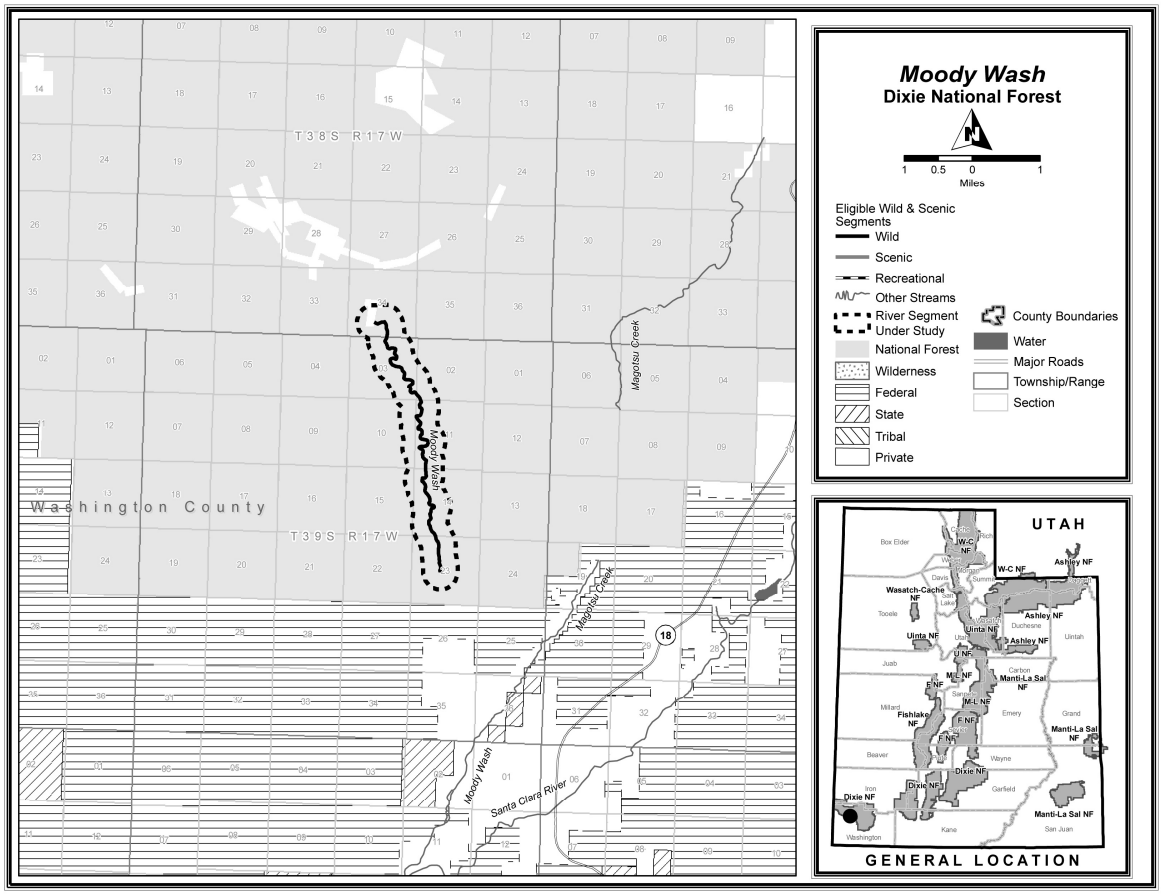
Moody Wash River
Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Moody Wash
River Mileage:
Studied: 12 miles, from headwaters to Santa Clara River
Eligible: 5 miles, from headwaters to Forest boundary

Location:

Moody Wash	Dixie National Forest, Pine Valley Ranger District, Washington County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	SW/SW 34 T 38 S R 17 E, SLM	SW/NW 23 T 39 S R 17 E, SLM	Wild	5*

*Eligibility determinations were made pending "ground truthing" of ORVs. Upon ground truthing Moody Wash, it was determined that only 5.08 miles contained the ORV. The new segment reflects the segment that is truly eligible.

Physical Description of River:
Moody Wash is a semi-arid desert stream system that is very closely connected to and dependant upon a shallow alluvial groundwater table. The mainstem of Moody Wash from its beginning approximately one mile above the Racer Canyon confluence to near the Forest boundary is considered a mid-elevation, transitional reach characterized by regular upwelling and downwelling of surface flow. Summer low

flows become intermittent, with areas of downwelling and upwelling that support and maintain a cottonwood and willow riparian plant community. The area is semi-arid, with average annual precipitation of approximately 12-18 inches. High flows typically occur December through May, but peak flows also occur from localized late summer thunderstorms. The upper headwaters of Moody Wash are typically more ephemeral in nature due to the small catchment's area that supplies runoff. The middle mainstem reach of Moody Wash primarily consists of narrow, single channel reaches with occasional wider sediment deposition zones. Seeps at the beginning of the mainstem, as well as flow from Racer Canyon, contribute to perennial surface flows in this reach. The approximately last 1.5 miles of the stream to the Forest boundary broaden out into a large depositional area that tends towards a multi-threaded channel system. This depositional area extends below the Forest boundary and is naturally more ephemeral in nature due to regular subbing of surface water into the streambed sediments. Moody Wash develops surface flow again just upstream of the confluence with Magotsu Creek.

ELIGIBILITY

Name and Date of Eligibility Document: Fishlake and Dixie National Forests Wild and Scenic River Eligibility Evaluation, June 2007

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of Moody Wash on National Forest System lands. The river segment is intermittent in the traditional sense with water flowing at the surface in some places and below the surface in other places. Where the river flows below ground, the shallow water table supports riparian vegetation and often puddles.

Summary of Outstandingly Remarkable Values (ORV):
Ecological – Moody Wash is a semi-arid desert stream system that is very closely connected to and dependant upon a shallow alluvial groundwater table. Summer low flows become intermittent, with areas of downwelling and upwelling that support and maintain a cottonwood and willow riparian plant community. Flows also support year-round populations of Virgin spinedace, speckled dace, and desert sucker, and amphibians such as the Arizona toad and canyon tree frog. The shallow groundwater table is recharged from winter-spring flows and summer thunderstorm flows, which also provide periods of perennial flow throughout the drainage, connecting populations of fish species during these high flows. Unlike the majority of similar systems in southwest Utah and the southwest U.S. that have been impacted by development, groundwater pumping, channel modifications, and invasive species such as tamarisk, Moody Wash is still a fully functioning semi-arid desert stream system. Moody Wash supports healthy, self-sustaining populations of native wildlife, including State of Utah sensitive species, and diverse, resilient riparian plant communities.

Geological/Hydrological – Moody Wash's close connectivity to a shallow alluvial groundwater table as well as its regular inundation by flood events play a primary role in the support of the riparian and aquatic ecosystem. The mainstem of Moody Wash from its beginning approximately 1 mile above the Racer Canyon confluence to near the Forest boundary is considered a midelevation, transitional reach characterized by regular upwelling and downwelling of surface flow. Because of these conditions, this kind of system is particularly sensitive to human disturbances such as dams, diversions, and groundwater pumping. Moody Wash is unique to other semi-arid streams in southwest Utah in that it is a rare system that has not been impaired by these common kinds of disturbances, and is still intact and functioning. In addition, Moody Wash is unique to the majority of other stream systems in southwest Utah draining into the Virgin River Basin in that it is dominated by volcanic geology versus the more typical sedimentary limestone and sandstone well known to the area.

Fish – Moody Wash is considered a very important refuge area for Virgin spinedace (*Lepidomeda mollispinis mollispinis*), a state sensitive species, in the Virgin River Basin. It is the only tributary to the

Santa Clara River that has its historic range intact and occupied. During annual periods of high flow spinedace are connected throughout the drainage; in periods of low flow spinedace recede to upper areas of perennial flow as refugia habitat. The population of Virgin spinedace in Moody Wash is a self-sustaining, breeding population, and is considered an important population that could be used to restock other areas. Moody Wash also contains desert sucker (*Catostomus clarkia*), also a state sensitive species list, speckled dace (*Rhinichthys osculus*), and habitat for the Arizona toad (*Bufo microscaphus*) (also called southwestern toad), another state sensitive species.

CLASSIFICATION

Basis for the Classification of River: Wild

There are approximately two miles of motorized four-wheel-drive route along the lower section of Moody Wash to the Forest boundary. The rest of the access in Moody Wash and Racer Canyon is via a non-motorized trail. A major utility corridor crosses Moody Wash near the Forest boundary.

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor consist is a 8.85 mile-long river segment encompasses about 2615.3 acres, and is predominantly on National Forest System (NFS) lands administered by the Dixie National Forest. The segment does have a 14.79 acre privately-owned section of property that is located within the corridor. In addition, there is a 39.47 acre section of privately-owned property directly bisects the river segment, and occurs entirely within the corridor. The river segment through the privately-owned property is 0.2 miles long.

River Mile	Ownership	Acres
0 – 3.07	Dixie National Forest (Pine Valley Ranger District)	982
3.07 – 3.27	Private land (40 acres lot size, 0.2 mile segment)	40
3.27 – 5.08	Dixie National Forest (Pine Valley Ranger District)	1786
	Total:	**2802 acres**

Moody Wash	Start	End	Miles
Dixie National Forest	SE ¼ SE ¼ Sect. 30, T 38S, R 17W, SLM	NE ¼ SW ¼ Sect. 34, T 38S, R 17W, SLM	3.07
Private Land	NE ¼ SW ¼ Sect. 34, T 38S, R 17W, SLM	NE ¼ SW ¼ Sect. 34, T 38S, R 17W, SLM	0.2
Dixie National Forest	NE ¼ SW ¼ Sect. 34, T 38S, R 17W, SLM	SW ¼ SE ¼ Sect. 23,T 39S, R 17W, SLM	1.81

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development in the eligible segment. There are two closed claims located on the private land. The first closed claim was and oil and gas lease from 1980 to 1986 (E ½ of NW ¼ NW ¼ sect. 34, T 38, R 17W SLM—lots 1-7). The second closed claim was an abandonment claim form 1988 to 1994 (NW ¼ SW ¼ sect. 34, T 38, R 17W SLM) (NE ¼ SE ¼ sect. 33, T 38, R 17W SLM).

Moody Wash is located in the Moody Wash Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area was as follows:

Oil and Gas: Currently there are no producing wells or fields in this area. It has been only lightly

explored.

Tertiary volcanic rocks cover the entire area. Oil potential associated with the hypothetical Late Paleozoic play is ranked as moderate (low certainty).

This area is not prospective for the discovery of natural gas due to the occurrence of volcanic rock and the lack of known source rocks. The Cretaceous conventional play associated with trap structures in Cretaceous sandstones and coalbed methane in the coal bearing Cretaceous Dakota Formation as are the southern portions of the other Dixie National Forest Districts to the east. In the southern areas of the other Districts occurrence potential is rated by the UGS as moderate (low to moderate certainty). Development potential is rated as low because the area is remote from established markets and pipelines and the maturity of the source rocks is questionable on providing adequate hydrocarbon generation for economic accumulations.

If leases are issued, exploratory drilling could occur.

Carbon Dioxide: This area is extremely faulted and deformed. Low potential for occurrence (low certainty). Development potential is low-none because there is no market.

Geothermal: There are known Geothermal Resource areas to the north and south outside the Forest boundaries. However, occurrence potential is rated as unknown due to the lack of identified thermal wells and springs. Development potential is low.

Coal: This area is located along the northern extent of the New Harmony Coal Field. Any coal seams in the area have been extensively deformed and faulted by uplift and formation of the Pine Valley Mountains. Occurrence potential is low-moderate and development potential is low-none.

