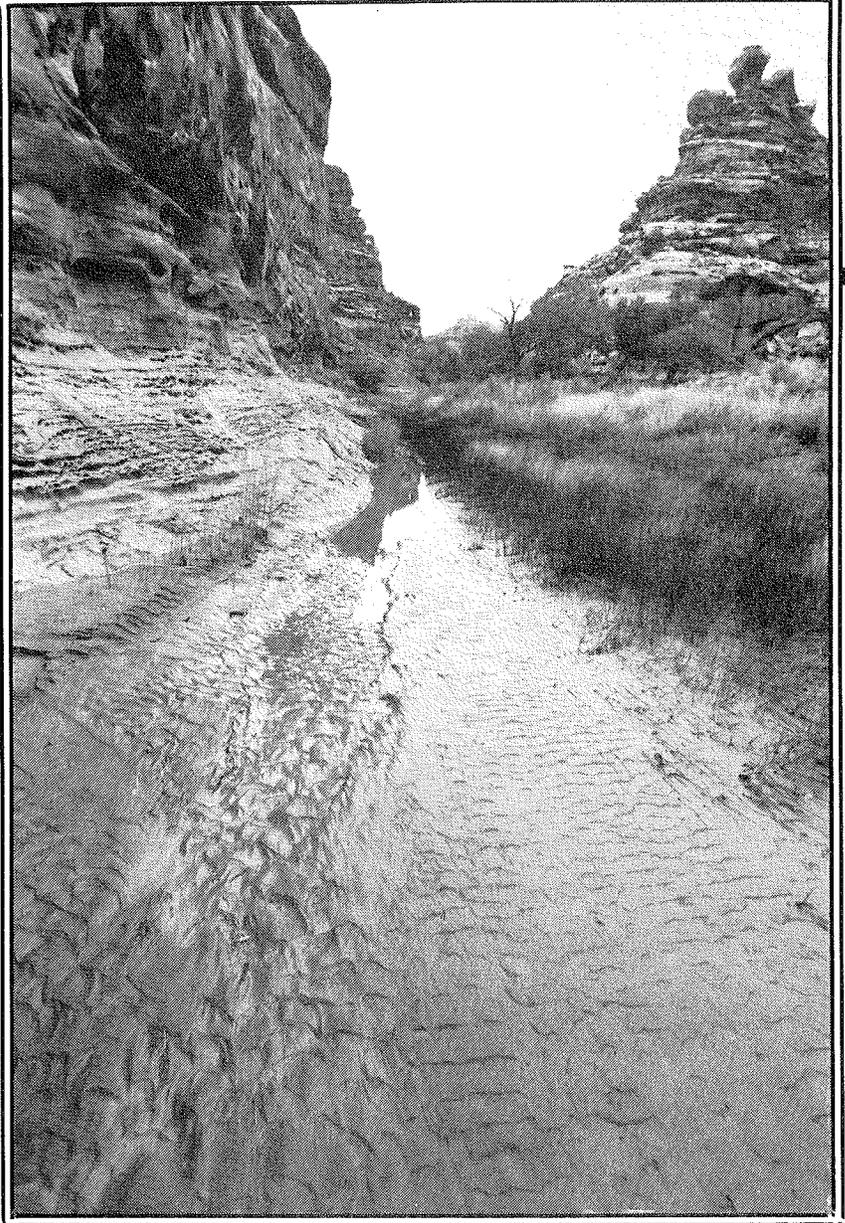


Fiddler Butte
WSA



FIDDLER BUTTE WSA

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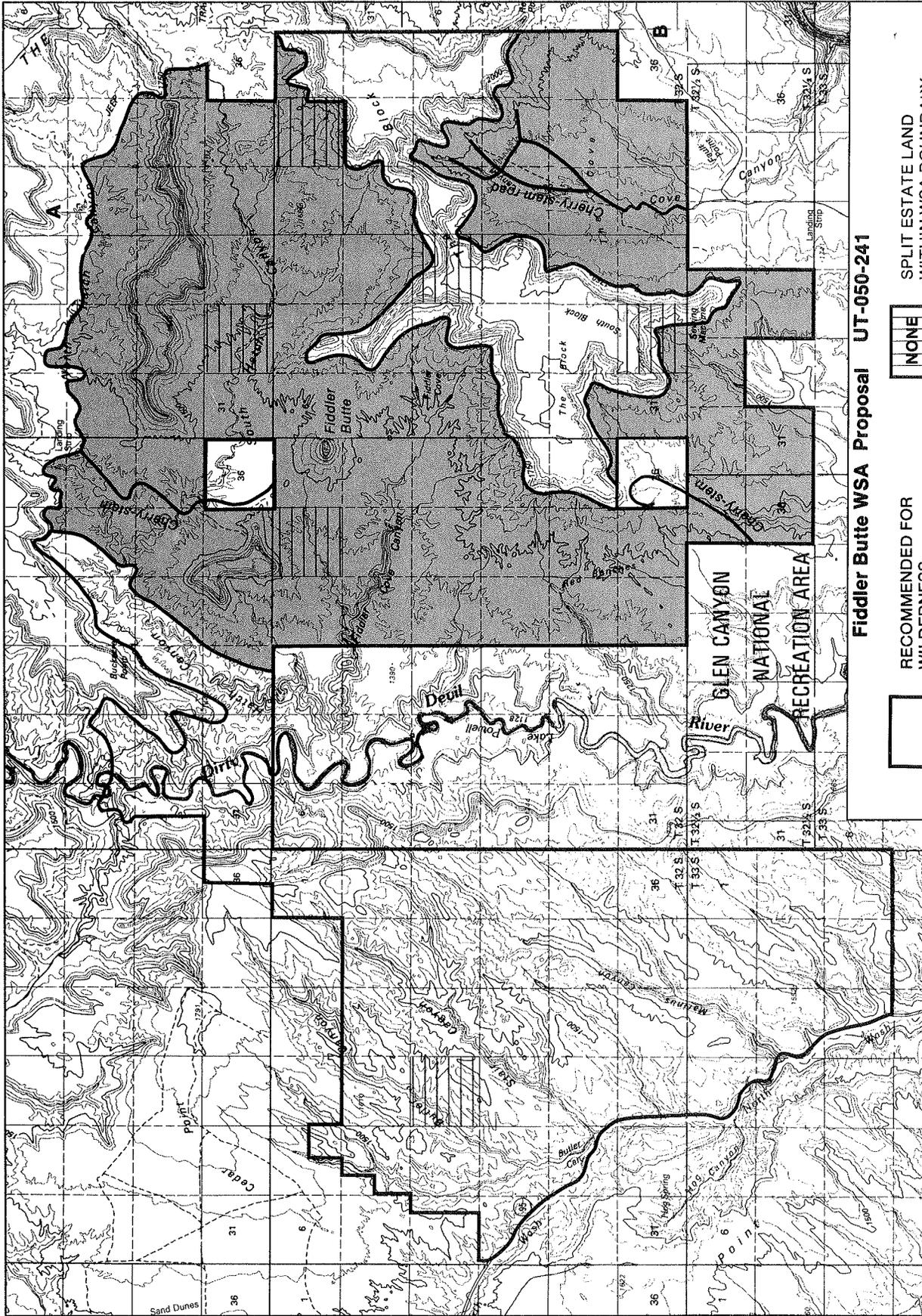
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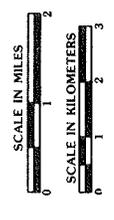
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Fiddler Butte WSA Proposal UT-050-241

	RECOMMENDED FOR WILDERNESS		SPLIT ESTATE LAND WITHIN WSA BOUNDARY
	RECOMMENDED FOR NON-WILDERNESS		STATE LAND WITHIN WSA BOUNDARY
	LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS		PRIVATE LAND WITHIN WSA BOUNDARY



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FIDDLER BUTTE WILDERNESS STUDY AREA

1. THE STUDY AREA: 73,100 acres

The Fiddler Butte Wilderness Study Area (WSA) (UT-050-241) is in northeastern Garfield County, about 25 miles east of Hanksville, Utah, and directly north of the Glen Canyon National Recreation Area (GCNRA). The study area is about 11 miles wide from north to south and about 12 miles long from east to west.

The Colorado River is south of the WSA. The WSA is defined by a road along the northern boundary and by State Highway 95 along the southwestern boundary, the GCNRA on the south and east, and section lines on the northwest which include land with wilderness boundaries (see Map). The WSA contains 73,100 acres of public land administered by the Bureau of Land Management (BLM).

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA***

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	73,100
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	3,836
Total	76,936
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	32,700
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	32,700
In-holdings (State, private)	1,920
