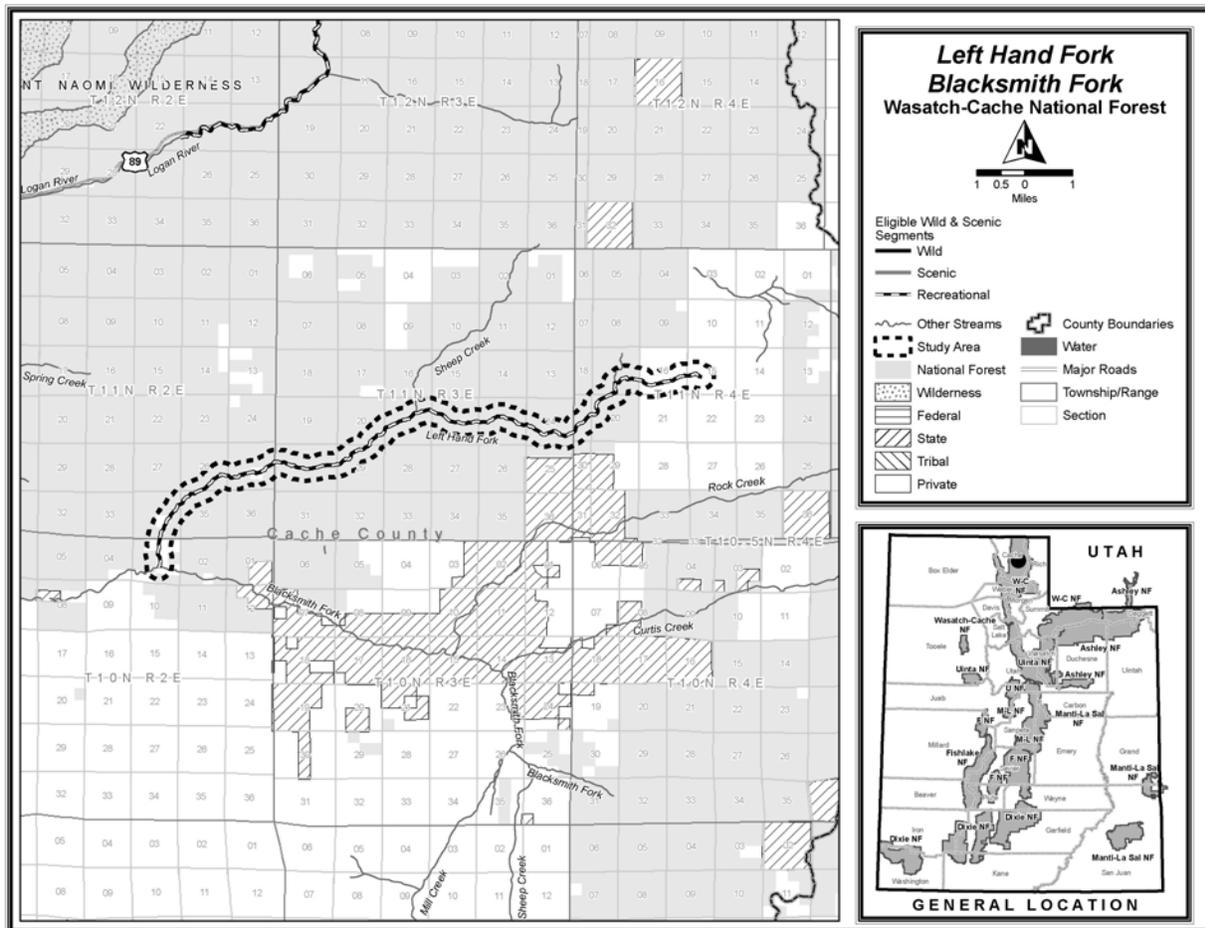


Left Hand Fork Blacksmiths Fork River Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Left Hand Fork Blacksmiths Fork

River Mileage:

Studied: 15.0 miles, from source to confluence with Blacksmiths Fork

Eligible: same

Location:

Left Hand Fork Blacksmiths Fork	Wasatch-Cache National Forest, Logan Ranger District, Cache County, Utah		Congressional District 1	
	Start	End	Classification	Miles
Segment 1	NE ¼ SE ¼ Sect. 23, T 11 N, R 4 E, SLM	NW ¼ SE ¼ Sect. 3, T 10 N, R 2 E, SLM	Recreational	15.0

Physical Description of River Segment:

This segment of Left Hand Fork of Blacksmith Fork is from its source near Bear Hollow to its confluence with Blacksmith Fork. Elevations along the segment range from 5,100 to 6,400 feet. The reach appears to follow a fault line and is bounded closely by a narrow valley. Most of the channel is cut into alluvium; but portions are controlled by bedrock. Upland vegetation communities are dominated by Douglas-fir on north-facing slopes with some maple communities at lower elevations. Mountain mahogany, sagebrush, and other mountain brush communities occur on south-facing slopes and other drier sites. Riparian communities are dominated by cottonwood and/or box elder trees with red-osier dogwood a common undergrowth component. This narrow canyon offers moderate vegetation diversity, and is an example of common vegetation for the area. State of Utah fishing rating is Class II, of great importance. Species present include rainbow trout, cutthroat trout (possibly Bonneville cutthroat trout, a sensitive species), brown trout and whitefish.