Locatable Minerals: There are no active mining claims in this area. There are no known valuable locatable mineral deposits in this area. However, faulted igneous rocks dominate the area, indicating that the area may be prospective for base and precious metals. Occurrence and development potential are considered to be low-moderate.

Common Variety: Igneous rocks cover the entire area. Igneous rock and associated colluvium could be developed for riprap, gravel, landscaping rock, and building stone. Development potential is considered moderate, probably on a small scale.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Bullock, Kenneth C., 1970. Iron Deposits of Utah. Utah Geological and Mineralogical Survey, Bulletin 88, December 1970.

Smith, Martha R., and Milligan, Mark R., Metalliferous Resources of Utah, Public Information Series 57, Utah Geological Survey, Salt Lake City, Utah

Water Resources Development – There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. There are no dams, diversions,

or other channel modifications on this segment. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – Forest Service Road # 30860 provides access to the lower two mile of Moody Wash and is located in the river corridor. The road also forks 0.5 miles up from the Forest boundary and follows the utility corridor. Forest Service Road #30354 dead-ends 0.25 mile from the upper reach of the river corridor. A non-system non-motorized trail continues from the roads terminus and follows the river corridor down to FS Road's #30860 terminus. The non-system non-motorized trail is on National Forest land with the exception of where it crosses the 40 acre parcel of privately-owned land.

There is a developed springhead located at the Forest Service owned water right (S. 1980ft., E. 660 ft. from the N corner of Section 33, T 38S, R 17W.). The purpose of the development is to provide water for cattle on the Bull Valley Allotment.

A major utility corridor crosses the river corridor approximately 0.6 mile north of the forest boundary (SE ¼ NW ¼ sect. 23, T 39, R 17W SLM). The utility corridor contains a power-line, two buried natural gas pipelines, and one buried fiber-optic line. The power-lines span from bank-to-bank, while the natural gas lines and the fiber-optic line are subsurface within the river corridor.

There are no developments on the privately-owned land within the river corridor.

Grazing Activities – The river segment is located within the Bull Valley Allotment (#00102) and the Gunlock Allotment (#00106). The Bull Valley allotment consists of 37,927 acres and is an active allotment with seven permittees. The Gunlock Allotment consists of 42,034 acres and is an active allotment with five permittees.

Bull Valley Allotment		
Permittee Name	Number of mature cow/Nursing	Active Grazing Dates
S.C. Cattle Co.	16	06/01 to 09/30
W. & R. Mathis	27	06/01 to 09/30
D.G. Hafen	49	06/01 to 09/30
G. B. Ranch	97	06/01 to 09/30
D. Frei	103	06/01 to 09/30
S. Frei	52	06/01 to 09/30
J.C. Frei	127	06/01 to 09/30

Gunlock Allotment		
Permittee Name	Number of mature cow/Nursing	Active Grazing Dates
E.L. Bowler	159	06/01 to 09/30
M.T. & L.L. Bowler	66	06/01 to 09/30
J.M. & S.L Bowler	61	06/01 to 09/30
J.H. Bowler	84	06/01 to 09/30
F.L. & M.E. Bowler	248	06/01 to 09/30

Recreation Activities – Recreational use of the Moody Wash drainage is considered low. Currently both FS Road #30860 and #30354 receive low to moderate ATV/OHV use. The lower section of FS Road #30860 does receive low to moderate use from full-size vehicles, but most tend to follow the utility

corridor to the east. The non-system trail that access Moody Wash is considered a low use trail, but does receive use for grazing administration and hunting purposes.

Other Resource Activities – Due to the limited access, topography, and vegetation composition, other river corridor uses, such as timber harvest and farming, are not foreseeable uses. Pine Valley Ranger District has experienced frequent and large fires. Restoring vegetation, post-fire, can be a challenge for land managers. Some of the most successful methods for seeding areas post-fire involved mechanical manipulation of the land and heavy equipment.

Special Designations – The Moody Wash river corridor is entirely located in the Dixie National Forest's Moody Wash Roadless Area (1999 Roadless Areas). The purpose of designated roadless areas under the 1999 Road Rule was "to restrict certain activities such as road construction and reconstruction into the unroaded portions of inventoried roadless areas and to establish a process for evaluating possible limitations on activities in other univentoried unroaded areas through forest planning at the local level."

Socio-Economic Environment – The river segment and corridor are all located within Washington County. The eastern part of Washington County (particularly St. George, Hurricane, and Washington cities) is one of the fastest growing areas in the entire country. The river segment is located in the very sparsely populated and rugged western part of the county. Local towns such as Veyo, Gunlock, Central, and Pine Valley are likely to see some growth in the next 20-50 years – approximately doubling by 2020, then six times larger by 2050 – but will remain less densely populated than the eastern part of the county which is expected to grow to over a half million people by 2050. The western communities retain much of their rural character and lifestyle. Ranching and farming still dominate the communities.

More specific information about Washington County:

The rugged National Forest System lands in the county include the 50,200-acre Pine Valley Mountain Wilderness Area north of St. George. The lack of future developable private lands to accommodate projected growth is a major issue for county leaders (Washington County Commission 2006). Due to mild winter weather and the quality of life offered by the area (which includes proximity to public lands[18]), Washington County has been the fastest growing county in the state (and one of the fastest in the country (U.S. Census Bureau 2005)) for the past several years. Growth is spread across the county. Annual growth rates for the communities of Washington, Hurricane, Ivins, and Santa Clara from 2000 to 2002 exceeded 10 percent, surpassing even St. George (State of Utah 2005). From 2004 to 2005 the county grew at a rate of 8.4 percent (State of Utah 2006). The county is projected to sustain a 3.9 percent growth rate through 2050, with total population projected to increase from 125,010 people in 2005 to 607,334 people by 2050 (State of Utah 2005). Much of the growth seen in recent years is due to the relocation of retiring baby-boomers to the area. Increased conflicts over the availability of private land, water, and open space will be a key trend in this area (State of Utah 2003, Washington County Commission 2006).

The trade, transportation, and utilities sector is currently the largest industry in Washington County (State of Utah 2003). In the period from 1980 to 2002, as the economy grew (service sector doubled) in other areas, many traditional industries (e.g., farming and ranching) saw their share of the county economy decrease. In fact, agriculture went from almost 5 percent of the economy to 1 percent (State of Utah 2003).

Between 2005 and 2030, government employment will likely remain the same and services will continue to grow, while traditional industries will likely continue to struggle. Health and education services are

[18] It is unclear how much of an impact the proximity to National Forest System lands contributes to bringing people to relocate in the region. This is an area for future research.

expected to grow to meet the demands of increased population (State of Utah 2003).

Washington County has a high job growth rate (Utah Business 2006) and a relatively diverse economic base. Per capita income in Washington County more closely approaches state averages than other counties in the planning area (State of Utah 2003). Low wages in the tourism industry are a concern for county officials (Washington County Commission 2006). Despite being below state averages for wage income, Washington County residents, buoyed by retirees, have the fifth highest total personal income in the state. Total personal income increased at the second fastest rate (exceeded only by Uintah County) in the state during the period from 2000 to 2003 (Bureau of Economic Analysis 2003).

Much of the Washington County General Plan is focused on public lands issues. County leaders will continue to seek working relationships with federal agencies to improve management of Federal lands that are viewed as critical to the county economy.

Current Administration and Funding Needs if Designated – The U.S. Forest Service would be the administering agency if he river segment were designated. There is an existing conservation agreement that is being coordinated by the Utah Division of Wildlife Resources for the Virgin River Spinedace.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average $200,000 per plan for 86 segments, which would cost approximately $17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be $200,000; a moderate complexity river would be $50,000; and a low complexity river at $25,000. Using an average of complexity costs, it would cost the Forest Service around $7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) **The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.**

U.S. Forest Service officials met with the Washington County Commission and the Washington County Water Conservancy District director on June 5, 2007. At the meeting, the Washington County Conservancy District indicated a willingness and interest in participating in watershed improvement projects in the Moody Wash area.

(2) **The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.**

The Utah Division of Wildlife Resources has a Conservation Agreement for the Virgin River Spinedace. This agreement – which the Forest Service participates in as a partner – should serve to protect fish species and provide for water quantity/quality and other resource benefits.

(3) **Support or opposition to designation.**

During the forest's eligibility process, the Dixie National Forest received comments from the Washington County Commission and Washington County Water Conservancy District in opposition to eligibility. In subsequent meetings, both entities have expressed opposition to suitability as well.

Local ranchers are the primary users of the river corridor. With the exception of Ed Bowler, who attended the June 5, 2007 meeting with the county and conservancy district to express concern, most of these people have not been actively involved in the public process. Anecdotally, they do not support designation of the river segment.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored "preservation" of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support have been received.

During the scoping and DEIS comment periods, the forest received many comments on Moody Wash. Many people expressed interest in seeing this river segment designated. It was part of a group of rivers suggested for a positive suitability finding by a group of conservation organizations. All of the three organized campaigns supported a positive suitability finding for this segment. Washington County, Washington County Water Conservancy District, and others have expressed strong opposition to designation. Meanwhile, strong interest has been expressed from many parties (including local and state government) in greater conservation measures for protection of some of the species and ecological qualities of the river segment.

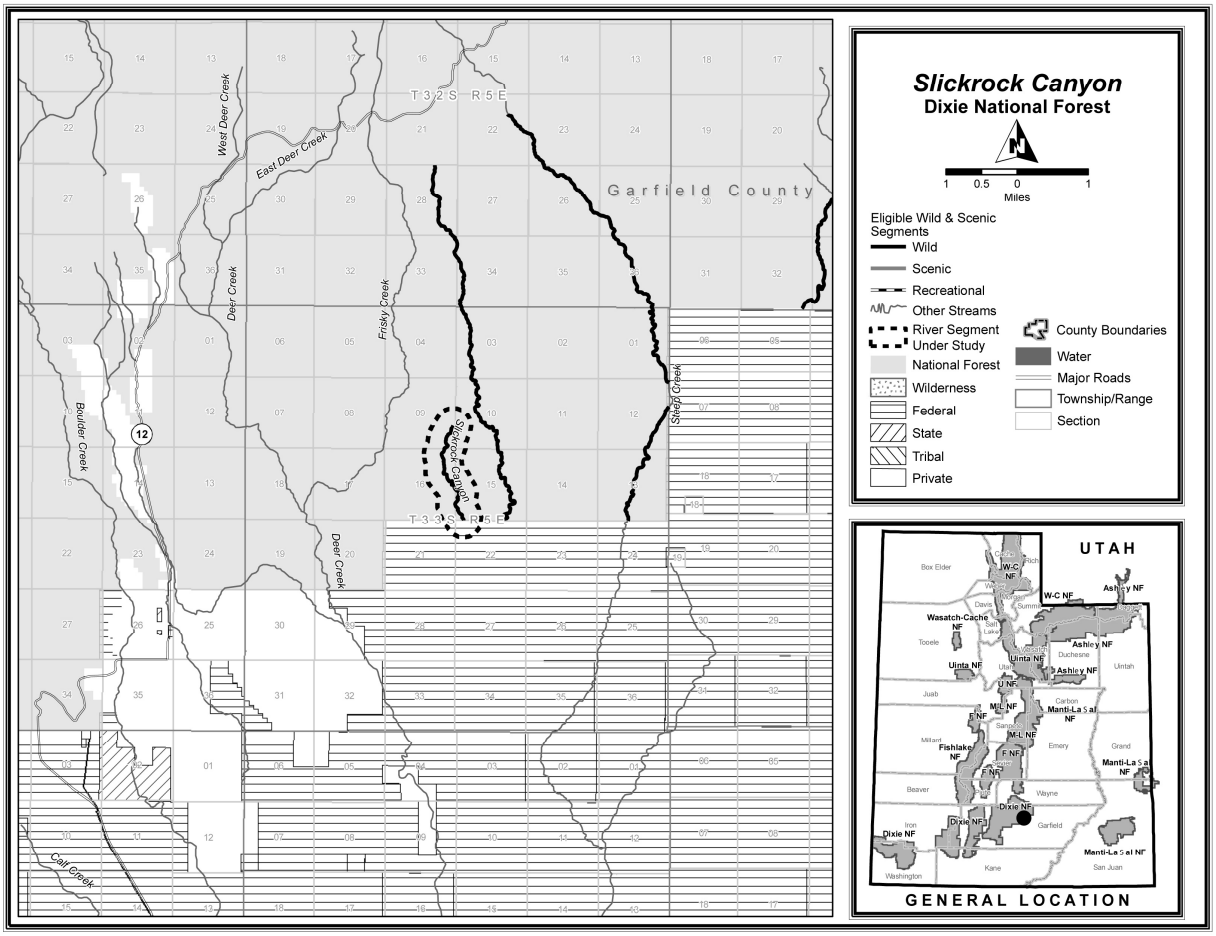
(4) **The consistency of designation with other agency plans, programs or policies and in meeting regional objectives**.
Designation would contribute to state and regional protection and recovery objectives for the Virgin spinedace outlined in the Virgin Spinedace Conservation Agreement and Strategy.