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	40,400
Split-Estate	0
Total BLM land not recommended for wilderness	40,400
In-holdings (State, Private)	1,916

Source: BLM File Data

* The Appendix is a detailed table of in-holdings included within the portion of the WSA recommended for designation.

Six sections of State land, comprising 3,836 acres, are inheld within the WSA. Three of these sections (1,920 acres) are in the portion that is recommended for wilderness designation. No private or other non-Federal land is included (see Table 1).

The portion of the WSA recommended for wilderness designation consists of two parts: a prominent mesa of about 5,700 acres in the eastern portion of the WSA, known as The Block, where elevations range from about 5,600 feet near the base of the mesa to 7,100 feet on North

FIDDLER BUTTE WILDERNESS STUDY AREA

Block; and the western portion of the WSA, about 27,000 acres, consisting of narrow ridges that separate eight essentially parallel canyons 5 to 8 miles long, that slope southwest into North Wash, a tributary of the Colorado River. The GCNRA and the Dirty Devil River Canyon divide the two portions of the recommended area. Elevations in the western portion are from 4,700 feet to about 6,500 feet. Vegetation is predominantly blackbrush-shadscale with scattered pinyon-juniper woodland, but almost one-fifth of the WSA is bare rock and sand.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Four alternatives were analyzed in the EIS: a large partial wilderness alternative where 32,700 acres would be designated as wilderness and the remaining 40,400 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; an all wilderness alternative; and a smaller partial wilderness alternative where 27,000 acres would be designated as wilderness.

