natural erosion, and are often hidden by vegetative regrowth. Several livestock reservoirs and fences are widely dispersed and inconspicuous. Many of these reservoirs have not been maintained on a regular basis, or at all, in recent years. Some are silted in with vegetation growing in the bottom, while others have been breached or hold little water, and have revegetated on one or both sides of their earthen berms. These conditions reduce greatly any visual impact they may present to visitors. A few of these reservoirs were constructed so long ago that there is little indication of the original routes leading to them. The lone oil/gas well within Unit 3 was plugged and abandoned in 1982 and the surface area of the drill pad has been reclaimed. Although there are minor scattered impacts noticeable from some locations within the inventory unit, this 10,195-acre portion of Unit 3 still retains its natural character. However, substantially noticeable and extensive impacts totaling nine acres exist on three specific areas within inventory Unit 3. These are unnatural in appearance due to the presence of range developments.

**Inventory Unit 4:** Most of Unit 4 (11,329 acres) appears to have been affected primarily by the forces of nature and retains its natural character. Human impacts are substantially unnoticeable in this portion of the unit and, for the most part, the unit's narrow ridgelines, steep draws, near-vertical cliff faces, and badlands have not experienced much in the way of human-caused surface disturbance. The few ways present are widely scattered and have become substantially unnoticeable in the landscape. Today, most are little more than parallel tire-track routes. Remnants of old seismograph line routes can also be found. These ways and traces of old seismograph line routes do not substantially impact the overall naturalness of the inventory unit. Several factors contribute to this condition. First, minimal construction was used in their initial development. And second, they have received very little use, show the effects of natural erosion, and are often hidden by vegetative regrowth. Several livestock reservoirs and fences are widely dispersed and inconspicuous. Many of these reservoirs have not been maintained on a regular basis, or at all, in recent years. Some are silted in with vegetation growing in the bottom, while others have been breached or hold little water, and have revegetated on one or both sides of their earthen berms. These conditions reduce greatly any visual impact they may present to visitors. A few of these reservoirs were constructed so long ago that there is little indication of the original routes leading to them. Although there are minor scattered impacts noticeable from some locations within the inventory unit, this 11,329-acre portion of Unit 4 still retains its natural character. However, substantially noticeable and extensive impacts totaling 129 acres exist on four specific areas within inventory Unit 4. These are unnatural in appearance due to the presence of livestock developments, fencelines, ways, and an abandoned oil/gas well drill pad.

**Inventory Unit 5:** Most of Unit 5 (6,414 acres) appears to have been affected primarily by the forces of nature and retains its natural character. Human impacts are substantially unnoticeable and, for the most part, are confined to the relatively narrow ridgetops and wash bottoms of Hartman, Marshall and West Boone Draws. Remnants of old seismograph line routes can also be found. These impacts have become substantially unnoticeable in the landscape and today, little more than parallel tire-track routes exist which do not substantially impact the overall naturalness of the inventory unit. Several factors contribute to this condition. First, minimal construction was used in their initial development. And second, they have received very little use, show the effects of natural erosion, and are often hidden by vegetative regrowth and/or screening. A few livestock reservoirs are widely dispersed and inconspicuous. The lone oil/gas well within Unit 5 was plugged and abandoned in 1984 and the surface area of the drill pad has been reclaimed. A small abandoned and deteriorating cabin, dugout water well, and remnants of associated homestead-style developments is located in Spicer Basin within Marshall Draw. Although there are minor scattered impacts

noticeable from some locations within the inventory unit, on a landscape-level basis, most of Unit 5 still retains its natural character. However, a substantially noticeable impact exists on one specific area. Along the unit's eastern boundary, just north of Sheephead Basin and the private property line, an 11-acre area is impacted by the proximity of a vehicle way to the unit boundary. The relationship between the location of this vehicle way and the unit's boundary road creates a small "island" that is visually unnatural appearing in the landscape.

**Solitude or Primitive and Unconfined Type of Recreation Criteria:** Determine if the area "...has outstanding opportunities for solitude or a primitive and unconfined type of recreation."