(5) **Contribution to river system or basin integrity**.
The Virgin River Water Basin is very large and Moody Wash does not contribute much water to the basin. It is a unique area in the basin because of the volcanic geology, but isn't likely critical to basin integrity.

(6) **Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.** Washington County Water Conservancy District has expressed a willingness to help provide volunteers and to partner for water conservation and for watershed improvement.

The Dixie NF is beginning to coordinate with the Utah Division of Wildlife Resources on developing some form of cooperative management strategy in Moody Wash (meeting in the works for fall 2007), as well as the Dixie National Forest becoming involved with the Virgin Spinedace Conservation Team. With active coordination with these groups, there is a high level of partnership potential.

Slickrock Canyon
Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Slickrock Canyon
River Mileage:
Studied: 4.4 miles, from headwaters to private land (T 33S, R 5E, Sect. 33)
Eligible: 1.6 miles, from headwaters to Forest boundary

Location:

Slickrock Canyon	Located on Dixie National Forest, administered by Fishlake National Forest, Fremont River Ranger District, Garfield County, Utah		Congressional District 2	
	Start	End	Classification	Miles
	NE ¼ SE ¼ Sect. 9, T 33S, R 5E, SLM	SW ¼ SW ¼ Sect. 15, T 33S, R 5E, SLM	Wild	1.6

Physical Description of River: Slickrock Canyon is located on the Fremont River Ranger District below Highway 12. The canyon is dominated by slickrock and ledge with pinyon and juniper trees transitioning to ponderosa pine. This is an ephemeral/intermittent stream.

ELIGIBILITY

Name and Date of Eligibility Document: Appendix 4, Wild and Scenic River Eligibility, Grand Staircase Escalante National Monument (GSENM), 1998.

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of Slickrock Canyon on National Forest System lands.

Summary of Outstandingly Remarkable Values (ORV):

Scenic – The area offers dramatic contrasts of color, texture, and slope common to other similar drainages in the surrounding landscape. This short segment (1.6 miles) of riparian corridor on the Fishlake National Forest parallels Cottonwood Canyon, yet is broader and more intermittent. The east facing escarpment of the mesa to the west, which the Long Neck Trail (non-motorized) traverses towards the north, is a significant visual feature as seen from this limited segment. The scenic value of the area is less than that found lower in the drainage on the GSEM

Recreational – The area within the canyon itself on the Fishlake National Forest receives a low-level of use by hikers and backpackers. The Long Neck Trail (#34017) located to the west above on the mesa, facilitates access to this segment's headwaters area. The steep winding canyon itself, though relatively accessible from the north via this trail, provides both solitude and a primitive experience and accordingly is used by Boulder Outdoor Survival.

Cultural – The area has been used intermittently by Native Americans and pioneers. On top of Long Neck Mesa to the west there is a cabin near the beginning of the Long Neck Trail which is estimated to be over 50 years of age.

Ecological – The stream (although intermittent) and associated riparian areas are vital to an otherwise desert ecosystem.

This stream was determined to be eligible by an interagency study headed by the Grand Staircase Escalante National Monument in 1998.

CLASSIFICATION
Basis for the Classification of River: Wild
There are no roads present in the river corridor. There is a non-motorized trail that parallels the river to the west that is located is within the corridor.

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor is a 1.6 mile-long river segment and encompasses 1,866 acres, and is entirely on National Forest System (NFS) lands administered by the Fishlake National Forest.

River Mile	Ownership	Acres
0 – 1.6	Dixie National Forest administered by the Fishlake National Forest (Fremont River Ranger District)	1866
	Total	**1866**

The stream corridor is within Management Area 2A# (MA-2A#) according to the Dixie National Forest Plan. MA-2A# has a management emphasis on semi-primitive recreation opportunities with a "no surface occupancy" stipulation for mineral entry. The area provides multiple uses.

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development in the eligible segment.

Slickrock Canyon is located in the Long Neck Mesa/Steep Creek/Oak Creek Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area was as follows:

Oil and Gas: Currently there are no producing wells or fields in this area. It has been only lightly explored. There are no leases, but industry has expressed interest in this general area. Expressions of Interest have been made for the area immediately to the northeast.

Oil potential associated with four possible plays (Late Proterozoic/Cambrian, Devonian-Pennsylvanian, Late Paleozoic, and Permo-Triassic Unconformity) is ranked as moderate to high (low certainty) along the eastern and southern portions of the Teasdale and Escalante Ranger Districts. Petroleum development potential is ranked by the UGS as low-moderate with the highest potential relative to the Devonian-Pennsylvanian and Permo-Triassic Plays. If leases are issued, exploratory drilling could occur. A total of 32 new exploratory wells are reasonably foreseeable for the Forest in the next 15 years. Of this total, only a couple of these would probably occur in this area. If a discovery were made, additional development wells could be drilled.

Jurassic sediments (Navajo Sandstone and Carmel Formation) are exposed in the area, however this area is not prospective for natural gas/methane due to the close proximity to the volcanic rocks of Boulder Mountain immediately to the west as well as uplift and erosion of known source/reservoir Cretaceous sedimentary rocks.

Carbon Dioxide: Moderate potential for occurrence (low certainty). Development potential is low-none because there is no market.

Geothermal: Occurrence potential is unknown due to the lack of identified thermal wells and springs. Due to the lack of known geothermal springs and wells and overall information, the development potential is considered low.

Coal: There are no known coal deposits in this area

Locatable Minerals: There are no known valuable deposits of base or precious metals or other locatable minerals. Development potential is low.

Common Variety: Sandstone, limestone and other sedimentary rocks in the area could be developed for decorative stone or building stone. Colluvium consisting of displaced sedimentary rocks and volcanic rock transported from Boulder Mountain could be developed for riprap, decorative stone, and building stone. Development potential is considered moderate, most likely on a small scale, localized basis.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Water Resources Development – There are no known planned or existing water developments (dams, diversions or channel modifications) on these segments. There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. Designation into the Wild and Scenic river system does not affect existing, valid water rights

Transportation, Facilities, and Other Developments – The Longneck Trail (#34017) parallels the river on the plateau above to the west. The Longneck Trail is located on the Dixie National Forest (Escalante Ranger District) and is a non-motorized pack and saddle trail that is considered a low use trail.

There are no other facilities and/or other developments located in the river corridor. Slickrock Canyon river corridor is entirely located in the Long Neck Mesa/Steep Creek/Oak Creek Inventoried Roadless Area.

Grazing Activities – The river segment is located within the Oak Creek Allotment. The Oak Creek Allotment consists of 72,712 acres and is an active allotment with three permittees. There is a section of cattle fencing that extends 600 feet into the river corridor, but does not bisect the river.

Oak Creek Allotment		
Permittee Name	Number of mature cow/Nursing	Active Grazing Dates
B.K. & M. Taylor	196	06/01 to 10/15
Tercero Corp.	806	06/01 to 10/15
R. & K. Fillmore	76	06/01 to 10/15

Recreation Activities – Recreational use of Slickrock Canyon is considered low. The Longneck Trail (#34017) parallels the river to the west and is in the river corridor. The Longneck Trail is located on the Dixie National Forest (Escalante Ranger District) and is a non-motorized pack and saddle trail that is considered a low use trail. There is no trail located adjacent to the river, however the area is used by hikers and backpacker. The steep winding canyon provides solitude and a primitive experience.

Other Resource Activities – None.

Special Designations – None

Socio-Economic Environment – The river segment is located within Garfield County. Boulder and Escalante are the two closest towns. Access to the area is provided by Highway 12 – an All-American Road. Slickrock Canyon flows from the Dixie National Forest onto the Grand Staircase-Escalante National Monument.

Garfield County is a largely rural county where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Much of this growth in recreation and tourism can be attributed to the designation of the Grand Staircase-Escalante National Monument in 1996. The county is struggling to retain rural traditions and lifestyles as well as "working" connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult. Second home ownership has increased in the county dramatically. Over 60% of property tax notices in Garfield County are sent out of the county (39% out of state or country).

A recent visitor study of the Grand Staircase-Escalante National Monument indicates that approximately 600,000 people visit the area every year. While most of the visitors remain in the frontcountry visitor areas, exploration into the backcountry is increasing. Visitors come from throughout the United States and the world. About 14% of visitors are from Utah, 13% from California, 6% from Arizona, 5% from Colorado, and 10% from other western states. About 30% come from the other 39 states leaving 23% from other countries. The average visitor spends three days in the area. Only 20% of these visitors indicated that the Monument was their primary destination. Many of these visitors end up exploring the forest. The most common visitor activities reported were hiking, photography, scenic driving, and viewing natural features. Escalante and Bryce Canyon are the two most visited communities near the Monument. Boulder also experienced high visitation. The average amount spent by a group of three to the area was just under $500. This means that more than $20.6 million is being directly spent in Garfield and Kane counties because of the designated Monument. This is the equivalent of more than 430 full-time jobs. (A Front Country Visitor Study for the Grand Staircase-Escalante National Monument, Utah State University, Professional Report IORT PR2006-01, April 2006).

More specifically, trends and conditions:

Garfield County, the fifth largest county in the state has the highest percentage of federal land (over 90%) in a county in the state of Utah.[19] The county contains over one million acres of National Forest System lands (including the Box-Death Hollow Wilderness Area) and large areas of other federal land, including portions of Grand Staircase-Escalante National Monument, Bryce Canyon National Park, Capitol Reef National Park, and Glen Canyon National Recreation Area. There are only about 170,000 acres of private land in the county. Public lands provide both challenges and opportunities for economic development in the county. The county is sparsely populated and is only projected to grow at a 1.0 percent annual rate between 2005 and 2050, a rate below the state average.

According to a 2003 Utah Bureau of Economic Analysis Report, Garfield County residents had one of the five lowest levels of total personal income in the state. Additionally, Garfield County had the second highest unemployment rate (10.8 percent) in the state according to 2003 Utah Department of Workforce Services information, exceeded only by Emery County's 11.0 percent unemployment rate. Slow job growth and unemployment are recurrent problems for the county. Traditionally, county residents have relied primarily upon ranching and timber. While there is a desire to retain these traditional sources of economic opportunity, services related to recreation and tourism are growing quickly in the county (*People and the Forests* 2003). Services are projected to increase from a 30.1 percent share in the Garfield County economy in 2005 to a 37.8 percent share in 2030 (State of Utah 2003).