2. RECOMMENDATION AND RATIONALE:

- 32,700 acres
(recommended for wilderness)
- 40,400 acres
(not recommended for wilderness)

The recommendation for this WSA is to designate 32,700 acres as wilderness and to release the remaining 40,400 acres for uses other than wilderness (see Map). Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts. The recommendation will apply to any in-holdings acquired through purchase or exchange with willing owners. The Appendix lists all in-holdings and provides information on acquisition.

The recommendation would create two separate wilderness areas: Stair Canyon

(27,000 acres) to the west and The Block (5,700 acres) to the east. Both areas are in a natural state. About 72 percent of the total area has outstanding solitude and all of both areas provide outstanding opportunities for primitive recreation.

No conflicts exist in Stair Canyon. Tar sand, uranium, gold, silver, and copper may occur in the vicinity of The Block, but the likelihood of development is low.

Wilderness designation would complement the proposed wilderness in the adjacent portion of the GCNRA.

The portion of the WSA that is not recommended for wilderness designation has two parts, Areas A and B, as shown on the Map. Portions of these areas are natural, but they have several intrusions. The intrusions are mainly roads built for administration of livestock grazing and tar sand exploration. These intrusions are noticeable because of flat terrain and sparse vegetation. Both areas have limited opportunities for solitude and primitive and unconfined recreation. Conflicts with future tar sand development within the Tar Sand Triangle Special Tar Sand Area (STSA), would occur if these areas were to be managed as wilderness. Tar sand extraction is not expected to occur in the short-term in the areas not recommended for designation, but the potential for long-term development is considered to outweigh known wilderness values.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Overall, 64,300 acres in the WSA meet the Wilderness Act criteria for naturalness.

Naturalness is enhanced by the Dirty Devil River which flows in a magnificent 2,000-foot deep canyon that divides the

FIDDLER BUTTE WILDERNESS STUDY AREA

unit. East of the river are a number of isolated buttes. The largest, The Block, rises above the broad Moenkopi bench and is pristine. Access is available to this remote area, but is difficult. West of the river are a number of North Wash tributaries which cut through the Navajo and Wingate sandstones. These canyons are characterized by colorful sheer cliffs. Vegetation is sparse and there is an abundance of slickrock.

Approximately 22,200 acres west of the Dirty Devil River are in a completely natural condition, with no human intrusions requiring rehabilitation.

East of the Dirty Devil River, the quality of naturalness varies considerably. The top of The Block, about 3,500 acres, is essentially pristine and has few, if any, signs of human activity. Portions of the benchlands around The Block are natural but there are several intrusions.

In the southeastern part of the WSA, The Cove contains approximately 1 mile of ways and 7.5 miles of maintained pre-FLPMA cherry-stemmed roads. These intrusions are noticeable because of the terrain and sparse vegetation.

A pre-FLPMA mining road approximately 3.5 miles long follows the west fork of Rock Canyon to a point near the southwest corner of The Block. This intrusion was also deleted from the WSA by cherry-stemming.

A way (approximately 6 miles) connects the two areas described above, but it is substantially unnoticeable. Several stock reservoirs in the vicinity are substantially unnoticeable.

Approximately 16.6 miles of roads and ways are north of The Block, in the Fiddler Butte and North and South Hatch Canyon areas. While there is no current mining activity, uranium exploration and assessment work are on-going. Portions of these roads are graded and are substantially noticeable. An old airstrip in South Hatch Canyon is deteriorating, but is still substantially noticeable. Between 1980 and 1982, tar sand and uranium exploration and construction of a small livestock reservoir occurred in areas that were later added to the WSA

as a result of appeals on the BLM 1980 Intensive Inventory Decision. Tar Sand exploration consisted of approximately 6 miles of road and eight drill holes in the vicinity of South Hatch Canyon. Disturbed areas have been rehabilitated. Thirteen holes were drilled along existing access routes for uranium exploration. The drill pads, approximately 20 by 50 feet in size, have been rehabilitated. Uranium assessment was also done on State land in the southeastern part of the WSA in 1981. A road that is now cherry-stemmed was used for access. A livestock reservoir that covers approximately a 0.25 acre is south of the Sewing Machine. Construction did not require new access.

B. Solitude

Overall, approximately 35 percent (25,600 acres) of the WSA provides outstanding opportunities for solitude. Solitude is judged to be less than outstanding in the eastern portion of the WSA (47,500 acres). The WSA has a wide variety of topographic features, and the quality of solitude varies considerably.

In North Wash and the Dirty Devil River canyons, the quality of solitude is outstanding because of the variety, size, isolation, and configuration of the canyons. Although the canyons are relatively short, their number and configuration provide seclusion. Vegetation is sparse in these areas and is not a contributing factor to solitude. No outside sights and sounds exist to adversely affect a visitor's ability to find seclusion, except in areas immediately adjacent to State Highway 95. Opportunities for solitude in this portion of the WSA (22,100 acres) are outstanding.