ELIGIBILITY

Name and Date of Eligibility Document: Revised Forest Plan, Wasatch-Cache National Forest 2003, Appendix VIII, USDA Forest Service; Draft Inventory of Rivers on Wasatch-Cache National Forest, Eligible for Inclusion in the national Wild and Scenic Rivers System 1999.

Determination of Free-flowing Condition: While the Left Hand Fork Blacksmiths Fork has some modifications, the stream appears to be free-flowing.

Summary of Outstandingly Remarkable Values (ORV):

Scenery- The scenery in the Left Hand Blacksmiths Fork provides a mosaic of colors and textures year-round. This value, when compared to nearby adjacent drainages and areas can be considered outstandingly remarkable.

CLASSIFICATION

Basis for the Classification of River – Recreational

The Left Hand Fork of Blacksmith Fork is free-flowing and possesses an outstandingly remarkable scenic value; therefore the stream is eligible for the National Wild and Scenic Rivers System. The stream can be classified as a recreational river because the stream has:

- Some developments and substantial evidence of human activity.
- It is readily accessible by road.
- A parallel road exists along one of the stream banks, has bridge crossings, and other river access points.

SUITABILITY REPORT

Landownership and Land Uses –This segment is on the Logan Ranger District in Cache County, Utah. National Forest system lands are dominant along this segment. The upper 1.5 miles of this segment flow through private land, then the stream flows predominantly through Forest land; however small areas of private ownership in two areas account for less than one half mile on both banks, and then the lower part of the segment flows through private land again to the confluence with the Blacksmiths Fork.

River Mile	Ownership	Acres
0-1.5	Private Land	515.9
1.5-11.4	Wasatch-Cache National Forest	3177.6
11.4-11.7	Private	36.4

11.7-13.9	Wasatch-Cache National Forest	705.5
13.9-14.1	Private	40.5
14.1-14.4	Wasatch-Cache National Forest	88.3
14.4-15.0	Private Land	234.9
	Total:	4800 acres

Readers Note: The study area boundaries displayed in Appendix A, Suitability Evaluation Reports, do not represent actual Wild and Scenic River boundaries, but the area of interest for eligible river segments. It should be noted that of the eligible rivers studied, 14 of the 86 river segments appear to include portions of private land, at the end of segments near the National Forest boundary. These typically short river stretches (1/4 to 4 miles long) were included in the eligibility study as part of the river segment length because they brought the river segment to a logical terminus at a confluence with a larger stream, also contained the ORV's of the National Forest portion of the segment, or National Forest land was located within ¼ mile of these segments. These lengths are also included in the tables found in this suitability study. The magnitude of this effect is small, representing approximately 22 miles total over 14 segments, or less than 3 percent of the total mileage in the study. Prior to finalization of this EIS, the actual miles of river segments recommended for designation will be calculated and the maps redrawn to exclude the private lands outside of the National Forest ownership to avoid the appearance of including these private lands in recommended river segments.

Private land is zoned Forest Recreation. The purpose of the forest-recreation zone is to permit the proper use of the forest areas of the county for grazing, forestry, mining, recreation and other activities to the extent compatible with the protection of the natural and scenic resources of the forests for the benefit of present and future generations (Cache County Ord. 2004-10, 8-10-2004).

Mineral and Energy Resource Activities – There are no known locatable mineral deposits of economic value within the area of the eligible Left Hand Fork Blacksmiths Fork segment and there are no known valuable deposits known on patented mining claims that now appear as private land in-holdings on the forest. Presently, there are no significant mining activities on the Forest. Also, this area is not a high oil and gas potential area (Revised Forest Plan, Wasatch Cache-National Forest, 2003).

Water Resources Development – 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 Road 245 parallels the stream for the full length of this segment. There are four road crossings. Two developed campgrounds and dispersed camping, hiking, and sight-seeing opportunities are present. Several road encroachments limit natural meander patterns, but the stream flow is basically unimpeded and natural.

Recreation Activities – Scenic viewing is enjoyed by motorists and visitors. The stream meanders through dogwood, river birch and other water loving plants. Deep gray limestone walls and conifers found on the northern slopes of the canyon are a backdrop for fall colors of red maple and yellow/orange oak. This canyon offers an intimate look at a modified ridge and valley network between the Wasatch Front and the high Wyoming basins. Fishing is popular, and access is easy by the adjacent road. Boating is not possible. Opportunities are similar to many available on creeks that flow out of the Wasatch Range. Use comes from the Cache Valley and the Wasatch Front. There are no known National Register eligible sites along this segment.

Grazing Activities - This segment is within valley bottom portions of the South Cache Cattle, White Rock and Boulder Mountain Sheep Allotments. The river corridor it self is used by permitted livestock for short periods while trailing or herding and occasionally by recreation stock. The grazing allotment permittee must operate in compliance with an Allotment Management Plan (AMP) and Annual Operating Instructions (AOI) administered by the Wasatch-Cache National Forest.

Other Resource Activities –There are no current or planned projects in this drainage. There is no commercial fishing or hunting operations.