According to Garfield County, the growth in the recreation and tourism industries has not been strong enough to provide the economic growth that has been achieved in more diverse parts of the state (Bremner 2006).[20] While these services (mostly related to leisure and hospitality) represent the largest sector in the Garfield County economy, government jobs (the sector ranked second) make up a much higher percentage of payroll wages (State of Utah 2003). There is a perception that leisure and hospitality jobs will not pay as much as jobs in other more traditional sectors.[21] According to Garfield County, ". . . Garfield County is struggling economically. Schools are showing declining enrollment, and additional natural resource based industries have been all but eliminated in the county. . . Garfield County is struggling and unless changes [in land management and opportunities] are made relatively soon, things will get tougher" (Bremner 2006). Also according to Garfield County Commissioner Maloy Dodds in testimony to Congress, "…most tourist-generated jobs generally are minimal skill, minimum wage jobs – not the kind that can support a family." Another important fact that the Commissioner noted, "Federal destination areas [are] a mixed blessing at best" for Garfield County because increased visitors can be a burden to the county in terms of increased cost of garbage and search and rescue operations (Testimony to House Resources Committee's Forest and Forest Health Subcommittee, June 15, 2005).

The closest communities to the river segment are Escalante and Boulder. Escalante is projected to grow from about 800 people in 2000 to about 1300 in 2050. Boulder is projected to grow from 180 in 2000 to around 300 in 2050.

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The river segment and the areas below Highway 12 are also used regularly by residents of Wayne County. Wayne County has the second highest percentage of federal land of any county in the state. The county contains about 160,000 acres of National Forest System lands. The county contains the second fewest acres of private land in the state, trailing only Daggett County (which is four times smaller than Wayne County) by about 8,000 acres. From 2004 to 2005, Wayne County was only one of three counties to register negative population growth. The county had a -0.6% annual growth rate, the lowest in the State (State of Utah 2006). However, from 2005 to 2050, the county is projected to almost double in population and grow at a 1.2 percent annual growth rate (State of Utah 2005).

Education and health services is the largest sector in the Wayne County economy. This sector is buoyed by the presence of Aspen Health Services' Aspen Achievement Academy, a wilderness therapy program that is a major county employer. Headquartered in Loa, the program operates on BLM and Forest Service lands. Government is the second largest sector in the county. Since 1980 agriculture has decreased dramatically and services have increased, a trend that is projected to continue into 2030. In 1980, agriculture made up 26.9 percent of the economy, while services took only a 3.5 percent share. By 2002, agriculture had declined to 13.8 percent and services had increased to 24.9 percent. In 2030, *People and the Forests* projects that agriculture will take a 6.5 percent share, while services will have increased to 30.3 percent (State of Utah 2003). This increase is visible in the increasingly popular tourist venue of Torrey at the gateway to Capitol Reef National Park.

While agriculture continues to decline, it is an important part of the county's traditions and customs. Many county residents work multiple jobs to keep the traditions of the past alive. The Wayne County General Plan identifies tourism promotion as an important economic development tool; however, there is concern over preserving quality of life while implementing this strategy.

Wayne County continues to struggle with issues of poverty. The county's 1999 poverty rate exceeded 15 percent, almost one and one-half times the state average (State of Utah 2003). Total personal income in Wayne County is the fourth lowest in the state. Growth rates of total personal income were second to last in the state from 2000 to 2003 (Bureau of Economic Analysis 2003).

Teasdale, Grover, and Torrey are the closest towns in Wayne County to the river segment. Torrey has a population of 171 (2005). None of the communities in Wayne County are expected to grow rapidly.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS. U.S. Forest Service and BLM would share management of the segment.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average $200,000 per plan for 86 segments, which would cost approximately $17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be $200,000; a moderate complexity river would be $50,000; and a low complexity river at $25,000. Using an average of complexity costs, it would cost the Forest Service around $7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) **The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.**

There has been no demonstrated or potential commitment to share preservation and/or administration.

(2) **The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with**

protection of river values.
Not applicable, as all of the land through which the segment flows is federally owned.

(3) **Support or opposition to designation.**
Garfield County is working on a Resource Management Plan for all lands in the county. They have included an analysis of Wild and Scenic Rivers in their discussions. While their RMP supports the designation of Cataract Canyon (Colorado River) and the Dirty Devil River as Wild and Scenic Rivers, the county does not support the designation of Slickrock Canyon.

During the Dixie and Fishlake National Forests eligibility process, the county expressed repeated concern over the eligibility determinations made for this and other river segments on the Escalante Ranger District. The county does not believe that the Escalante River system is suitable because its flow is too regulated by irrigators.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored "preservation" of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support has been received.

In response to scoping, a non-profit organization expressed support for designation because of the segment's contribution to river system integrity.

Comment letters on the DEIS received were generally opposed to designation. An exception would be the Grand Canyon Trust, who supports the suitability of Slickrock Canyon (it is assumed this includes the FS segment) along with a list other eligible segments on adjacent Forests.

Allen Rowley (Fishlake NF Supervisor) has recently spoken with the BLM Manager of the Grand Staircase-Escalante National Monument relative to suitability of this segment on FS lands, and has not yet received any indication of support or opposition.

None of the three organized campaigns supported a positive suitability finding for this segment.

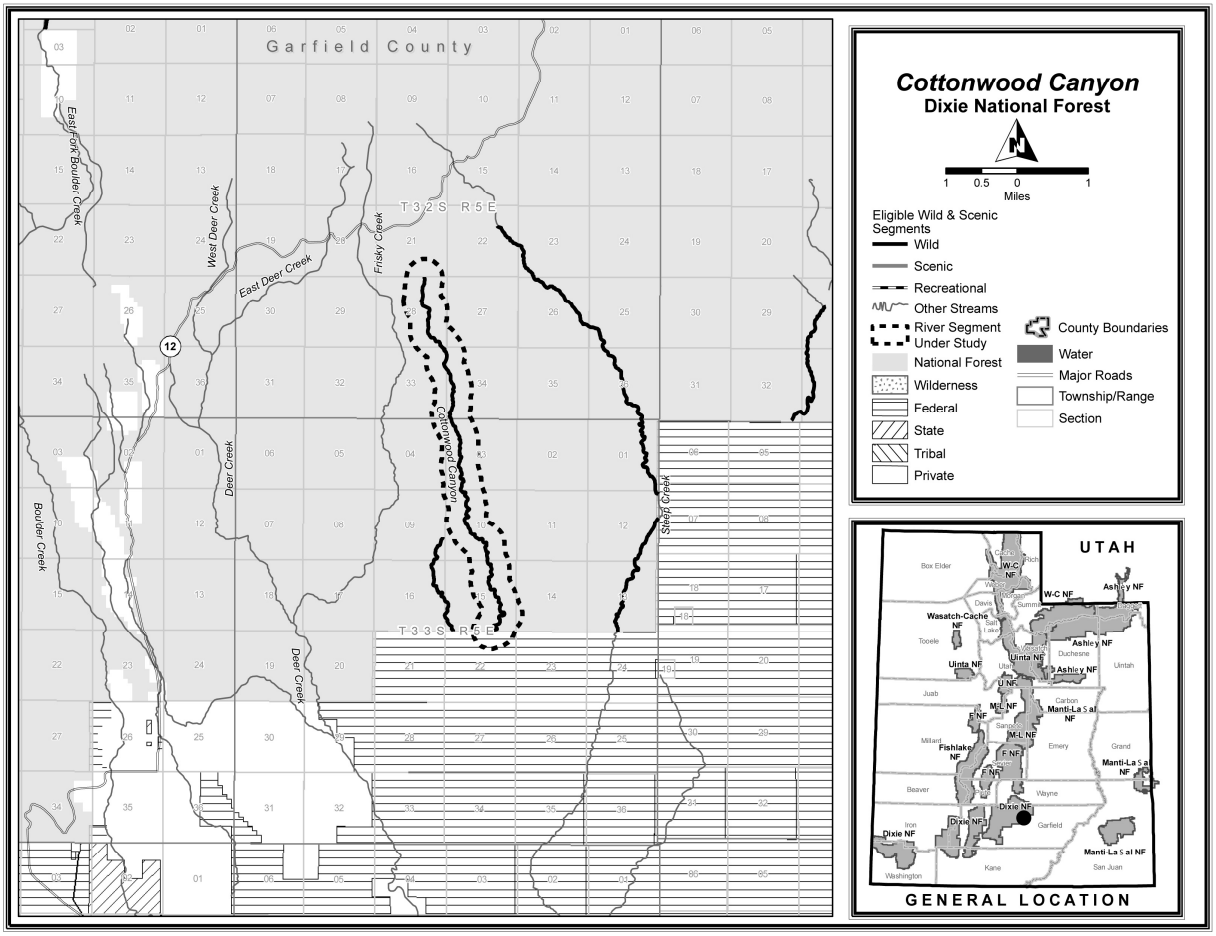
(4) **The consistency of designation with other agency plans, programs or policies and in meeting regional objectives**.
Downstream from the Forest Service boundary, the BLM found Slickrock Canyon to be suitable for designation because "high quality scenery, recreational values, prehistoric sites, and riparian areas make this a worthy addition to the WSR system" (Appendix 11, GSENM FEIS Monument Plan).

The Dixie National Forest, Glen Canyon National Recreation Area, Bryce Canyon National Park, and GSENM all worked together on eligibility for this river segment. Final determinations of suitability were reserved for individual agencies to make on their own.

(5) **Contribution to river system or basin integrity**.
Slickrock Canyon does not contribute significantly to the flow of the Escalante River. The segment within the GSENM has been found suitable for designation.

(6) **Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.**
No commitment has been expressed.

Cottonwood Canyon
Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Cottonwood Canyon

River Mileage:
Studied: 10.7 miles, from headwaters to Lower Deer Creek (T 34S, R 5E, Sect. 4)
Eligible: 6.3 miles, from headwaters to forest boundary

Location:

Cottonwood Canyon	Dixie National Forest administered by the Fishlake National Forest, Fremont River Ranger District, Garfield County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	SW ¼ SE ¼ Sect. 21, T 32S, R 5E, SLM	SW ¼ SE ¼ Sect. 15, T 33S, R 5E, SLM	Wild	6.3

Physical Description of River:
Cottonwood Canyon is located on the Fremont River Ranger District below Highway 12. Lower reaches are dominated by slickrock and ledges with pinyon and juniper trees transitioning to ponderosa pine. Upper regions just below Highway 12 hold aspen and conifer in areas with deeper soils. This stream is intermittent.

ELIGIBILITY

Name and Date of Eligibility Document: Appendix 4, Wild and Scenic River Eligibility, Grand Staircase Escalante National Monument, 1998.

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of Cottonwood Canyon on National Forest System lands.

Summary of Outstandingly Remarkable Values (ORV):

Scenic – In common with other segments in this landscape, the area offers dramatic contrasts of color, texture, and slope which are unique to southern Utah redrock country. As the segment leaves the GSEM and extends into the Fishlake National Forest it becomes broader and loses some of the narrowness and dramatic contrasts found on the lower stretches.

Recreational – The area near the upper segment of the corridor located within the Fishlake National Forest may be accessed via the Long Neck Trail (#34017) or more readily at Highway 12 at its headwaters. The canyon itself receives a low-level of use by hikers and backpackers. Portions of the canyon adjacent to the Monument which are steep and winding provide increased solitude and more opportunity for primitive experience.