The top of The Block (North and South Block) contains about 3,500 acres of land in an irregular configuration, and the opportunity for solitude is outstanding. Overall, size and configuration could force visitors into close proximity to each other at some locations, particularly the land bridge connecting the North and South Blocks. Vegetation screening is provided by dense pinyon-juniper woodland vegetation and the terrain. Scenic views of the Henry Mountains, Dirty Devil River Canyon, Dark Canyon, Cataract Canyon, Canyon-

FIDDLER BUTTE WILDERNESS STUDY AREA

lands National Park, and the Abajo Mountains enhance the experience of solitude.

The benchlands surrounding The Block generally consist of low hills with sparse, low-growing vegetation. The terrain tends to force visitors to go around the base of The Block or the other buttes in the area. Solitude is adversely affected by some of the mining activity, roads, and ways in the immediate area, such as in The Cove and around Fiddler Butte.

Opportunities for solitude in the northeastern 8,100 acres of the WSA are less than outstanding. The dominant feature of this portion of the WSA is an unnamed mesa between North and South Hatch Canyons. The mesa top is sparsely covered by pinyon-juniper woodland and brush. Visitors tend to be in close proximity in this area, reducing the opportunity for seclusion. Vegetation on the surrounding benchlands is sparse, resulting in little chance to be screened from others.

C. Primitive and Unconfined Recreation

The recreational opportunities vary, depending on location in the WSA.

In the western portion of the WSA, recreational opportunities for hiking are considered outstanding in the canyons of North Wash due to the variety of hiking routes and ease of access from Highway 95. This area of 22,200 acres meets the standards of the Wilderness Act for outstanding opportunities for primitive and unconfined recreation.

Opportunities for backpacking and photography are outstanding along the Dirty Devil River and The Block. These two areas constitute about 10,500 acres.

Recreational opportunities are less than outstanding in the benchlands east of the Dirty Devil River, and this area does not offer a diversity of recreational opportunities that could be considered outstanding. This area covers about 40,400 acres.

D. Special Features

Special features of this WSA identified during the BLM Wilderness Inventory include cultural resources (with a high potential for finding additional sites), the scenery along the canyons of the Dirty Devil River, and the views from The Block.

Approximately 26,000 acres or 36 percent of the WSA is rated as outstanding for scenic quality.

The WSA includes a 4-mile segment of the Dirty Devil River which is a Nationwide Rivers Inventory segment with potential for study and addition to the National Wild and Scenic Rivers System.

The WSA may have Desert bighorn sheep, which is a species associated with wilderness. Peregrine falcons and black-footed ferrets, both of which are listed as endangered species, and five additional special status animal species may inhabit or frequent the WSA.

Sclerocactus wrightiae, an endangered cactus, may occur in the WSA. In addition, there are two other special status plant species that are likely to occur in the WSA.

Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS.

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PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is blackbrush (24,750 acres), galleta-threawn shrubsteppe (2,400 acres), juniper-pinyon woodland (41,050 acres), and saltbush-greasewood (4,900 acres).

Juniper-woodland PNV is well represented in the NWPS nationally and in one Utah wilderness. Saltbush-greasewood PNV is represented only in Utah. Blackbrush and galleta-threawn shrubsteppe PNV are not represented at all in the NWPS. All four PNV types are represented in other BLM study areas. This information is summarized in Table 2 from data compiled in December 1989.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Blackbrush	0	0	11	205,314
Galleta-Threawn-Shrubsteppe	0	0	10	188,326
Juniper-Pinyon Woodland	11	1,401,745	84	2,102,955
Saltbush-Greasewood	1	20,000	17	389,103
UTAH (COLORADO PLATEAU PROVINCE)				
Blackbrush	0	0	11	205,314
Galleta-Threawn-Shrubsteppe	0	0	10	188,326
Juniper-Pinyon Woodland	1	26,000	53	1,665,148
Saltbush-Greasewood	1	20,000	17	389,103

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Provo-Orem, Utah	11	721,793	90	2,713,768

Source: BLM File Data.

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B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Provo-Orem, Utah standard metropolitan statistical area. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of this population center.

C. Balancing the Geographic Distribution of Wilderness Areas

The Fiddler Butte WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

As of January 1987, the NWPS included 93 areas totaling 5,475,207 acres in Utah, Arizona, and Colorado.

A Fiddler Butte Wilderness would supplement the NWPS in the Canyonlands Section of the Colorado Plateau where there are just two established wilderness areas totaling 70,751 acres. There are two designated wilderness areas within 100 miles of the WSA. To the southeast is the 45,000-acre Dark Canyon Wilderness and to the west-southwest is the 25,751-acre Box-Death Hollow Wilderness. Both are administered by the U.S. Forest Service (FS).

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The entire WSA, including the portion recommended for wilderness designation could be managed to preserve the wilderness values now in the area. Current uses including livestock grazing and maintenance of one spring development and 13 reservoirs would continue without significantly affecting management of the wilderness.

There are 7,760 acres of pre-FLPMA oil and gas leases in the area recommended for wilderness. All of these leases are under application for conversion to combined hydrocarbon leases. It is not expected that the leases would be developed as conventional oil and gas leases if the area is designated as wilderness. If converted to combined hydrocarbon

leases, they would contain stipulations that would limit development to those activities that would not degrade wilderness values; therefore, it is projected that none of the leases would be developed following wilderness designation.