Special Designations – The Left Hand Fork Blacksmiths Fork is a fish bearing stream and is managed by the Wasatch-Cache National Forest as a Category 1. Fish-Bearing Stream Riparian Habitat Conservation Areas (RHCA) include traditional riparian corridors, wetlands, intermittent streams, and other areas that help maintain the integrity of aquatic ecosystems by (1) influencing the delivery of coarse sediment, organic matter, and woody debris to streams, (2) providing root strength for channel stability, (3) shading the stream, and (4) protecting water quality. This designation still allows for a full range of activities but it emphasis the achievement of riparian management objectives that are identified on a site-by-site basis. These objectives should include riparian vegetation and instream habitat conditions consist of the stream and the area on either side of the stream extending from the edges of the active stream channel to 300 feet slope distance (600 feet, including both sides of the stream channel).

Approximately 10.8 miles of this stream corridor are within a Wasatch-Cache National Forest inventoried roadless area. These are areas that do not have developed and maintained roads, and that are substantially natural.

There are several Wasatch-Cache National Forest management prescriptions within the stream corridor that provide for watershed, wildlife, forest and recreation resource protection (Revised Forest Plan, Wasatch Cache-National Forest, 2003):

Land management direction for land within the stream corridor on the north bank of Left Hand Blacksmiths Fork:

Management Prescription 3.1w Watershed Emphasis: This area consists of uplands identified as important watersheds.

(S3.1W) Timber harvest, road construction and new recreation facility development are not allowed.

(G3.1W-1) Vegetation/fuel treatment, prescribed fire, and wildland fire use are allowed for the purposes of maintaining, improving or restoring watersheds to desired conditions, and to protect property in the wildland urban interface.

(G3.1W-2) Livestock grazing is allowed on open allotments to meet site-specifically defined desired conditions.

(G3.1W-3) New trail construction is allowed with consideration of existing road/trail densities.

Management Prescription 5.1 Emphasis on maintaining or restoring forested ecosystem integrity while meeting multiple resource objectives. Emphasis is on properly functioning conditions. Emphasis is not on timber growth and yield. Instead it is on maintaining or restoring vegetation composition, structure and patterns within the historic range of variability.

(G5.1-1) Timber harvest, vegetation/fuel treatment, prescribed fire and wildland fire use are allowed to maintain or restore proper functioning conditions, for hazardous fuel reduction, to

protect property in the wildland urban interface, and to provide for commodity and non commodity outputs and services.

(G5.1-2) Road construction, new recreation development and new trail construction are allowed.

(G5.1-3) Grazing is allowed on open allotments to meet site-specifically defined desired conditions.

Management Prescription 6.1 Emphasis on maintaining or restoring non-forested ecosystem integrity while meeting multiple resource objectives: Emphasis is on non-forested vegetation properly functioning conditions (i.e. vegetation composition, structure and patterns within the historic range of variability). Management encompasses the full range of land and resource treatment activities.

(G6.1-1) Timber harvest, vegetation/fuel treatment, prescribed fire and wildland fire use are allowed to maintain or restore proper functioning conditions, for hazardous fuel reduction, to protect property in the wildland urban interface, and to provide for commodity and non commodity outputs and services.

(G6.1-2) Grazing is allowed on open allotments to meet site-specifically defined desired conditions.

(G6.1-3) Road construction, new recreation development, and new trail construction are allowed.

Land management direction for the land adjacent to the Left Hand Blacksmiths Fork:

Management Prescription 4.3 Backcountry Motorized Emphasis: These areas provide recreation opportunities in a more remote and isolated setting where visitors can obtain a higher degree of solitude and the environment is in a near-natural setting. Access to and within these areas is primarily through the use of motorized trails and roads. Sights of other visitors are low and sounds of other users are low to moderate. Visitors are largely managed off-site, with signs and regulations posted at area boundaries. Management of recreation impacts is of a semi-primitive nature with regulation of use a priority management tool over site modification. Visitor self-reliance is high. Management visibility is low with backcountry ranger patrols focusing on monitoring and maintaining natural conditions and processes.

(S4.3) New recreation development is not allowed.

(G4.3-1) Timber harvest, vegetation/fuels treatment, road construction, prescribed fire and wildland fire use are allowed to mimic historic conditions and to restore ecosystem functioning as compatible with the backcountry recreation opportunity and natural setting desired.

(G4.3-2) Grazing is allowed on open allotments to meet site-specifically defined desired conditions.

(G4.3-3) New trail construction is allowed.

Management Prescription 4.4 Dispersed Motorized Emphasis: These areas provide recreation opportunities within a range of semi-primitive to rural settings. Visitors may be able to obtain a moderate degree of solitude, but this prescription area provides opportunities for increased social interaction. Access to and within these areas is primarily through the use of motorized trails and roads. Sights and sounds of others may be noticeable throughout the area. Management of recreation impacts range from semi-primitive to rural depending on the ROS category at the specific area and visitor desires for convenience. Impacts to natural resources are dealt with through various management techniques and regulations. Management visibility is moderate to high with ranger patrols focusing on education, user ethics, and enforcement.