Cultural – The area has been used intermittently by Native Americans and pioneers.

This stream was determined to be eligible by an interagency study headed by the Grand Staircase Escalante National Monument in 1998.

CLASSIFICATION

Basis for the Classification of River: Wild
There are no roads present in the river corridor. There is access to the headwaters via a non-motorized trail. There is also a non-motorized trail that parallels the river to the west that is located within the corridor, but is not related to recreational use of the river.

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor is a 6.3 mile-long river segment and encompasses 1,866 acres, and is entirely on National Forest System (NFS) lands administered by the Fishlake National Forest.

River Mile	Ownership	Acres
0 – 6.3	Fishlake National Forest (Fremont River RD)	1866

The stream corridor is within Management Area 2A# (MA-2A#) according to the Dixie National Forest Plan. MA-2A# has a management emphasis on semi-primitive recreation opportunities with a "no surface occupancy" stipulation for mineral entry. The area provides multiple uses.

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development in the eligible segment.

Cottonwood Canyon is located in the Long Neck Mesa/Steep Creek/Oak Creek Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area is as follows:

Oil and Gas: Currently there are no producing wells or fields in this area. It has been only lightly explored. There are no leases, but industry has expressed interest in this general area. Expressions of

Interest have been made for the area immediately to the northeast.

Oil potential associated with four possible plays (Late Proterozoic/Cambrian, Devonian-Pennsylvanian, Late Paleozoic, and Permo-Triassic Unconformity) is ranked as moderate to high (low certainty) along the eastern and southern portions of the Teasdale and Escalante Ranger Districts. Petroleum development potential is ranked by the UGS as low-moderate with the highest potential relative to the Devonian-Pennsylvanian and Permo-Triassic Plays. If leases are issued, exploratory drilling could occur. A total of 32 new exploratory wells are reasonably foreseeable for the Forest in the next 15 years. Of this total, only a couple of these would probably occur in this area. If a discovery were made, additional development wells could be drilled.

Jurassic sediments (Navajo Sandstone and Carmel Formation) are exposed in the area, however this area is not prospective for natural gas/methane due to the close proximity to the volcanic rocks of Boulder Mountain immediately to the west as well as uplift and erosion of known source/reservoir Cretaceous sedimentary rocks.

Carbon Dioxide: Moderate potential for occurrence (low certainty). Development potential is low-none because there is no market.

Geothermal: Occurrence potential is unknown due to the lack of identified thermal wells and springs. Due to the lack of known geothermal springs and wells and overall information, the development potential is considered low.

Coal: There are no known coal deposits in this area

Locatable Minerals: There are no known valuable deposits of base or precious metals or other locatable minerals. Development potential is low.

Common Variety: Sandstone, limestone and other sedimentary rocks in the area could be developed for decorative stone or building stone. Colluvium consisting of displaced sedimentary rocks and volcanic rock transported from Boulder Mountain could be developed for riprap, decorative stone, and building stone. Development potential is considered moderate, most likely on a small scale, localized basis.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Water Resources Development – There are no known existing water developments (dams, diversions or channel modifications) on this segment. There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – The Slickrock Trail (#35120) provides access to the river's headwaters and is located in the river corridor. This non-motorized trail is 24 miles long and receives low to moderate use. The Longneck Trail (#34017) parallels the river to the west and enters the river corridor approximately 1.5 mile south of the headwaters (sect. 33, T 32S, R 5E and sect. 4, T 33S, R 5E, SLM). The Longneck Trail is located on the Dixie National Forest (Escalante Ranger District) and is a non-motorized pack and saddle trail that is considered a low use trail.

There is a section of cattle fencing that extends 600 feet into the river corridor, but does not bisect the river.

There are no other facilities and/or other developments located in the river corridor. Cottonwood Canyon river corridor is entirely located in the Long Neck Mesa/Steep Creek/Oak Creek Inventoried Roadless Area.

Grazing Activities – The river segment is located within the Oak Creek Allotment. The Oak Creek Allotment consists of 72,712 acres and is an active allotment with three permittees. There is a section of cattle fencing that extends 600 feet into the river corridor, but does not bisect the river.

Oak Creek Allotment		
Permittee Name	Number of mature cow/Nursing	Active Grazing Dates
B.K. & M. Taylor	196	06/01 to 10/15
Tercero Corp.	806	06/01 to 10/15
R. & K. Fillmore	76	06/01 to 10/15

Recreation Activities – Recreational use of Cottonwood Canyon is considered low. The Slickrock Trail (#35120) provides access to the river corridor is considered a low use trail, but does receive use for grazing administration and stock and hiking recreation. The Longneck Trail (#34017) parallels the river to the west and enters the river corridor approximately 1.5 mile south of the headwaters (sect. 33, T 32S, R 5E and sect. 4, T 33S, R 5E, SLM). The Longneck Trail is located on the Dixie National Forest (Escalante Ranger District) and is a non-motorized pack and saddle trail that is considered a low use trail. There is no trail located adjacent to the river, however the area is used by hikers and backpacker. The steep winding canyon provides solitude and a primitive experience.

Other Resource Activities – The upper one mile of Cottonwood Canyon corridor contains some aspen stands. Forest managers may work to regenerate aspen in this area through the use of prescribed fire among other tools.

Special Designations – None

Socio-Economic Environment – The river segment is located within Garfield County. Boulder and Escalante are the two closest towns. Access to the area is provided by Highway 12 – an All-American Road. Cottonwood Canyon flows from the Dixie National Forest onto the Grand Staircase-Escalante National Monument.

Garfield County is a largely rural county where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Much of this growth in recreation and tourism can be attributed to the designation of the Grand Staircase-Escalante National Monument in 1996. The county is struggling to retain rural traditions and lifestyles as well as "working" connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult. Second home ownership has increased in the county dramatically. Over 60% of property tax notices in Garfield County are sent out of the county (39% out of state or country). Educating these occasional land users about special values and proper use is becoming more difficult.

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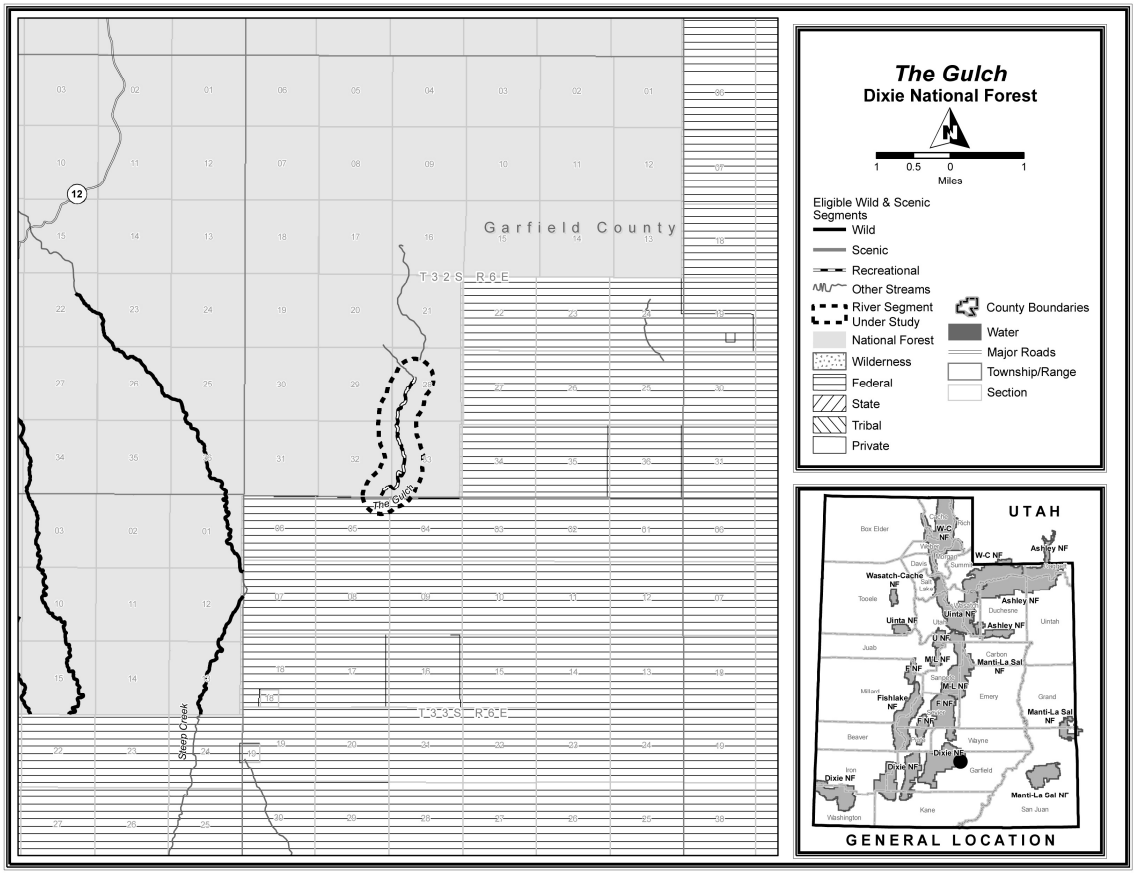
(4) **The consistency of designation with other agency plans, programs or policies and in meeting regional objectives**.
Downstream from the Forest Service boundary, the BLM found Cottonwood Canyon to be not suitable for designation because "the quality of the river characteristics in this segment would not significantly enhance nor contribute to the NWSRS" (Appendix 11, GSENM FEIS Monument Plan). In the DEIS, the GSENM indicated "although this canyon exhibits high quality scenery and has recreational use, it is not deemed to be the best of the best" (Appendix 5, GSENM DEIS Monument Plan).

The Dixie National Forest, Glen Canyon National Recreation Area, Bryce Canyon National Park, and GSENM all worked together on eligibility for this river segment. Final determinations of suitability were reserved for individual agencies to make on their own.

(5) **Contribution to river system or basin integrity**.
Cottonwood Canyon does not contribute significantly to the flow of the Escalante River. The segment within the GSENM was not found to be suitable for designation.

(6) **Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.**
No commitment has been expressed.

The Gulch
Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: The Gulch
River Mileage:
Studied: 26.7 miles, from headwaters to Escalante River
Eligible: 2.1 miles, from headwaters (confluence with Stair Canyon) to Forest boundary

Location:

The Gulch	Dixie National Forest administered by the Fishlake National Forest, Fremont River Ranger District, Garfield County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	SE ¼ NW ¼ Sect. 28, T 32S, R 6E, SLM	SE ¼ SE ¼ Sect. 33, T 32S, R 6E, SLM	Recreational	2.1

Physical Description of River:
The Gulch, a perennial stream, is located on the Fremont River Ranger District below Highway 12. Lower reaches are dominated by slickrock and ledges with pinyon and juniper trees transitioning to ponderosa pine.

ELIGIBILITY

Name and Date of Eligibility Document: Appendix 4, Wild and Scenic River Eligibility, Grand Staircase Escalante National Monument (GSENM), 1998.

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of The Gulch on National Forest System lands.

Summary of Outstandingly Remarkable Values (ORV):

Scenic – As is common to adjoining segments of this and other similar drainages in the surrounding landscape, the area offers dramatic contrasts of color, texture, and slope. This relatively short segment (2.1 miles) of riparian corridor from the confluence with Stair Canyon to the Forest boundary down stream is paralleled by Forest roads (#147 and #023) for its entire length. Associated human related activity is apparent. The gulch is nearly a mile wide at the Forest boundary with few features that compare with other segments down stream on the GSEM lands.