There are 760 acres of mining claims in the area recommended for wilderness. Because of moderate certainty that uranium is within the WSA, it is projected that following wilderness designation, uranium exploration would occur on at least a part of these and future mining claims existing at the time of designation. It is projected that only 4 acres of disturbance would result from uranium exploration in the area recommended as wilderness. Exploration and small scale development of uranium would not reduce wilderness values in the recommended area as a whole.

Management of the recommended area could be further complicated by the presence of portions of three sections of State land (1,920 acres) in the recommended part of the WSA because BLM could not control activities on these lands and would be required to provide reasonable access. However, only two of the three sections in the recommended area have uranium potential, and these are on The Block where access would be difficult. Therefore, development of the uranium on in-held lands in the recommended area is not expected.

There are 18,323 acres of pre-FLPMA oil and gas leases in the portion of the WSA not recommended for wilderness, but they likely would not be developed following designation for the reasons explained above. Management of the area not recommended for wilderness would be more difficult than in the recommended area because of the uranium potential of the area. There are 1,940 acres of mining claims in this part of the WSA, and it is projected that about 45 acres of disturbance would occur following designation for exploration of valid claims. Management of this area also would be complicated by the presence of all or part of four sections of State land (1,916 acres) in more accessible areas where exploration would likely occur. Uranium developments on these in-held lands also could degrade wilderness val-

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ues in the surrounding wilderness. Additionally, if large scale tar sand developments occur near the WSA, they would detract from wilderness management in the area not recommended as wilderness.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Fiddler Butte WSA (USGS Bulletin 1759-B, Russell F. Dubiel, et al., 1989). The report indicates that the eastern portion of the area recommended for wilderness designation may contain subeconomic resources of tar sands in the northeastern part, with in-place resources estimated to be 375 to 480 million barrels of oil. Dolomite suitable for various industrial uses is present, but the remote location of the deposit makes development unlikely. Common sand, gravel, and stone within the area have no unique qualities and are not likely to be developed. Abundant petrified wood, suitable for collecting and polishing, is present in some locations. The southwestern part of this portion of the WSA has moderate mineral resource potential for localized tar sand deposits. The entire eastern recommended portion has a moderate potential for undiscovered uranium and vanadium, oil and gas, small isolated occurrences of silver and gold, and a low potential for geothermal resources and other undiscovered metals.

The western portion of the area recommended for designation is underlain with tar sands that are estimated to contain the equivalent of 260 to 320 million barrels of oil. Uranium occurs in channel deposits in part of the area. An estimated 7,500 tons of uranium ore were produced from workings just outside the WSA.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

With BLM's recommended partial wilderness alternative, economic conditions

would not be affected. In the long term, there would be major beneficial and adverse effects on all economic sectors and infrastructures of the Wayne, Garfield, and possibly Emery Counties from tar sand development because much of the tar sand deposits in the WSA would be in the area not recommended for wilderness designation where they could be accessed and developed.

An unquantified but potentially significant economic impact could result in Emery, Garfield, Sevier, and Wayne Counties, if water developments are restricted upstream of the WSA.

Summary of WSA-Specific Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 70 inputs specifically addressing this WSA were received from 379 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs. In general, 55 commenters supported wilderness designation for part or all of the WSA, while 320 commenters were opposed. Four commenters addressed the relative merits of the EIS but took no formal position on wilderness designation.

Those favoring wilderness stated that designation of the WSA would complement proposed wilderness in the adjacent portion of GCNRA and noted the WSA contains wilderness values. The majority of those commenting in favor of wilderness were from other states. Of particular concern was the need to protect wilderness values.

Those opposing wilderness were concerned that wilderness would prohibit or restrict mineral exploration and develop-

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ment, public access, livestock management, and flood and erosion control; harm local and State economies; and that wilderness designation is unnecessary to protect the area and that it would conflict with other uses. Most of those opposing wilderness designation were from rural Utah.

Three Federal agencies, the National Park Service (NPS), the Environmental Protection Agency (EPA), and USBM commented on the Draft EIS. The NPS concurred with the proposed action alternative and felt it would coincide with the natural zone in the GCNRA. Both the NPS and EPA commented that the analysis of impacts associated with tar sand development should be expanded.

The USBM did not take a position on wilderness designation for the WSA, but stated that the BLM had underestimated the petroleum potential of the WSA. The USBM also had questions on the mineral data presented in the EIS.

No comment letters were received on the Final EIS.

There are six State sections (3536 acres) of State land in the WSA. In commenting on the Draft EIS, the State of Utah pointed out inconsistencies in the reported State in-holdings, the need for discussion of off-highway vehicle use in the WSA and the lack of a summary of solitude characteristics. According to the State, the Fiddler Butte WSA has moderate wilderness values and high conflicts in comparison with other WSAs in the region. Reported conflicts would be with tar sand and the Highway 95 right-of-way. The State noted that the 27,000-acre partial wilderness alternative would eliminate most conflicts.