**Finding:** Each of the five separate inventory units meets the solitude or primitive and unconfined type of recreation criteria somewhere within that acreage found to be natural appearing in character.

**Inventory Unit 1:** This unit offers visitors outstanding opportunities to experience solitude in many locations throughout that portion of the unit retaining its natural character. The varied topography, including long narrow ridges, steep draws, sandstone cliffs, and threadlike canyons with confined valley floors, provide outstanding opportunities for visitors to find a secluded place and isolation. The western and southwestern slopes of The Bears Ears and its headwater drainages - Big Bend Draw, Kraft Draw, Ted's Draw, and several large unnamed draws tributary to Vermillion Creek - are very steep, frequently rugged, seldom visited terrain which exemplify much of what Unit 1 has to offer in the way of secluded places to visit. Likewise, the northwest-southeast trending ridges and canyon bottoms of the area lying between the east ridgeline of Irish Canyon and the Blue Hill Road is a rugged, seldom visited area which provides visitors outstanding opportunities for solitude. Additionally, the unit's overall size and vegetative screening afforded by often dense pinyon and juniper woodland, contribute to a visitor's ability to locate places where a perception/feeling of being totally alone or remote from others can be found.

Unit 1 offers visitors outstanding opportunities to participate in recreation activities which are dispersed in nature and do not require developed sites and facilities or motorized equipment, either to take part in the activities or to gain access into the unit's interior. Because of its overall size, shape, and topography, a wide variety of dispersed recreation activities are not only possible throughout that portion of the unit retaining its natural character, but the unit allows visitors an opportunity to realize truly outstanding experiences through participation. Hunting, hiking, backpacking, camping, sightseeing (particularly to see botanical, geological and cultural resource features), horseback riding, photographing, and bird watching/wildlife observation are primitive and unconfined recreation activity opportunities considered outstanding within inventory Unit 1. Irish Canyon and its surrounding vicinity, The Bears Ears and the rugged draws radiating west and southwest from it, and Vermillion Canyon are specific locations where such outstanding opportunities may be discovered.

**Inventory Unit 2:** Outstanding opportunities for solitude can be found in Unit 2 by any visitor seeking it within the largest of the two unnamed side canyons tributary to Dry Creek. This very rugged and relatively deep side canyon provides a natural barrier to easy access from the upland areas surrounding it. Similar opportunities do not exist for those who visit the relatively narrow mesa tops which lack both the expanse and pinyon and juniper woodland screening available in Unit 1 and other locations within the inventory area.

Unit 2 offers opportunities for primitive and unconfined recreation, including day hiking, sightseeing and photographing scenery, but these opportunities are limited and are not considered outstanding. Although

outstanding opportunities for solitude can be found within the largest of the two unnamed side canyons tributary to Dry Creek, neither this small canyon nor the unit's lesser canyons, draws and upland areas provide dispersed recreation activity opportunities considered outstanding.

**Inventory Unit 3:** This unit offers visitors outstanding opportunities to experience solitude in many locations throughout that portion of the unit retaining its natural character. The varied topography, including long narrow ridges, steep draws, threadlike canyons with confined valley floors provide outstanding opportunities for visitors to find a secluded place and isolation. Additionally, the unit's overall size, in conjunction with the general landscape features associated with the badlands' steep draws descending from the Vermillion Bluffs escarpment, contribute to a visitor's ability to locate places where a perception/feeling of being totally alone or remote from others can be found.

Unit 3 offers visitors outstanding opportunities to participate in recreation activities which are dispersed in nature and do not require developed sites and facilities or motorized equipment, either to take part in the activities or to gain access into the unit's interior. Because of its overall size, shape, and topography, a wide variety of dispersed recreation activities are not only possible throughout that portion of the unit retaining its natural character, but the unit allows visitors an opportunity to realize truly outstanding experiences through participation. Hunting, hiking, backpacking, camping, sightseeing (particularly to view scenery and see botanical and geological resource features), photographing, and wildlife observation are primitive and unconfined recreation activity opportunities considered outstanding within inventory Unit 3. The Vermillion Bluffs escarpment and its long rugged draws radiating to the northwest, and the badlands encompassing the toe of the escarpment, are specific locations where such outstanding opportunities may be discovered.