Recreational – The area receives a low-level of use by hikers and backpackers, and is readily accessible to the motorized public via the Burr Trail Road from the town of Boulder which feeds the Forest roads which directly access the bottom of the Gulch itself. There is a moderate amount of solitude and some relative primitive experience available, perhaps in some of the side canyons, given the isolation or distance of travel to this area by motorized vehicle.

Cultural – The area has been used intermittently by Native Americans and pioneers.

This stream was determined to be eligible by an interagency study headed by the Grand Staircase Escalante National Monument in 1998.

CLASSIFICATION

Basis for the Classification of River: Recreational

There are approximately two miles of motorized four-wheel-drive route along The Gulch to the Forest boundary, therefore it was necessary to change the classification from Wild to Recreational due to the presence of a road within the stream corridor (does not meet classification criteria for a Wild river).

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor is a 2.1 mile-long river segment and encompasses about 663.62 acres, and is entirely on National Forest System (NFS) lands administered by the Fishlake National Forest.

River Mile	Ownership	Acres
0 – 2.1	Fishlake National Forest (Fremont River Ranger District)	**664**
	Total	**664**

The stream corridor is within Management Area 2A (MA-2A) according to the Dixie National Forest Plan. MA-2A# has a management emphasis on semi-primitive recreation opportunities. The area provides multiple uses.

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development in the eligible segment.

The Gulch is located in the Long Neck Mesa/Steep Creek/Oak Creek Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area was as follows:

Oil and Gas: Currently there are no producing wells or fields in this area. It has been only lightly explored. There are no leases, but industry has expressed interest in this general area. Expressions of Interest have been made for the area immediately to the northeast.

Oil potential associated with four possible plays (Late Proterozoic/Cambrian, Devonian-Pennsylvanian, Late Paleozoic, and Permo-Triassic Unconformity) is ranked as moderate to high (low certainty) along the eastern and southern portions of the Teasdale and Escalante Ranger Districts. Petroleum development potential is ranked by the UGS as low-moderate with the highest potential relative to the Devonian-Pennsylvanian and Permo-Triassic Plays. If leases are issued, exploratory drilling could occur. A total of 32 new exploratory wells are reasonably foreseeable for the Forest in the next 15 years. Of this total, only a couple of these would probably occur in this area. If a discovery were made, additional development wells could be drilled.

Jurassic sediments (Navajo Sandstone and Carmel Formation) are exposed in the area, however this area is not prospective for natural gas/methane due to the close proximity to the volcanic rocks of Boulder Mountain immediately to the west as well as uplift and erosion of known source/reservoir Cretaceous sedimentary rocks.

Carbon Dioxide: Moderate potential for occurrence (low certainty). Development potential is low-none because there is no market.

Geothermal: Occurrence potential is unknown due to the lack of identified thermal wells and springs. Due to the lack of known geothermal springs and wells and overall information, the development potential is considered low.

Coal: There are no known coal deposits in this area

Locatable Minerals: There are no known valuable deposits of base or precious metals or other locatable minerals. Development potential is low.

Common Variety: Sandstone, limestone and other sedimentary rocks in the area could be developed for decorative stone or building stone. Colluvium consisting of displaced sedimentary rocks and volcanic rock transported from Boulder Mountain could be developed for riprap, decorative stone, and building stone. Development potential is considered moderate, most likely on a small scale, localized basis.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Water Resources Development – There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – Forest Service Roads #31473 and #30023 provide access to the river and are located in the river corridor. FS Road #30023 intersects road #31473 adjacent to river and then turns south, following the river, and dead-ends at the Forest boundary. FS Road #31473 begins at the junction with FS Road #30023, travels north along the river for approximately 1

mile, turns and heads west for approximately 0.5 miles, and then dead-ends into a non-system non-motorized trail. The non-system non-motorized trail eventually turns into the Indian Trail Bench (#35126) Trail that terminates at Roundup Flat.

There are no facilities and/or other developments. The Gulch river corridor is entirely located in the Long Neck Mesa/Steep Creek/Oak Creek Inventoried Roadless Area.

Grazing Activities – The river segment is located within the Oak Creek Allotment. The Oak Creek Allotment consists of 72,712 acres and is an active allotment with three permittees.

Oak Creek Allotment		
Permittee Name	Number of mature cow/Nursing	Active Grazing Dates
B.K. & M. Taylor	196	06/01 to 10/15
Tercero Corp.	806	06/01 to 10/15
R. & K. Fillmore	76	06/01 to 10/15

Recreation Activities – Recreational use of The Gulch drainage is considered low to moderate. Currently FS Roads #31473 and #30023, and trail #35126 receive low to moderate ATV/OHV use. The non-system trail that access that connect FS Road #31473 and FS Trail #35126 is considered a low use trail, but does receive use for grazing administration and stock and hiking recreation.

Other Resource Activities – None

Special Designations – None

Socio-Economic Environment – The river segment is located within Garfield County. Boulder and Escalante are the two closest towns. Access to the area is provided by Highway 12 – an All-American Road and the Burr Trail road. The Gulch flows from the Dixie National Forest onto the Grand Staircase-Escalante National Monument.

Garfield County is a largely rural county where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Much of this growth in recreation and tourism can be attributed to the designation of the Grand Staircase-Escalante National Monument in 1996. The county is struggling to retain rural traditions and lifestyles as well as "working" connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult. Second home ownership has increased in the county dramatically. Over 60% of property tax notices in Garfield County are sent out of the county (39% out of state or country).

A recent visitor study of the Grand Staircase-Escalante National Monument indicates that approximately 600,000 people visit the area every year. While most of the visitors remain in the frontcountry visitor areas, exploration into the backcountry is increasing. Visitors come from throughout the United States and the world. About 14% of visitors are from Utah, 13% from California, 6% from Arizona, 5% from Colorado, and 10% from other western states. About 30% come from the other 39 states leaving 23% from other countries. The average visitor spends three days in the area. Only 20% of these visitors indicated that the Monument was their primary destination. Many of these visitors end up exploring the forest. The most common visitor activities reported were hiking, photography, scenic driving, and viewing natural features. Escalante and Bryce Canyon are the two most visited communities near the Monument. Boulder also experienced high visitation. The average amount spent by a group of three to the area was just under $500. This means that more than $20.6 million is being directly spent in Garfield and Kane counties because of the designated Monument. This is the equivalent of more than 430 full-

time jobs. (A Front Country Visitor Study for the Grand Staircase-Escalante National Monument, Utah State University, Professional Report IORT PR2006-01, April 2006).

More specifically, trends and conditions:

Garfield County, the fifth largest county in the state has the highest percentage of federal land (over 90%) in a county in the state of Utah.[25] The county contains over one million acres of National Forest System lands (including the Box-Death Hollow Wilderness Area) and large areas of other federal land, including portions of Grand Staircase-Escalante National Monument, Bryce Canyon National Park, Capitol Reef National Park, and Glen Canyon National Recreation Area. There are only about 170,000 acres of private land in the county. Public lands provide both challenges and opportunities for economic development in the county. The county is sparsely populated and is only projected to grow at a 1.0 percent rate annually between 2005 and 2050, a rate below the state average.

According to a 2003 Utah Bureau of Economic Analysis Report, Garfield County residents had one of the five lowest levels of total personal income in the state. Additionally, Garfield County had the second highest unemployment rate (10.8 percent) in the state according to 2003 Utah Department of Workforce Services information, exceeded only by Emery County's 11.0 percent unemployment rate. Slow job growth and unemployment are recurrent problems for the county. Traditionally, county residents have relied primarily upon ranching and timber. While there is a desire to retain these traditional sources of economic opportunity, services related to recreation and tourism are growing quickly in the county (*People and the Forests*, 2003). Services are projected to increase from a 30.1 percent share in the Garfield County economy in 2005 to a 37.8 percent share in 2030 (State of Utah 2003).

According to Garfield County, the growth in the recreation and tourism industries has not been strong enough to provide the economic growth that has been achieved in more diverse parts of the state (Bremner 2006).[26] While these services (mostly related to leisure and hospitality) represent the largest sector in the Garfield County economy, government jobs (the sector ranked second) make up a much higher percentage of payroll wages (State of Utah 2003). There is a perception that leisure and hospitality jobs will not pay as much as jobs in other more traditional sectors.[27] According to Garfield County, ". . . Garfield County is struggling economically. Schools are showing declining enrollment, and additional natural resource based industries have been all but eliminated in the county. . . Garfield County is struggling and unless changes [in land management and opportunities] are made relatively soon, things will get tougher" (Bremner 2006). Also according to Garfield County Commissioner Maloy Dodds in testimony to Congress, "…most tourist-generated jobs generally are minimal skill, minimum wage jobs – not the kind that can support a family." Another important fact that the Commissioner noted, "Federal destination areas [are] a mixed blessing at best" for Garfield County because increased visitors can be a burden to the county in terms of increased cost of garbage and search and rescue operations (Testimony to House Resources Committee's Forest and Forest Health Subcommittee, June 15, 2005).

The closest communities to the river segment are Escalante and Boulder. Escalante is projected to grow

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[27] In the book *Visions of the Grand Staircase-Escalante* (compiled at the time of the Grand Staircase-Escalante National Monument planning process in the 1990s), Gail Blattenberger and David Kiefer acknowledge, "[m]inimum wages plus tips at Ruby's Inn are what the locals [in Garfield County] envisage from the service industry, but high tech service enterprises are also viable given an investment in communications infrastructure." Blattenberger and Kiefer suggest that while based on past performance "economic well-being" is clearly an issue in Kane and Garfield counties, "[e]xtractive industries are not an optimal or even a viable solution to the economic situation in these counties." Furthermore, "change will certainly come to these economies" and be met with "resistance (because of) the desire for a land-based economy (which is) seen as crucial to the quality of life in the rural West." According to the authors, the key is to "find ways of preserving our land-based Western heritage and lifestyle (which are so important to rural residents) along with the natural treasures of the countryside." Roughly 10 years later, we seem to face the same conditions, trends, attitudes, fears, opportunities, and challenges (Blattenberger and Kiefer 1998).

from about 800 people in 2000 to about 1300 in 2050. Boulder is projected to grow from 180 in 2000 to around 300 in 2050.

The river segment and the areas below Highway 12 are also used regularly by residents of Wayne County. Wayne County has the second highest percentage of federal land of any county in the state. The county contains about 160,000 acres of National Forest System lands. The county contains the second fewest acres of private land in the state, trailing only Daggett County (which is four times smaller than Wayne County) by about 8,000 acres. From 2004 to 2005, Wayne County was only one of three counties to register negative population growth. The county had a -0.6% annual growth rate (the lowest in the State) (State of Utah 2006). However, from 2005 to 2050, the county is projected to nearly double in population and grow at a 1.2 percent annual growth rate (State of Utah 2005).

Education and health services is the largest sector in the Wayne County economy. This sector is buoyed by the presence of Aspen Health Services' Aspen Achievement Academy, a wilderness therapy program that is a major county employer. Headquartered in Loa, the program operates on BLM and Forest Service lands. Government is the second largest sector in the county. Since 1980 agriculture has decreased dramatically and services have increased, a trend that is projected to continue into 2030. In 1980, agriculture made up 26.9 percent of the economy, while services took only a 3.5 percent share. By 2002, agriculture had declined to 13.8 percent and services had increased to 24.9 percent. In 2030, *People and the Forests* projects that agriculture will take a 6.5 percent share, while services will have increased to 30.3 percent (State of Utah 2003). This increase is visible in the increasingly popular tourist venues of Torrey at the gateway to Capitol Reef National Park.

While agriculture continues to decline, it is an important part of the county's traditions and customs. Many county residents work multiple jobs to keep the traditions of the past alive. The Wayne County General Plan identifies tourism promotion as an important economic development tool; however, there is concern over preserving quality of life while implementing this strategy.