The Fiddler Butte WSA is in Garfield County. The Garfield County Master Plan covers this WSA. In the plan, Garfield County proposed that 142,653 acres in three BLM and one FS area be recommended to the Utah Congressional delegation as wilderness. The County plan recommends that the remaining lands within the County, including the Fiddler Butte WSA, be retained for multiple uses. The Garfield County Commission is opposed to designation of this WSA because in their opinion there are large commercial de-

posits of tar sand and because partial wilderness designation would require peripheral zones of influence that would constrain tar sand development on lands adjacent to the proposed wilderness. The Commission pointed out that Garfield County's average family income is about 25 percent below the State average, and therefore the county cannot afford to bypass any potential resource development opportunities.

The County Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah.

FIDDLER BUTTE WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives

Issue Topic	Recommendation Large Partial Wilderness (32,700 Acres)	No Action/No Wilderness	All Wilderness (73,100 Acres)	Small Partial Wilderness (27,000 Acres)
Impacts on Wilderness Values	<p>Wilderness values would be preserved overall in the designated area which is approximately 45 percent of the WSA. In the short term, naturalness and opportunities for solitude and primitive recreation would be directly lost on 62 acres because of uranium exploration and development, construction of access roads to State in-held lands, and rangeland projects, and indirectly reduced in quality on up to 1,462 acres more. Almost all of the direct impact would be in the nondesignated area. Use of 23.6 miles of ways and future mining roads in the nondesignated portion would detract from solitude and primitive recreation. In the long term, tar sand development would result in direct loss of wilderness values on 12,800 acres of the WSA in the nondesignated portion and would indirectly reduce the quality of opportunities for solitude and primitive recreation and scenic values throughout the WSA. The best special features including most Class A scenery and the Dirty Devil River would be preserved in the designated area. Cultural values, special status species, and wildlife would be disturbed but because of required mitigation would not be significantly affected in the nondesignated area. This alternative would complement the NPS proposal for wilderness management on contiguous NRA lands.</p>	<p>Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the short term, naturalness and opportunities for solitude and primitive recreation would be directly lost on 62 acres because of uranium exploration and development, construction of access roads to State in-held lands, and rangeland projects, and would be indirectly reduced in quality on up to 1,462 acres. Special features would not be significantly affected. In the long term, wilderness values would be indirectly lost on an additional 15,100 acres and would be indirectly reduced in quality throughout the WSA. Vehicular use of 23.6 miles of ways and future mining roads would detract from opportunities for solitude and primitive recreation. This would not complement goals of the NPS for wilderness management of contiguous NRA lands. Special features such as the wild and scenic river qualities of the Dirty Devil River, Class A scenery, and cultural values would be negatively affected over the long term.</p>	<p>Wilderness designation would preserve overall the wilderness values in the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 38 acres of the WSA because of uranium exploration and development, construction of access roads to State in-held lands, and rangeland projects, and indirectly reduced in quality on up to an additional 731 acres. Special features would be preserved. This alternative would complement NPS goals for wilderness management of contiguous NRA lands.</p>	<p>Wilderness values would be preserved overall in the designated area which is approximately 37 percent of the WSA. In the short term, naturalness and opportunities for solitude and primitive recreation would be directly lost on less than 62 acres of the WSA because of uranium exploration and development, construction of roads for access to State in-held lands, and rangeland projects, and indirectly reduced in quality on up to 1,462 acres more. All of the direct impact would be in the nondesignated area. Use of 23.6 miles of ways and future mining roads in the nondesignated portion would detract from opportunities for solitude and primitive recreation. Over the long term, tar sand development would result in direct loss of wilderness values on 15,100 acres of the WSA in the nondesignated portion, and would indirectly reduce opportunities for solitude and primitive recreation throughout the WSA. The best special features including the Dirty Devil River and most Class A scenery would be preserved in the designated area. This alternative would complement the NPS proposal for wilderness designation of the contiguous NRA lands.</p>

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Table 4 (Continued)
Comparative Summary of Impacts by Alternative