(G4.4-1) Timber harvest, vegetation/fuel treatment, road construction, prescribed fire and wildland fire use are allowed to mimic historic conditions, to restore ecosystem functioning, and to protect property in the wildland urban interface, and are designed to be compatible with motorized recreation, but must not detract from the recreation setting over the long-term.

(G4.4-2) Grazing is allowed on open allotments to meet site-specifically defined desired conditions.

(G4.4-3) New recreation development and new trail construction are allowed.

Land management direction for the land within the stream corridor on the south bank of the Left Hand Blacksmiths Fork:

Management Prescription 3.2U: Terrestrial Habitat Emphasis-Undeveloped: These areas consist of those terrestrial habitat areas protected from development because of potential impacts to key habitat elements. Manage upland habitats to provide for sustaining and/or recovering desired plant and animal species and/or communities. Maintain or restore lands to meet desired conditions of habitat for threatened, endangered, and sensitive species. Considerations for these areas include winter ranges and corridors for seasonal migrations as well as movement of genetic materials, individuals, and populations; vegetation composition, structure, and pattern needed for life cycle stages; needs for control or eradication of undesirable non-native species; and protection of special or unique habitats.

(S-3.2U) Timber harvest, road construction, and new recreation developments are not allowed.

(G3.2U-1) Vegetation/fuel treatment, prescribed fire and wildland fire use are allowed for the purposes of maintaining, improving or restoring terrestrial habitat, for hazardous fuel reduction, and to protect property in the wildland urban interface.

(G3.2U-2) New trail construction is allowed with consideration of existing road/trail densities and site-specifically developed habitat objectives.

Socio-Economic Environment –The Left Hand Fork Blacksmiths Fork feeds the Blacksmiths Fork which supplies hydroelectric power, culinary, and agricultural water to the town of Hyrum, population 6,400. The local population relies primarily on agriculture, some light industry, and, to an increasing extent tourism and the services that support it.

The local population of Cache Valley (estimated population of 98,622 in 2006) relies primarily on the university, agriculture, some light industry, and to increasing extent tourism and the services that support it. There is a high rate of growth expected in Cache Valley. As the population grows, a change in landscape is occurring, and agricultural and open lands are being converted for urban, commercial and industrial development. Off highway vehicle (OHV) use, hiking, fishing, biking, rock climbing, whitewater boating, skiing and snowmobiling are popular recreation activities for locals and visitors in local canyons.

Current Administration and Funding Needs if Designated – The current administering agencies for lands along this segment are the Wasatch-Cache National Forest and Cache County. The National Forest System lands along the segment are managed under the direction of the Revised Forest Plan, Wasatch Cache-National Forest, 2003. The private lands within this segment are subject to Cache County Countywide Comprehensive Plan, the primary land use ordinance for private land. The Comprehensive Plan is a planning tool for making policy decisions. The Land Use Ordinance is the instrument by which these policies are implemented.

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 and determination of the degree to which the agency proposes or a State or its political subdivisions might participate in the shared preservation and administration of the river, including the costs thereof, should it be proposed for inclusion in the System.

Eligible rivers are protected and managed by the Forest Service according to standards included in Appendix VIII of the Revised Forest Plan until designated by Congress, or otherwise directed by other legal means. The Wasatch-Cache National Forest Revised Plan provides direction to implement Management Prescriptions for stream segments that are suitable for Wild and Scenic River designation by Congress. Once designated, the Wasatch-Cache National Forest will apply Management Prescription numbers to the designated Wild (2.1), Scenic (2.2), and Recreational (2.3) Rivers on Forest, which include land corridors that extend 1/4 mile from each bank.

The State of Utah has not demonstrated interest or disinterest in having the river deemed wild and scenic, or in sharing of the costs.

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

This majority of the stream segment and corridor is on the Wasatch-Cache National Forest. The private land could be developed in the future. This development would be directed by the County Comprehensive Plan and zoning ordinances for the Forest Recreation (FR 40) zone; which allows for one seasonal cabin per forty acres. Regulations for sensitive areas, steep slopes, jurisdictional wetlands, natural waterways and areas lying within the floodplain, and areas of wildlife habitat are declared under Title 17.18.020. Title 17.18.060 specifies setbacks for development from natural waterways of 50 ft. for dwellings, 100 ft. for septic systems, and up to 100' for dwellings if within the FEMA mapped floodplain.

(3) Support or opposition to designation.

One comment to the Left Hand Fork Blacksmith Fork in the January 1999 Draft Inventory of Rivers on the Wasatch-Cache National Forest Eligible for Inclusion in the National Wild and Scenic Rivers System communicated the value of wildlife and botanical qualities along this segment.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Designation of this segment of Left Hand Blacksmiths Fork complements current Forest management for dispersed recreation and watershed protection. Designation may conflict with the density of subdivision development on land owned privately or by the city of Hyrum. The recreational classification allows the more extensive residential or commercial developments than are currently present in this stream corridor.