**Inventory Unit 4:** Not unlike inventory Unit 3, this unit offers visitors outstanding opportunities to experience solitude in many locations throughout that portion of the unit retaining its natural character. The overall size of Unit 4, in conjunction with the general landscape features associated with the badlands' steep descent from the Vermillion Bluffs escarpment, contribute to a visitor's ability to locate places where a perception/feeling of being totally alone or remote from others can be found. Here, the rugged, near-vertical escarpment and its steep, narrow draws have much to offer in the way of secluded places to visit.

Unit 4 offers visitors outstanding opportunities to participate in recreation activities which are dispersed in nature and do not require developed sites and facilities or motorized equipment, either to take part in the activities or to gain access into the unit's interior. Because of its overall size, shape, and topography, a wide variety of dispersed recreation activities are not only possible throughout that portion of the unit retaining its natural character, but the unit allows visitors an opportunity to realize truly outstanding experiences through participation. Hunting, hiking, backpacking, camping, sightseeing (particularly to view scenery and see botanical and geological resource features), photographing, and wildlife observation are primitive and unconfined recreation activity opportunities considered outstanding within inventory Unit 4. Lookout Mountain and the Vermillion Bluffs escarpment, the badlands encompassing the toe of the escarpment, and the long rugged draws radiating from the Vermillion Bluffs ridgeline are specific locations where such outstanding opportunities may be discovered.

**Inventory Unit 5:** Although the smallest of the five separate units, Unit 5 offers opportunities for solitude and primitive and unconfined recreation which are notably outstanding in the Vermillion Basin inventory area. During team discussions in the field about the character of the interior portion of Unit 5 (the headwater drainages of Hartman and Marshall Draws specifically), one of the ranchers specifically commented on how remote and rugged the area is.

Unit 5 offers visitors outstanding opportunities to participate in recreation activities which are dispersed in nature and do not require developed sites and facilities or motorized equipment, either to take part in the activities or to gain access into the unit's interior. Horseback riding, hunting, day hiking, sightseeing, photographing, and wildlife observation are primitive and unconfined recreation activity opportunities considered outstanding within inventory Unit 5. The rugged headwater drainages of both Hartman and Marshall Draws, along with the ridges, small box canyons and upland areas separating them, are specific locations where these outstanding opportunities may be discovered and experienced.

**Supplemental Values Criteria:** Determine if the area "...contains ecological, geological, or other features of scientific, educational, scenic, or historical value."

**Finding:** Each of the five separate inventory units contains supplemental values. See Table 3 for a unit-by-unit indication of supplemental values present.

**Inventory Unit 1:** This inventory unit includes a portion of the Irish Canyon Area of Critical Environmental Concern and the Ink Springs Special Management Area. A significant feature here is Irish Lakes - a natural aquatic feature. Five remnant plant associations occur here, as do four documented BLM sensitive plant species. Irish Canyon, of which a portion lies within Unit 1, is on the eastern end of Cold Springs Mountain and is roughly parallel to Vermillion Creek. The southern end of the canyon is composed of sandstone layered with Uinta Mountain Red Quartzite. This quartzite is one of the oldest exposed rock formations in Colorado - dating back over one billion years. Stromatolite fossils, a unique geological feature found within Unit 1, are located along an exposed limestone shelf near the eastern unit boundary. Stromatolites are silicified concentrations of tree stumps, algal growth rings and fresh water ostracods. The fossils are round, oblong or egg-shaped features and range in size from one to over seven meters in diameter. The quantity and density of the stromatolites in this particular location suggests the remains of an ancient, submerged forest. Due to weathering or rolling down hill and breaking apart, interior portions of a number of these geologic oddities are open - revealing multiple layers of solidified algal growth rings.