		Alternatives		
Issue Topic	Recommendation Large Partial Wilderness (32,700 Acres)	No Action/No Wilderness	All Wilderness (73,100 Acres)	Small Partial Wilderness (27,000 Acres)
Impacts on Air Quality	Over the short term, air quality would not be reduced by activities in the WSA. Without new technology for extraction of oil from tar sand, long-term development would reduce air quality and with variances could exceed PSD Class I limitations in Canyonlands National Park.	Over the short term, air quality would not be significantly reduced by activities in the WSA. Without new technology for extraction of oil from tar sand, long-term development would reduce air quality and with variances could exceed PSD Class I limitations in Canyonlands National Park.	Air quality would not be affected by activities inside the WSA.	Over the short term, air quality would not be reduced by activities in the WSA. Without new technology for extraction of oil from tar sand, long-term development would reduce quality and with variances could exceed PSD Class I limitations in Canyonlands National Park.
Impacts on Geology and Topography	Geologic and topographic features would be altered in the long term on 18 percent (12,800 acres) of the WSA.	Geologic and topographic features of the WSA would be altered on 21 percent (15,100 acres) of the WSA.	Geologic and topographic features would not be significantly affected because disturbance would be minimized and tar sand would not be developed.	Geologic and topographic features would be altered in the long term on 21 percent (15,100 acres) of the WSA, all in the non-designated area.
Impacts on Soils	Increases in soil loss would be significant (37 percent) on a localized basis. Discharge into the Dirty Devil River would not be significant because of required mitigation and small flows in drainages.	Increases in soil erosion would be significant (44 percent) on a localized basis. Discharge into the Dirty Devil River would not be significant because of required mitigation and small flows in drainages.	Impacts on soils and a 1-percent increase in erosion would be insignificant.	Increases in soil erosion would be significant (44 percent) on a localized basis. Discharges into the Dirty Devil River would not be significant because of required mitigation and small flows in the drainages.
Impacts on Vegetation	Over the long term, vegetation types would be altered or destroyed on 18 percent (12,800 acres) of the WSA. Individual plants of special status species may be destroyed but the viability of populations would be maintained. Vegetation types and special status species would receive additional protection on 45 percent of the WSA.	Over the long term, vegetation types would be altered or destroyed on 21 percent of the WSA. Individual plants of special status species may be destroyed but the viability of populations would be maintained.	Vegetation types would not be significantly altered and special status species would be protected.	Over the long term, vegetation types would be altered or destroyed on 21 percent of the WSA. Individual plants of special status species may be destroyed but the viability of populations would be maintained. Vegetation types and special status species would receive additional protection on 37 percent of the WSA.

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Table 4 (Continued)
Comparative Summary of Impacts by Alternative

		Alternatives		
Recommendation		No Action/No Wilderness	All Wilderness	Small Partial Wilderness
		(32,700 Acres)	(73,100 Acres)	(27,000 Acres)
Issue Topic	Large Partial Wilderness			
Impacts on Water Resources	Water quality would not be affected in the short term. Over the long term, tar sand development would reduce the quality of groundwater and reduce salinity in the Colorado River. Impacts on use of water in the Dirty Devil River system would be the same as with the All Wilderness Alternative because the Dirty Devil River would be in the designated area.	In the short term, ground and surface water quality and quantity would not be significantly affected. Over the long term, tar sand development would reduce salinity in the Colorado River, reduce the flow of the Dirty Devil River, and compete with other potential consumptive water uses in the Dirty Devil River system.	In the short term, ground and surface water quality and quantity would not be affected. In the long term, groundwater quality could be affected by tar sand development outside the WSA. Future water diversions and new consumptive uses in the Dirty Devil River system upstream of the WSA in Sevier, Wayne, Garfield, and Emery Counties may be hampered or restricted.	Impacts on water resources would be essentially the same as with the Large Partial Wilderness Alternative.
	Long-term potential for production of 39 million barrels of oil from tar sand and an unknown amount of uranium oxide would be foregone.	This alternative would not affect mineral exploration or production because the WSA would remain open to mineral leasing, location of mining claims, and mineral exploration and development without restriction for protection of wilderness values.	Long-term potential for production of 208.5 million barrels of oil from tar sand and an unknown amount of uranium oxide would be foregone.	This alternative would not significantly affect mineral exploration or production because known mineral resources would be in the nondesignated area and could be developed as with the No Action/No Wilderness Alternative.
Impacts on Mineral and Energy Development and Production	Wildlife habitat and populations would not be significantly affected in the short term. Wildlife populations would benefit from solitude on 45 percent of the WSA. Over the long term, tar sand development would reduce available habitat for endangered, sensitive, and other species including desert bighorn sheep in the eastern portion of the WSA. Populations of some species would be reduced but reclamation would improve habitat for others.	Wildlife habitat and populations would not be significantly affected in the short term. Over the long term, tar sand development would reduce available habitat for special status species and most other species including desert bighorn sheep on 21 percent of the WSA. Populations of some species would be reduced in the WSA but reclamation efforts would improve habitat for others.	Wildlife habitat and populations would be protected and would benefit from solitude.	Wildlife habitat and populations would not be significantly affected in the short term. Wildlife populations would benefit from solitude on 37 percent of the WSA. Long-term impacts would be as described for the No Action/No Wilderness Alternative because all of the projected disturbance would occur in the nondesignated area.
	Wildlife habitat and populations would not be significantly affected in the short term. Wildlife populations would benefit from solitude on 45 percent of the WSA. Over the long term, tar sand development would reduce available habitat for endangered, sensitive, and other species including desert bighorn sheep in the eastern portion of the WSA. Populations of some species would be reduced but reclamation would improve habitat for others.	Wildlife habitat and populations would not be significantly affected in the short term. Over the long term, tar sand development would reduce available habitat for special status species and most other species including desert bighorn sheep on 21 percent of the WSA. Populations of some species would be reduced in the WSA but reclamation efforts would improve habitat for others.	Wildlife habitat and populations would be protected and would benefit from solitude.	Wildlife habitat and populations would not be significantly affected in the short term. Wildlife populations would benefit from solitude on 37 percent of the WSA. Long-term impacts would be as described for the No Action/No Wilderness Alternative because all of the projected disturbance would occur in the nondesignated area.