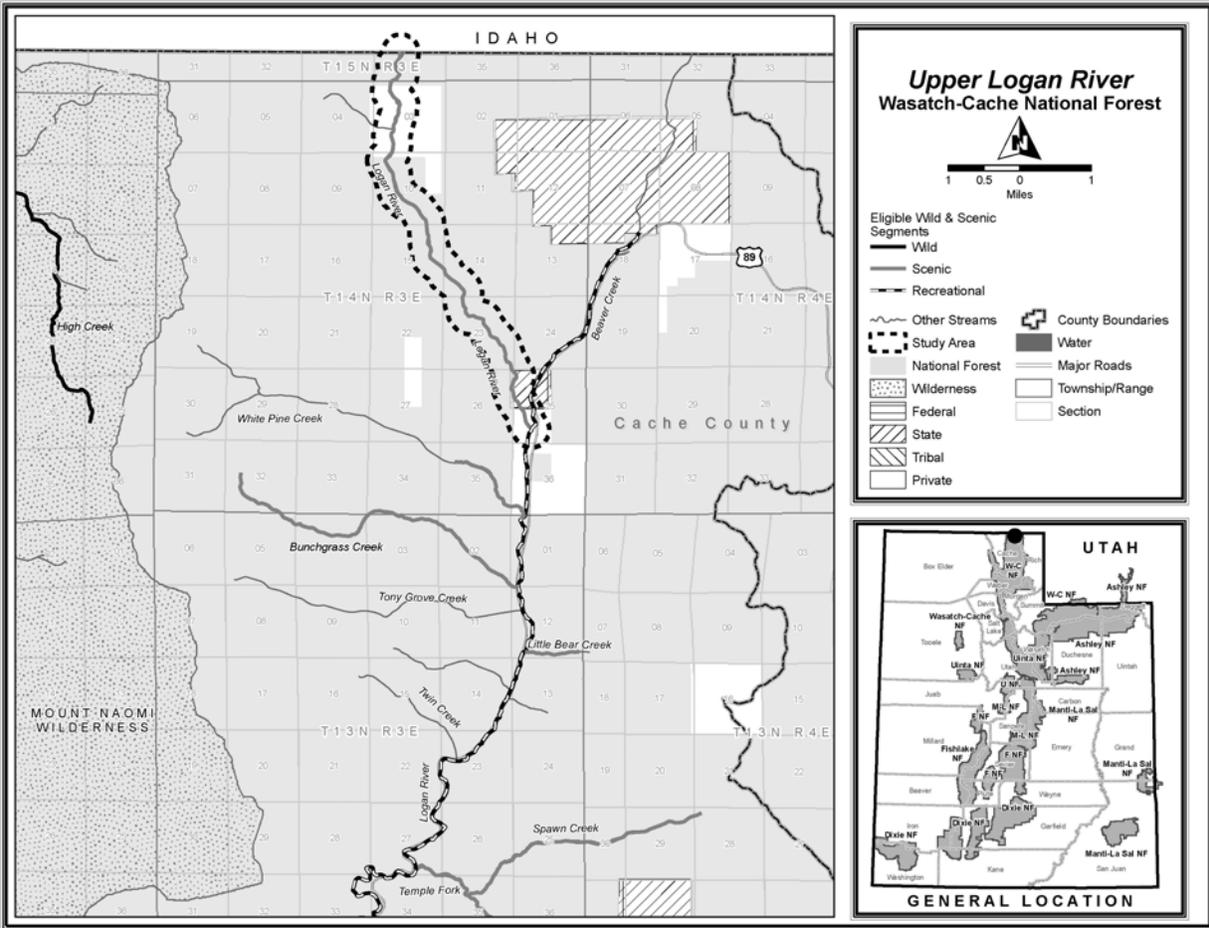
(5) Contribution to river system or basin integrity.

While this segment is long, extending from its headwaters to the Forest boundary, it does not contribute greatly 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.

There are no known groups who have shown interest in the management of this river segment.

Logan River Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Logan River

River Mileage:

Studied: 6.5 miles, Idaho state line to confluence with Beaver Creek

Eligible: same

Location:

Logan River	Wasatch-Cache National Forest, Logan Ranger District, Cache County, Utah		Congressional District 1	
	Start	End	Classification	Miles
Segment 1	NE ¼ NW ¼ Sect. 34, T 15 N, R 3 E, SLM	SE ¼ SW ¼ Sect. 25, T 14 N, R 3 E, SLM	Scenic	6.5

Physical Description of River Segment:

Elevations range along the stream from approximately 7,500 feet at the Idaho state line to about 6,400 feet at Beaver Creek. This segment of the Logan River is a relatively small upriver portion of the stream where the river is natural in character and has few highway and road encroachments and crossings. The stream flow is perennial; however during low flow periods a portion of the stream can go underground for about 100 to 200 yards. In the upper reaches of the segment the somewhat confined channel is characterized by pool-riffle-run and it runs through a broad open valley. Adjacent uplands are primarily dominated by aspen and sagebrush communities and some conifer communities. Subalpine fir is succeeding aspen communities in some areas. Riparian communities are characterized by thinleaf alder and various willows. Fish species present include Bonneville cutthroat trout (a sensitive species), brook trout, brown trout, and sculpin. The State of Utah rates the fishery here as a Class II (unique).

ELIGIBILITY

Name and Date of Eligibility Document: Revised Forest Plan, Wasatch-Cache National Forest 2003, Appendix VIII, USDA Forest Service; Draft Inventory of Rivers on Wasatch-Cache National Forest, Eligible for Inclusion in the national Wild and Scenic Rivers System, 1999.