Wayne County continues to struggle with issues of poverty. The county's 1999 poverty rate exceeded 15 percent, almost one and one-half times the state average (State of Utah 2003). Total personal income in Wayne County is the fourth lowest in the state. Growth rates of total personal income were second to last in the state from 2000 to 2003 (Bureau of Economic Analysis 2003).

Teasdale, Grover, and Torrey are the closest towns in Wayne County to the river segment. Torrey has a population of 171 (2005). None of the communities in Wayne County are expected to grow rapidly.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS. The U.S. Forest Service and BLM would share management of the segment.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average $200,000 per plan for 86 segments, which would cost approximately $17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be $200,000; a moderate complexity river would be $50,000; and a low complexity river at $25,000. Using an average of complexity costs, it would cost the Forest Service around $7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) **The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.**

There has been no demonstrated or potential commitment to share preservation and/or administration.

(2) **The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.**
Not applicable, as all of the land through which the segment flows is federally owned.

(3) **Support or opposition to designation.**
Garfield County is working on a Resource Management Plan for all lands in the county. They have included an analysis of Wild and Scenic Rivers in their discussions. While their RMP supports the designation of Cataract Canyon (Colorado River) and the Dirty Devil River as Wild and Scenic Rivers, the county does not support the designation of The Gulch.

During the Dixie and Fishlake National Forests eligibility process, the county expressed repeated concern over the eligibility determinations made for this and other river segments on the Escalante Ranger District. The county does not believe that the Escalante River system is suitable because its flow is too regulated by irrigators.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored "preservation" of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support has been received.

In response to scoping, a non-profit organization expressed support for designation because of the segment's contribution to river system integrity. None of the three organized campaigns supported a positive finding of suitability for this segment.

Allen Rowley (Fishlake NF Supervisor) has recently spoken with the BLM Manager of the Grand Staircase-Escalante National Monument relative to suitability of this segment on FS lands, and has not yet received any indication of support or opposition.

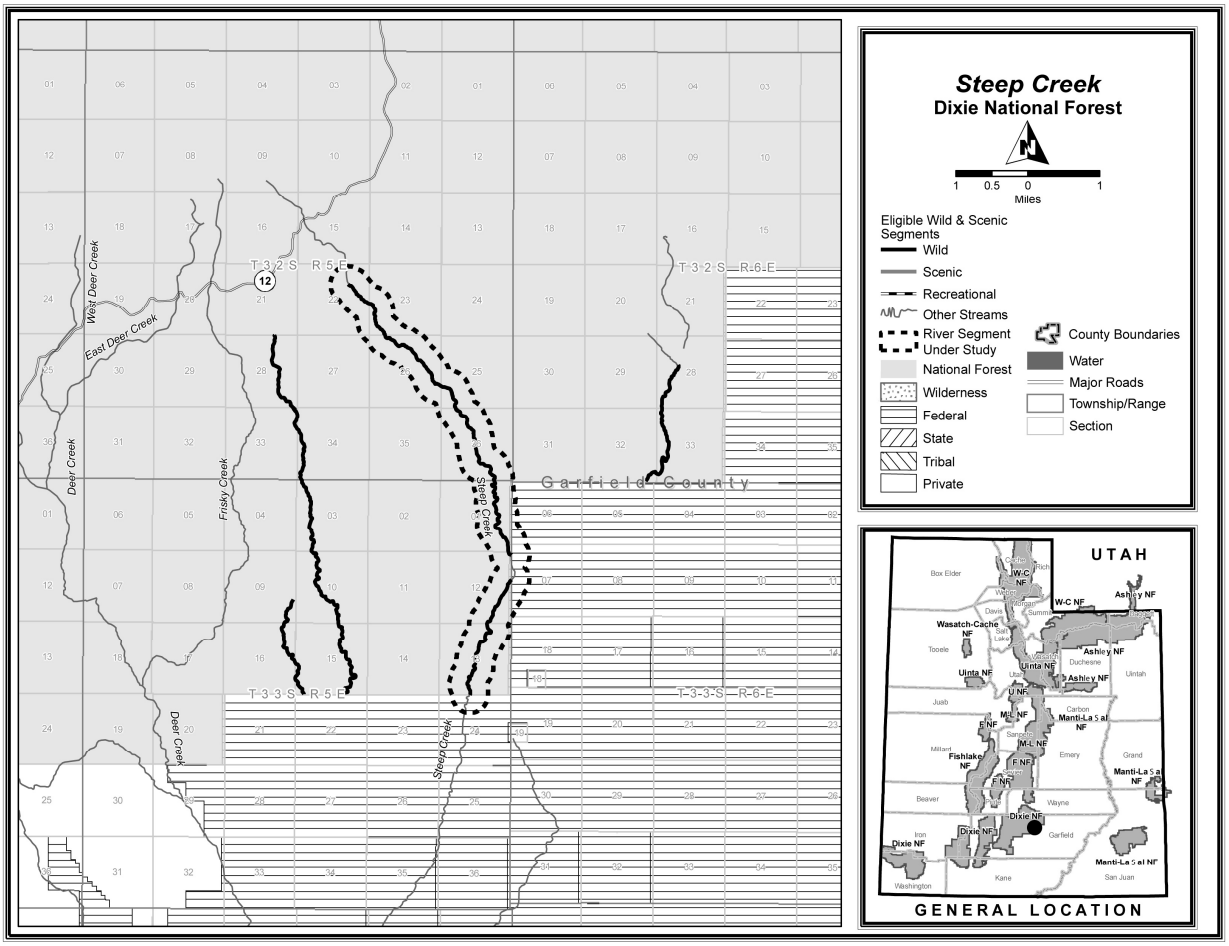
(4) **The consistency of designation with other agency plans, programs or policies and in meeting regional objectives**.
Downstream from the Forest Service boundary, the BLM found The Gulch to be suitable for designation because the presence of "high quality scenery, outstanding recreation, natural arch, peregrine habitat, Traditional Cultural Property, riparian area, petrified wood are the characteristics that make it worthy [as an addition to the NWSRS]" (Appendix 11, GSENM FEIS Monument Plan).

The Dixie National Forest, Glen Canyon National Recreation Area, Bryce Canyon National Park, and GSENM all worked together on eligibility for this river segment. Final determinations of suitability were reserved for individual agencies to make on their own.

(5) **Contribution to river system or basin integrity**.
The Gulch is not one of the tributaries identified in the GSENM plan that contributes significantly to the flow of the Escalante River, however, as a perennial stream it does provide flow consistently to the system. The segment within the GSENM has been found suitable for designation.

(6) **Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.**
Boulder Outdoor Survival School hold s special use permit for survival training in the area. There may be opportunity to partner and use volunteers in the area from the school. No commitment has been expressed.

Steep Creek
Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Steep Creek

River Mileage:

Studied: 16.2 miles, from headwaters (1 mile south of HWY 12) to The Gulch

Eligible: 7.3 miles, from headwaters to Forest boundary

Location:

Steep Creek	Dixie National Forest administered by the Fishlake National Forest, Fremont River Ranger District, Garfield County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	SE ¼ NE ¼ Sect. 22, T 32S, R 5E, SLM	NE ¼ NE ¼ Sect. 12, T 33S, R 5E, SLM	Wild	5.3
Segment 2	NE ¼ NE ¼ Sect. 12, T 33S, R 5E, SLM	SE ¼ NE ¼ Sect. 12, T 33S, R 5E, SLM	Wild (GSENM)	0.3
Segment 3	SE ¼ NE ¼ Sect. 12, T 33S, R 5E, SLM	SE ¼ SW ¼ Sect. 13, T 33S, R 5E, SLM	Wild	2

Physical Description of River:
Steep Creek, a perennial stream, is located on the Fremont Ranger District below Highway 12. Lower reaches are dominated by slickrock and ledges with pinyon and juniper trees transitioning to ponderosa pine. Upper regions just below Highway 12 are aspen and conifer in areas with deeper soils.

ELIGIBILITY

Name and Date of Eligibility Document: Appendix 4, Wild and Scenic River Eligibility, Grand Staircase Escalante National Monument (GSENM), 1998.

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of Steep Creek on National Forest System lands.

Summary of Outstandingly Remarkable Values (ORV):
This stream was determined to be eligible by an interagency study headed by the Grand Staircase Escalante National Monument in 1998. However, many of the details from that determination have been lost. As a result, the ORV summaries are brief.

Scenic – The area offers dramatic contrasts of color, texture, and slope as is common to other segments of this and other similar drainages which have carved the associated landscape. This segment of riparian corridor extends over 7 miles into the Fishlake National Forest. The area in general as associated with the Monument is regionally, nationally, and even internationally recognized as an important scenic attraction.

Recreational – The steep winding canyon provides solitude and a primitive experience, however the segment contained within the Forest boundary is not unique enough to attract visitors from outside the more immediate geographic area. The area receives a low-level of use by hikers and backpackers. The few who do visit this segment are primarily locals.

Ecological – The area provides vital riparian areas within an otherwise desert ecosystem, as is the case for most riparian resources in this region.

This stream was determined to be eligible by an interagency study headed by the Grand Staircase Escalante National Monument in 1998.

CLASSIFICATION

Basis for the Classification of River: Wild
There are no roads present in the river corridor. There is access to the headwaters via a non-motorized trail. The river corridor is located in a remote location that is difficult to access.

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor is a 7.3 mile-long river segment and encompasses about 2,147 acres, and is entirely on National Forest System (NFS) lands administered by the Fishlake National Forest.

River Mile	Ownership
0 – 5.3	Fishlake National Forest (Fremont River RD)
0 – 0.3	Grand Staircase-Escalante National Monument
0 – 2	Fishlake National Forest (Fremont River RD)

The stream corridor is within Management Area 2A# (MA-2A#) according to the Dixie National Forest Plan. MA-2A# has a management emphasis on semi-primitive recreation opportunities with a “no surface occupancy” stipulation for mineral entry. The area provides multiple uses.

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development in the eligible segment.

Steep Creek is located in the Long Neck Mesa/Steep Creek/Oak Creek Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area was as follows:

Oil and Gas: Currently there are no producing wells or fields in this area. It has been only lightly explored. There are no leases, but industry has expressed interest in this general area. Expressions of Interest have been made for the area immediately to the northeast.

Oil potential associated with four possible plays (Late Proterozoic/Cambrian, Devonian-Pennsylvanian, Late Paleozoic, and Permo-Triassic Unconformity) is ranked as moderate to high (low certainty) along the eastern and southern portions of the Teasdale and Escalante Ranger Districts. Petroleum development potential is ranked by the UGS as low-moderate with the highest potential relative to the Devonian-Pennsylvanian and Permo-Triassic Plays. If leases are issued, exploratory drilling could occur. A total of 32 new exploratory wells are reasonably foreseeable for the Forest in the next 15 years. Of this total, only a couple of these would probably occur in this area. If a discovery were made, additional development wells could be drilled.

Jurassic sediments (Navajo Sandstone and Carmel Formation) are exposed in the area, however this area is not prospective for natural gas/methane due to the close proximity to the volcanic rocks of Boulder Mountain immediately to the west as well as uplift and erosion of known source/reservoir Cretaceous sedimentary rocks.

Carbon Dioxide: Moderate potential for occurrence (low certainty). Development potential is low-none because there is no market.

Geothermal: Occurrence potential is unknown due to the lack of identified thermal wells and springs. Due to the lack of known geothermal springs and wells and overall information, the development potential is considered low.

Coal: There are no known coal deposits in this area

Locatable Minerals: There are no known valuable deposits of base or precious metals or other locatable minerals. Development potential is low.