Unit 1 encompasses a broad range of visual resources which include expansive vistas, broad valleys and incised hydrologic channels. References to the scenic values in Irish Canyon are found in visitor guides to the area. Unit 1 contains some of the most unique prehistoric cultural resources found within the five inventory units as well as within the entire local region. Represented here is a cultural progression from around AD 1 to AD 1400. This covers several cultural groups that used the area. This is present on the rock art panels located on BLM lands within the unit as well as on Colorado State land outside the inventory boundary. These panels are some of the best in the region, both in subject matter and lack of vandalism. The potential for other panels to be discovered in the unit is very high. Other areas of Unit 1 show that Native American groups were present as far back in time as 11,000 years ago.

**Inventory Unit 2:** Southward-facing aspects, topology and sparse vegetation within this inventory unit provide expansive, unimpaired, viewsheds of the unit and other areas within visual limits. Scenic features include the western bank of Dry Creek and the broad plateaus and deeply incised canyons of ephemeral tributaries. Although little cultural resource management work has been carried out in this unit, human occupation and use of the area is again felt to be represented by the 11,000 years of Native American presence in the local region. The rolling landscape, deeply bisected by steep/deep gullies and valleys (with little substantial tall vegetation), does indicate that occupation sites will be few. It is believed that other activities, such as moving through the area, hunting, and staying overnight for limited periods along the water courses, would be present in the prehistorical archaeological record.



**Inventory Unit 3:** This inventory unit includes all or portions of the G-gap and Vermillion Bluffs Special Management Areas and the Lookout Mountain Area of Critical Environmental Concern. This inventory area supports two remnant plant associations and two BLM sensitive plants. Unit 3 visual resources consist of elevated vistas and deeply eroded drainages. The topology of this unit presents visitors a wide range of pleasing visual resources. Scenic features of interest include portions of the Vermillion Bluffs and Dry Creek. Within the Vermillion Bluffs vicinity there exists recorded buffalo kill sites, open habitation sites and wickiup structures. The unit’s lower rolling hill areas, dotted with sand dunes and scattered juniper stands, yield another example of the span of human occupation in the region. The identified archaeological and paleontological locations point to a rich resource being present here.

**Inventory Unit 4:** This inventory unit includes the northern half of the Lookout Mountain Area of Critical Environmental Concern. Significant features are the colorful viewshed and unique geology associated with the badlands falling into Dry Creek. The area supports two remnant plant associations and four BLM sensitive plants. In addition, the steep badland cliffs provide nesting habitat for raptors, including the prairie falcon. Unit 4 contains a broad range of visual resources which include expansive vistas, broad valleys and incised hydrologic channels. Remarkable scenic views from Lookout Mountain (the highest point in the inventory area at 8,120 feet in elevation) are available to visitors. Scenic features of interest include the Vermillion Bluffs, Lookout Mountain itself, eroding clays of the Buffalo Drop, and the eastern bank of Dry Creek. From a cultural resource standpoint, Unit 4 is very similar to Unit 3. Formal cultural resource inventory/research projects have also been undertaken within Unit 4 which, combined with both archaeological and paleontological sites shown to the BLM by several concerned members of the public, provide a fairly extensive understanding of the archaeological landscape dominated by the Vermillion Bluffs in this area. Within the Vermillion Bluffs vicinity there exists recorded buffalo kill sites, open habitation sites and wickiup structures. The unit’s lower rolling hill areas, dotted with sand dunes and scattered juniper stands, yield another example of the span of human occupation in the region. The identified archaeological and paleontological locations point to a rich resource being present here.

**Inventory Unit 5:** The topology of this unit affords visitors a number of pleasing visual resources. Scenic features of interest include Spicer Basin and Marshall Draw. Similar to Unit 2, little cultural resource management work has been carried out in Unit 5. However, it is reasonable to project, based on the cultural resource record of adjacent inventory units, what may be present within Unit 5. The pinyon-juniper woodlands that dominate the steep rolling hillsides will have numerous open habitation sites. Cultural survey work in these adjacent areas has shown that numerous open sites are present within the woodlands and along the contact zones between pinyon-juniper stands and sagebrush vegetation. The likelihood that wickiup camps and other wooden structures exist is very good.

**Table 3 - Supplemental Values Contained Within the Vermillion Basin Area by Inventory Unit**

Inventory Unit	Supplemental Value		
	Ecological	Geological	Other Features
1	X	X	X

2			X
3	X		X
4	X		X
5			X