Determination of Free-flowing Condition: This segment of the Logan River has not been substantially modified by the dirt road that runs along it or by other construction or diversion. The segment is free-flowing.

Summary of Outstandingly Remarkable Values (ORV):

Fish - The Bonneville cutthroat trout fishery within this tributary to the upper Logan River is a significant population, because of its size, diversity, distribution within several suitable habitats, self-sustaining natural reproduction and the size and vigor of the fish. The importance of this meta-population of Bonneville cutthroat trout is an outstandingly remarkable value. The range of Bonneville cutthroat trout includes most of the eastern Great Basin. This portion of the main Logan River along with several tributaries are occupied with a meta-population (that is a genetically interactive larger population of the species) that, if protected, can insure the preservation of the species, which is currently under some considerable pressure to survive due to pressures of exotic species introduction, fishing pressure, and habitat fragmentation, destruction, and/or degradation. The Logan River population of these fish is probably the largest and most diverse subpopulation with habitat connectivity that remains. Fish abundance for the Bonneville cutthroat is high, and the population is self-sustaining through natural spawning in both the main Logan River and these tributaries. This river system is of critical importance to Bonneville cutthroat because of its lack of migratory obstructions, the large number of connected populations, and the overall strength and diversity of the population.

CLASSIFICATION

Basis for the Classification of River – Scenic

Since this segment of the Logan River is free-flowing and has an outstandingly remarkable fish value, the segment is eligible for the National Wild and Scenic Rivers System. The stream can be classified as a scenic river because the stream and stream corridor is or has:

- Free of impoundment.
- The road parallels stream through the valley bottom, but is not immediately adjacent to stream throughout entire segment.
- Access from road is not readily accessible throughout the entire segment.

SUITABILITY REPORT

Landownership and Land Uses – This segment of Logan River, from the Idaho Stateline to its confluence with Beaver Creek, is located on the Logan District in Cache County, Utah. A recent land exchange with the State of Utah in the upper reaches of the river have made most of the lands through which it flows part of the National Forest system, although about 1 mile still flows through private lands. These private inholdings have water rights in Franklin Basin. The lower portion of the stream flows through Utah State land and then private land at the confluence with Beaver Creek.

River Mile	Ownership	Acres
0-0.6	Wasatch-Cache National Forest	179.8
0.6-1.7	Private Land	362.2
1.7-5.6	Wasatch-Cache National Forest	1228.8
5.6-5.8	Utah State Land	78.4
5.8-5.9	Wasatch-Cache National Forest	28.7
5.9-6.2	Utah State Land	85.6
6.2-6.5	Private Land	115.9
	Total:	2079.4 acres

Readers Note: The study area boundaries displayed in Appendix A, Suitability Evaluation Reports, do not represent actual Wild and Scenic River boundaries, but the area of interest for eligible river segments. It should be noted that of the eligible rivers studied, 14 of the 86 river segments appear to include portions of private land, at the end of segments near the National Forest boundary. These typically short river stretches (1/4 to 4 miles long) were included in the eligibility study as part of the river segment length because they brought the river segment to a logical terminus at a confluence with a larger stream, also contained the ORV's of the National Forest portion of the segment, or National Forest land was located within 1/4 mile of these segments. These lengths are also included in the tables found in this suitability study. The magnitude of this effect is small, representing approximately 22 miles total over 14 segments, or less than 3 percent of the total mileage in the study. Prior to finalization of this EIS, the actual miles of river segments recommended for designation will be calculated and the maps redrawn to exclude the private lands outside of the National Forest ownership to avoid the appearance of including these private lands in recommended river segments.

The private lands are zoned Forest Recreation. The purpose of the forest-recreation zone is to permit the proper use of the forest areas of the county for grazing, forestry, mining, recreation and other activities to the extent compatible with the protection of the natural and scenic resources of the forests for the benefit of present and future generations (Ord. 2004-10, 8-10-2004).

Mineral and Energy Resource Activities – There are no known locatable mineral deposits of economic value within the area of this eligible Logan River segment and there are no known valuable deposits on patented mining claims that now appear as private land in-holdings on the forest. Presently, there are no significant mining activities on the Forest. Also, this area is not a high oil and gas potential area.

Water Resources Development – 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 – Access to segment is from US Highway 89, a National Scenic Byway. Forest Road 006 (Franklin Basin Rd.) is a dirt road that runs adjacent to the segment. There are two bridges that span the stream in this segment, one bridge is located on private land,

the other is on State land. The bridges are full spanning and most do not constrict flows. All pass fish. No developed Forest Service campgrounds are present in the upper part of the segment. The Utah Division of Parks and Recreation operates a winter sports trailhead parking area at the junction of Highway 89 and the Franklin Basin Road.

Recreation Activities – Dispersed recreation is common along the upper position of the river segment. Some of these dispersed camping areas have been closed by the Forest Service to reduce the impacts to the stream.

Grazing Activities - This segment is within the valley bottom portion of the Franklin Basin Cattle Allotment. The river corridor itself is used by permitted livestock for short periods while trailing or herding and occasionally by recreation stock. The grazing allotment permittee must operate in compliance with an Allotment Management Plan (AMP) and Annual Operating Instructions (AOI) administered by the Wasatch-Cache National Forest.