Common Variety: Sandstone, limestone and other sedimentary rocks in the area could be developed for decorative stone or building stone. Colluvium consisting of displaced sedimentary rocks and volcanic rock transported from Boulder Mountain could be developed for riprap, decorative stone, and building stone. Development potential is considered moderate, most likely on a small scale, localized basis.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Water Resources Development – There are no known planned or existing water developments (dams, diversions or channel modifications) on these segments. There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – The Slickrock Trail (#35120) provides access to the river's headwaters and is located in the river corridor. This non-motorized trail is 24 miles long and receives low to moderate use.

There is a series of five spring-fed stock ponds located near the headwaters of Steep Creek, however only three of the five are located within the river corridor. The five stock ponds are inter-connected with pipelines.

There are no other facilities and/or other developments located in the river corridor. The Steep Creek river corridor is entirely located in the Long Neck Mesa/Steep Creek/Oak Creek Inventoried Roadless Area.

Grazing Activities – The river segment is located within the Oak Creek Allotment. The Oak Creek Allotment consists of 72,712 acres and is an active allotment with three permittees.

Oak Creek Allotment		
Permittee Name	Number of mature cow/Nursing	Active Grazing Dates
B.K. & M. Taylor	196	06/01 to 10/15
Tercero Corp.	806	06/01 to 10/15
R. & K. Fillmore	76	06/01 to 10/15

Recreation Activities – Recreational use of Steep Creek is considered low. There is no trail following the river corridor, however the area could be used by hikers and backpackers. The steep winding canyon provide solitude and a primitive experience.

Other Resource Activities – The upper one half mile of the Steep Creek corridor contain some aspen stands. Forest managers may work to regenerate aspen in this area through the use of prescribed fire among other tools.

Special Designations – None.

Socio-Economic Environment – The river segment is located within Garfield County. Boulder and Escalante are the two closest towns. Access to the area is provided by Highway 12 – an All-American Road. Steep Creek flows from the Dixie National Forest onto the Grand Staircase-Escalante National Monument.

Garfield County is a largely rural county where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Much of this growth in recreation and tourism can be attributed to the designation of the Grand Staircase-Escalante National Monument in 1996. The county is struggling to retain rural traditions and lifestyles as well as "working" connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult. Second home ownership has increased in the county dramatically. Over 60% of property tax notices in Garfield County are sent out of the county (39% out of state or country).

A recent visitor study of the Grand Staircase-Escalante National Monument indicates that approximately 600,000 people visit the area every year. While most of the visitors remain in the frontcountry visitor areas, exploration into the backcountry is increasing. Visitors come from throughout the United States and the world. About 14% of visitors are from Utah, 13% from California, 6% from Arizona, 5% from Colorado, and 10% from other western states. About 30% come from the other 39 states leaving 23% from other countries. The average visitor spends three days in the area. Only 20% of these visitors indicated that the Monument was their primary destination. Many of these visitors end up exploring the

forest. The most common visitor activities reported were hiking, photography, scenic driving, and viewing natural features. Escalante and Bryce Canyon are the two most visited communities near the Monument. Boulder also experienced high visitation. The average amount spent by a group of three to the area was just under $500. This means that more than $20.6 million is being directly spent in Garfield and Kane counties because of the designated Monument. This is the equivalent of more than 430 full-time jobs. (A Front Country Visitor Study for the Grand Staircase-Escalante National Monument, Utah State University, Professional Report IORT PR2006-01, April 2006).

More specifically, trends and conditions:

Garfield County, the fifth largest county in the state has the highest percentage of federal land (over 90%) in a county in the state of Utah.[28] The county contains over one million acres of National Forest System lands (including the Box-Death Hollow Wilderness Area) and large areas of other federal land, including portions of Grand Staircase-Escalante National Monument, Bryce Canyon National Park, Capitol Reef National Park, and Glen Canyon National Recreation Area. There are only about 170,000 acres of private land in the county. Public lands provide both challenges and opportunities for economic development in the county. The county is sparsely populated and is only projected to grow at a 1.0 percent annual rate between 2005 and 2050, a rate below the state average.

According to a 2003 Utah Bureau of Economic Analysis Report, Garfield County residents had one of the five lowest levels of total personal income in the state. Additionally, Garfield County had the second highest unemployment rate (10.8 percent) in the state according to 2003 Utah Department of Workforce Services information, exceeded only by Emery County's 11.0 percent unemployment rate. Slow job growth and unemployment are recurrent problems for the county. Traditionally, county residents have relied primarily upon ranching and timber. While there is a desire to retain these traditional sources of economic opportunity, services related to recreation and tourism are growing quickly in the county (*People and the Forests*, 2003). Services are projected to increase from a 30.1 percent share in the Garfield County economy in 2005 to a 37.8 percent share in 2030 (State of Utah 2003).

According to Garfield County, the growth in the recreation and tourism industries has not been strong enough to provide the economic growth that has been achieved in more diverse parts of the state (Bremner 2006).[29] While these services (mostly related to leisure and hospitality) represent the largest sector in the Garfield County economy, government jobs (the sector ranked second) make up a much higher percentage of payroll wages (State of Utah 2003). There is a perception that leisure and hospitality jobs will not pay as much as jobs in other more traditional sectors.[30] According to Garfield County, ". . . Garfield County is struggling economically. Schools are showing declining enrollment, and additional natural resource based industries have been all but eliminated in the county. . . Garfield County is struggling and unless changes [in land management and opportunities] are made relatively soon, things will get tougher" (Bremner 2006). Also according to Garfield County Commissioner Maloy Dodds in testimony to Congress, "…most tourist-generated jobs generally are minimal skill, minimum wage jobs – not the kind that can support a family." Another important fact that the Commissioner noted, "Federal destination areas [are] a mixed blessing at best" for Garfield County because increased visitors can be a

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[30] In the book *Visions of the Grand Staircase-Escalante* (compiled at the time of the Grand Staircase-Escalante National Monument planning process in the 1990s), Gail Blattenberger and David Kiefer acknowledge, "[m]inimum wages plus tips at Ruby's Inn are what the locals [in Garfield County] envisage from the service industry, but high tech service enterprises are also viable given an investment in communications infrastructure." Blattenberger and Kiefer suggest that while based on past performance "economic well-being" is clearly an issue in Kane and Garfield counties, "[e]xtractive industries are not an optimal or even a viable solution to the economic situation in these counties." Furthermore, "change will certainly come to these economies" and be met with "resistance (because of) the desire for a land-based economy (which is) seen as crucial to the quality of life in the rural West." According to the authors, the key is to "find ways of preserving our land-based Western heritage and lifestyle (which are so important to rural residents) along with the natural treasures of the countryside." Roughly 10 years later, we seem to face the same conditions, trends, attitudes, fears, opportunities, and challenges (Blattenberger and Kiefer 1998).

burden to the county in terms of increased cost of garbage and search and rescue operations (Testimony to House Resources Committee's Forest and Forest Health Subcommittee, June 15, 2005).

The closest communities to the river segment are Escalante and Boulder. Escalante is projected to grow from about 800 people in 2000 to about 1300 in 2050. Boulder is projected to grow from 180 in 2000 to around 300 in 2050.

The river segment and the areas below Highway 12 are also used regularly by residents of Wayne County. Wayne County has the second highest percentage of federal land of any county in the state. The county contains about 160,000 acres of National Forest System lands. The county contains the second fewest acres of private land in the state, trailing only Daggett County (which is four times smaller than Wayne County) by about 8,000 acres. From 2004 to 2005, Wayne County was only one of three counties to register negative population growth. The county had a -0.6% annual growth rate (the lowest in the State) (State of Utah 2006). However, from 2005 to 2050, the county is projected to almost double in population and grow at a 1.2 percent annual growth rate (State of Utah 2005).

Education and health services is the largest sector in the Wayne County economy. This sector is buoyed by the presence of Aspen Health Services' Aspen Achievement Academy, a wilderness therapy program that is a major county employer. Headquartered in Loa, the program operates on BLM and Forest Service lands. Government is the second largest sector in the county. Since 1980 agriculture has decreased dramatically and services have increased, a trend that is projected to continue into 2030. In 1980, agriculture made up 26.9 percent of the economy, while services took only a 3.5 percent share. By 2002, agriculture had declined to 13.8 percent and services had increased to 24.9 percent. In 2030, *People and the Forests* projects that agriculture will take a 6.5 percent share, while services will have increased to 30.3 percent (State of Utah 2003). This increase is visible in the increasingly popular tourist venue of Torrey at the gateway to Capitol Reef National Park.

While agriculture continues to decline, it is an important part of the county's traditions and customs. Many county residents work multiple jobs to keep the traditions of the past alive. The Wayne County General Plan identifies tourism promotion as an important economic development tool; however, there is concern over preserving quality of life while implementing this strategy.

Wayne County continues to struggle with issues of poverty. The county's 1999 poverty rate exceeded 15 percent, almost one and one-half times the state average (State of Utah 2003). Total personal income in Wayne County is the fourth lowest in the state. Growth rates of total personal income were second to last in the state from 2000 to 2003 (Bureau of Economic Analysis 2003).

Teasdale, Grover, and Torrey are the closest towns in Wayne County to the river segment. Torrey has a population of 171 (2005). None of the communities in Wayne County are expected to grow rapidly.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS. The U.S. Forest Service and BLM would share management of the segment.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average $200,000 per plan for 86 segments, which would cost approximately $17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be $200,000; a moderate complexity river would be $50,000; and a low complexity river at $25,000. Using an average of complexity costs, it would cost the Forest Service around $7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) **The extent to which the State or its political subdivisions might participate in the shared**

preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.
There has been no demonstrated or potential commitment to share preservation and/or administration.

(2) **The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.**
Not applicable, as all of the land through which the segment flows is federally owned.

(3) **Support or opposition to designation.**
Garfield County is working on a Resource Management Plan for all lands in the county. They have included an analysis of Wild and Scenic Rivers in their discussions. While their RMP supports the designation of Cataract Canyon (Colorado River) and the Dirty Devil River as Wild and Scenic Rivers, the county does not support the designation of Steep Creek.

During the Dixie and Fishlake National Forests eligibility process, the county expressed repeated concern over the eligibility determinations made for this and other river segments on the Escalante Ranger District. The county does not believe that the Escalante River system is suitable because its flow is too regulated by irrigators.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored "preservation" of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support has been received.

In response to scoping, a non-profit organization expressed support for designation because of the segment's contribution to river system integrity. None of the three organized campaigns supported a positive finding of suitability for this segment.

Allen Rowley (Fishlake NF Supervisor) has recently spoken with the BLM Manager of the Grand Staircase-Escalante National Monument relative to suitability of this segment on FS lands, and has not yet received any indication of support or opposition.

(4) **The consistency of designation with other agency plans, programs or policies and in meeting regional objectives**.
Downstream from the Forest Service boundary, the BLM found Steep Creek to be suitable for designation because "high quality scenery, recreational values, and riparian areas make this a worthy addition to the WSR system" (Appendix 11, GSENM FEIS Monument Plan).

The Dixie National Forest, Glen Canyon National Recreation Area, Bryce Canyon National Park, and GSENM all worked together on eligibility for this river segment. Final determinations of suitability were reserved for individual agencies to make on their own.

(5) **Contribution to river system or basin integrity**.
Steep Creek is not one of the tributaries identified in the GSENM plan that contributes significantly to the flow of the Escalante River, however, as a perennial stream it does provide flow consistently to the system. The segment within the GSENM has been found suitable for designation.

(6) **Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.**
No commitment has been expressed.