FIDDLER BUTTE WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

		Alternatives		
		Recommendation	All Wilderness	Small Partial Wilderness
Issue Topic		Large Partial Wilderness (32,700 Acres)	No Action/No Wilderness (73,100 Acres)	(27,000 Acres)
Impacts on Livestock Management		In the short term, the methods and costs of livestock management would not be affected. In the long term, available livestock forage in one allotment would be reduced by 12 percent for the duration of the tar sand activities. Access would not be affected because the 23.6 miles of ways would remain open to unrestricted use by the four permittees.	In the short term, livestock management would not be affected. In the long term, available livestock forage in one allotment would be reduced by 12 percent for the duration of tar sand activities.	Impacts would be the same as with the Large Partial Wilderness Alternative.
Impacts on Visual Resources		Visual resources would be preserved overall in the designated portion which is 45 percent of the WSA. VRM class objectives would not be met on 12,800 acres in the nondesignated area disturbed by tar sand development.	Visual resources would be degraded throughout the WSA and VRM objectives would not be met in the directly disturbed areas (15,100 acres) in the eastern portion of the WSA.	Visual resources would be preserved overall in the designated portion which is 37 percent of the WSA. VRM class objectives would not be met on 15,100 acres in the nondesignated area disturbed by tar sand development.
Impacts on Cultural Resources		Forty-five percent of the WSA including eight recorded sites would receive protection as a result of wilderness designation under this alternative. The remainder of the WSA including 32 recorded sites would be adversely affected by tar sand development and possibly ORV use. Intentional vandalism and artifact collection may increase.	The benefits of protection from surface disturbance would outweigh potential damage from increased vandalism from wilderness designation. Closure to all vehicular activity would protect sites from unintentional damage and generally decrease accessibility in the unit. Management of cultural resources would be restricted in scope and execution to protect other wilderness values.	Thirty-seven percent of the WSA including three recorded sites would receive protection as a result of wilderness designation under this alternative. In the long term, the remainder of the WSA including 37 known sites would be adversely affected. Intentional vandalism and artifact collection may increase.

FIDDLER BUTTE WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

		Alternatives		
Issue Topic	Recommendation	Large Partial Wilderness (32,700 Acres)	No Action/No Wilderness (73,100 Acres)	All Wilderness (127,000 Acres)
Impacts on Recreation	Primitive recreation opportunities would be preserved on 45 percent of the WSA. Over the long term, as tar sand development occurs, opportunities for primitive recreation would be significantly reduced in quality or eliminated in the nondesignated area. Approximately 23.6 miles of ways would remain open for vehicular use on the remaining 55 percent (40,400 acres) of the WSA further reducing the quality of primitive recreational opportunities. Wild and scenic river values of the Dirty Devil River would be preserved.	Opportunities for vehicular-based recreation would be maintained as tar sand development occurs. Over the long term, opportunities for primitive recreation would be significantly reduced in quality or eliminated from the eastern portion of the WSA. Wild and scenic river values of the Dirty Devil River would be altered.	This alternative would benefit primitive recreation by reducing surface-disturbing activities and increasing management attention and recognition of primitive recreation values. ORV use would be eliminated from the WSA but would not decline on a regional basis because vehicle use is low and there are other vehicle use areas near the WSA. Wild and scenic river values of the Dirty Devil River would be preserved.	Primitive recreation opportunities would be preserved on 37 percent of the WSA. Over the long term, as tar sand development occurs, opportunities for primitive recreation would be significantly reduced in quality or eliminated in the nondesignated area. Approximately 23.6 miles of ways would remain open for vehicular use on the remaining 63 percent (46,100 acres) of the WSA further reducing the quality of primitive recreational opportunities. Wild and scenic river values of the Dirty Devil River would be preserved.
Impacts on Economic Conditions	Economic conditions would not be significantly affected in the short term. In the long term, there would be major beneficial and adverse effects from tar sand developments as described for the No Action/No Wilderness Alternative. Impacts from potential water consumptive projects upstream of the WSA may not occur.	Economic conditions would not be significantly affected in the short term. In the long term, there would be major beneficial and adverse effects on all economic sectors and infrastructures of Wayne, Garfield, Sevier, and possibly Emery Counties from the tar sand and water developments in the Dirty Devil River system.	Economic conditions would not be significantly changed in the short term. In the long term, major beneficial or adverse impacts on the economic sectors and infrastructures of Wayne, Garfield, Sevier, and possibly Emery Counties from tar sand development in the WSA would not occur. Economic impacts from water consumptive projects upstream of the WSA in the Dirty Devil River system may not occur.	Economic conditions would not be significantly affected in the short term. In the long term, there would be major beneficial and adverse effects from tar sand development as described for the No Action/No Wilderness Alternative. Impacts from potential water consumptive projects upstream of the WSA may not occur.

FIDDLER BUTTE WILDERNESS STUDY AREA

Appendix
 Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 37 S., R. 13 E., Sec. 16	640.00		State	No	Exchange	\$2,000	
T. 32 S., R. 15 E., Sec. 16	640.00		State	No	Exchange	\$2,000	
T. 32 S., R. 15 E., Sec. 32	640.00		State	No	Exchange	\$2,000	

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.