Other Resource Activities – There are no current or planned Forest Service projects within this stream corridor.

Special Designations – The Logan River is a fish bearing stream and is managed by the Wasatch-Cache National Forest as a Category 1 Fish-Bearing Stream Riparian Habitat Conservation Areas (RHCA). A RHCA includes traditional riparian corridors, wetlands, intermittent streams, and other areas that help maintain the integrity of aquatic ecosystems by (1) influencing the delivery of coarse sediment, organic matter, and woody debris to streams, (2) providing root strength for channel stability, (3) shading the stream, and (4) protecting water quality. This designation still allows for a full range of activities but it emphasizes the achievement of riparian management objectives that are identified on a site-by-site basis. These objectives should include riparian vegetation and instream habitat conditions consist of the stream and the area on either side of the stream extending from the edges of the active stream channel to 300 feet slope distance (600 feet, including both sides of the stream channel).

This segment of the Logan River is managed by the State of Utah as a Blue Ribbon fishery. Blue Ribbon Fishery waters are to be managed principally by protecting their watersheds, maintaining and restoring habitat, and implementing appropriate angling regulations. Waters classified as a Blue Ribbon Fishery are given protective legal status through the Division of Water Quality and the Division of Wildlife Resources. In addition, funding is available for projects associated with Blue Ribbon Fisheries. This funding is available to private organizations and groups for projects that would enhance Blue Ribbon Fisheries.

The stream segment and corridor ends at the Logan Canyon National Scenic Byway.

Approximately 3.4 miles of this stream corridor are within a Wasatch-Cache National Forest inventoried roadless area. These are areas that do not have developed and maintained roads, and that are substantially natural.

There are three areas within the stream segment's corridor that are recognized by the State of Utah as a Transient Drinking Water Source Protection Zones for the Red Banks, Lewis M. Turner, and Card campgrounds. This designation defines the area where contaminants are limited from the surface and subsurface areas surrounding a surface source of drinking water supplying a public water system (PWS), over which or through which contaminants are reasonably likely to move toward and reach the source. Surface water means all water which is open to the atmosphere and subject to surface runoff, and

subsurface water relates to any well, spring, tunnel, adit, or other underground opening from or through which ground-water flows or is pumped from subsurface water-bearing formations.

Land management direction for Wasatch-Cache National Forest land within the stream corridor from the Idaho Stateline to the confluence with Beaver Creek:

Management Prescription 3.1A Aquatic Habitat Emphasis: consists of the stream and adjacent riparian areas (or 300 feet either side of the stream whichever is greater). Because of the large number of existing facilities (roads, developed recreation sites, trails), already located within areas mapped as 3.1A, and because of their relatively high value and small proportion of the landscape, development outside already developed areas within this prescription is to be avoided. Protect or restore proper hydrologic functioning.

(S3.1A-1) New recreation facility development is not allowed.

(S3.1A-2) Cutting fuelwood larger than 5 inches in diameter is not allowed.

(G3.1A-1) Timber harvest, vegetation/fuel treatments, prescribed fire, and wildland fire use are allowed only for the purposes of maintaining, improving or restoring riparian and aquatic habitat to desired conditions or to protect property in the wildland urban interface.

(G3.1A-2) Livestock grazing is allowed with the utilization standard for Riparian Class 1, and to meet site-specifically developed desired conditions.

(G3.1A-3) Road construction is not allowed except for road crossings.

(G3.1A-4) New trail construction is allowed if consistent with site-specifically defined riparian management objectives.

Land management direction for land within the stream corridor along the road and to the east side of the stream:

Management Prescription 3.2U/3.2D Terrestrial Habitats Emphasis: Manage upland habitats to provide for sustaining and/or recovering desired plant and animal species and/or communities. Maintain or restore lands to meet desired conditions of habitat for threatened, endangered, and sensitive species. Considerations for these areas include winter ranges and corridors for seasonal migrations as well as movement of genetic materials, individuals, and populations; vegetation composition, structure, and pattern needed for life cycle stages; needs for control or eradication of undesirable non-native species; and protection of special or unique habitats.

3.2U consists of those terrestrial habitat areas protected from development because of potential impacts to key habitat elements.

(S-3.2U) Timber harvest, road construction, and new recreation developments are not allowed.

(G3.2U-1) Vegetation/fuel treatment, prescribed fire and wildland fire use are allowed for the purposes of maintaining, improving or restoring terrestrial habitat, for hazardous fuel reduction, and to protect property in the wildland urban interface.

(G3.2U-2) New trail construction is allowed with consideration of existing road/trail densities and site-specifically developed habitat objectives.

3.2D consists of those terrestrial habitat areas where development is allowed for the purpose of maintaining, improving, or restoring key habitat elements.

(G3.2D-1) Timber harvest, road construction, vegetation/fuel treatment, prescribed fire and wildland fire use are allowed for the purposes of maintaining, improving or restoring terrestrial habitat, for oil and gas exploration, for hazardous fuel reduction, and to protect property in the wildland urban interface.

(G3.2D-2) Grazing is allowed on open allotments to meet site-specifically defined desired conditions.

(G3.2D-3) New recreation development and new trail construction are allowed with consideration of existing road/trail densities and site-specifically defined terrestrial habitat desired conditions.

Land management direction for land within the stream corridor along the west side of the stream:

Management Prescription 4.4 Emphasis on Recreation Motorized Settings: These areas provide recreation opportunities within a range of semi-primitive to rural settings. Visitors may be able to obtain a moderate degree of solitude, but this prescription area provides opportunities for increased social interaction. Access to and within these areas is primarily through the use of motorized trails and roads. Sights and sounds of others may be noticeable throughout the area. Management of recreation impacts range from semi-primitive to rural depending on the ROS category at the specific area and visitor desires for convenience. Impacts to natural resources are dealt with through various management techniques and regulations. Management visibility is moderate to high with ranger patrols focusing on education, user ethics, and enforcement.

(G4.4-1) Timber harvest, vegetation/fuel treatment, road construction, prescribed fire and wildland fire use are allowed to mimic historic conditions, to restore ecosystem functioning, and to protect property in the wildland urban interface, and are designed to be compatible with motorized recreation, but must not detract from the recreation setting over the long-term.

(G4.4-2) Grazing is allowed on open allotments to meet site-specifically defined desired conditions.

(G4.4-3) New recreation development and new trail construction are allowed.

Socio-Economic Environment – The Logan River supplies agricultural water to the Cache Valley. The Logan River has multiple dams below the eligible segments. The First Dam (upstream from the town of Logan) is one of three hydroelectric dams built to generate electricity for Logan City. Unlike the other two, First Dam was not built by Logan City but by Utah State University. About two miles further up the canyon is Second Dam, site of the Logan City Power Plant and the Morgan Smith Turbine. Logan City has been using Second Dam for power since the beginning of the 20th century. The Third Dam is used for storage of spring runoff until it is needed in the drier months of summer.

The local population of Cache Valley (estimated population of 98,622 in 2006) relies primarily on the university, agriculture, some light industry, and to increasing extent tourism and the services that support it. There is a high rate of growth expected in Cache Valley. As the population grows, a change in landscape is occurring, and agricultural and open lands are being converted for urban, commercial and industrial development. Off highway vehicle (OHV) use, hiking, fishing, biking, rock climbing, whitewater boating, skiing and snowmobiling are popular recreation activities for locals and visitors in Logan Canyon.

Current Administration and Funding Needs if Designated – The current administering agencies for lands along this segment are the Wasatch-Cache National Forest, the State of Utah School and Institutional Trust Lands Administration (SITLA), and Cache County. The National Forest System lands along the segment are managed under the direction of the Revised Forest Plan, Wasatch Cache-National Forest, 2003. The State land along this segment is managed by SITLA, where the general land

management objective for school and institutional trust lands is to optimize and maximize trust land uses for support of the beneficiaries over time through development of surface and mineral resources and real estate development. The private lands within this segment are subject to Cache County Countywide Comprehensive Plan, the primary land use ordinance for private land. The Comprehensive Plan is a planning tool for making policy decisions. The Land Use Ordinance is the instrument by which these policies are implemented.

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 and determination of the degree to which the agency proposes or a State or its political subdivisions might participate in the shared preservation and administration of the river, including the costs thereof, should it be proposed for inclusion in the System.

Eligible rivers are protected and managed by the Forest Service according to standards included in Appendix VIII of the Revised Forest Plan until designated by Congress, or otherwise directed by other legal means. The Wasatch-Cache National Forest Revised Plan provides direction to implement Management Prescriptions for stream segments that are suitable for Wild and Scenic River designation by Congress. Once designated, the Wasatch-Cache National Forest will apply Management Prescriptions numbers to the designated Wild (2.1), Scenic (2.2), and Recreational (2.3) Rivers on Forest, which include land corridors that extend 1/4 mile from each bank.

The State of Utah has not shown interest or disinterest in having the river deemed wild and scenic or in sharing the costs.

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

The private and SITLA land could be developed in the future. This development would be directed by the County Comprehensive Plan and zoning ordinances for the Forest Recreation (FR 40) zone, which allows for one seasonal cabin per forty acres. Regulations for sensitive areas, steep slopes, jurisdictional wetlands, natural waterways and areas lying within the floodplain, and areas of wildlife habitat are declared under Title 17.18.020. Title 17.18.060 specifies setbacks for development from natural waterways of 50 ft. for dwellings, 100 ft. for septic systems, and up to 100 ft. for dwellings if within the FEMA mapped floodplain.

(3) Support or opposition to designation.

Public comments to the Draft Inventory of Rivers on Wasatch-Cache National Forest, Eligible for Inclusion in the national Wild and Scenic Rivers System. USDA Forest Service, 1999 were in support of listing of this portion of the Logan River for its fisheries and scenic values.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Designation of this segment of the Logan River complements the State's Blue Ribbon Fishery designation for this river and current Forest management. Designation may conflict with the density of subdivision development on private and SITLA land. Scenic classification allows the presence of small communities or dispersed dwellings or farm structures but not more extensive residential or commercial developments. The designation also complements the Scenic Byway corridor at the bottom of the stream segment.

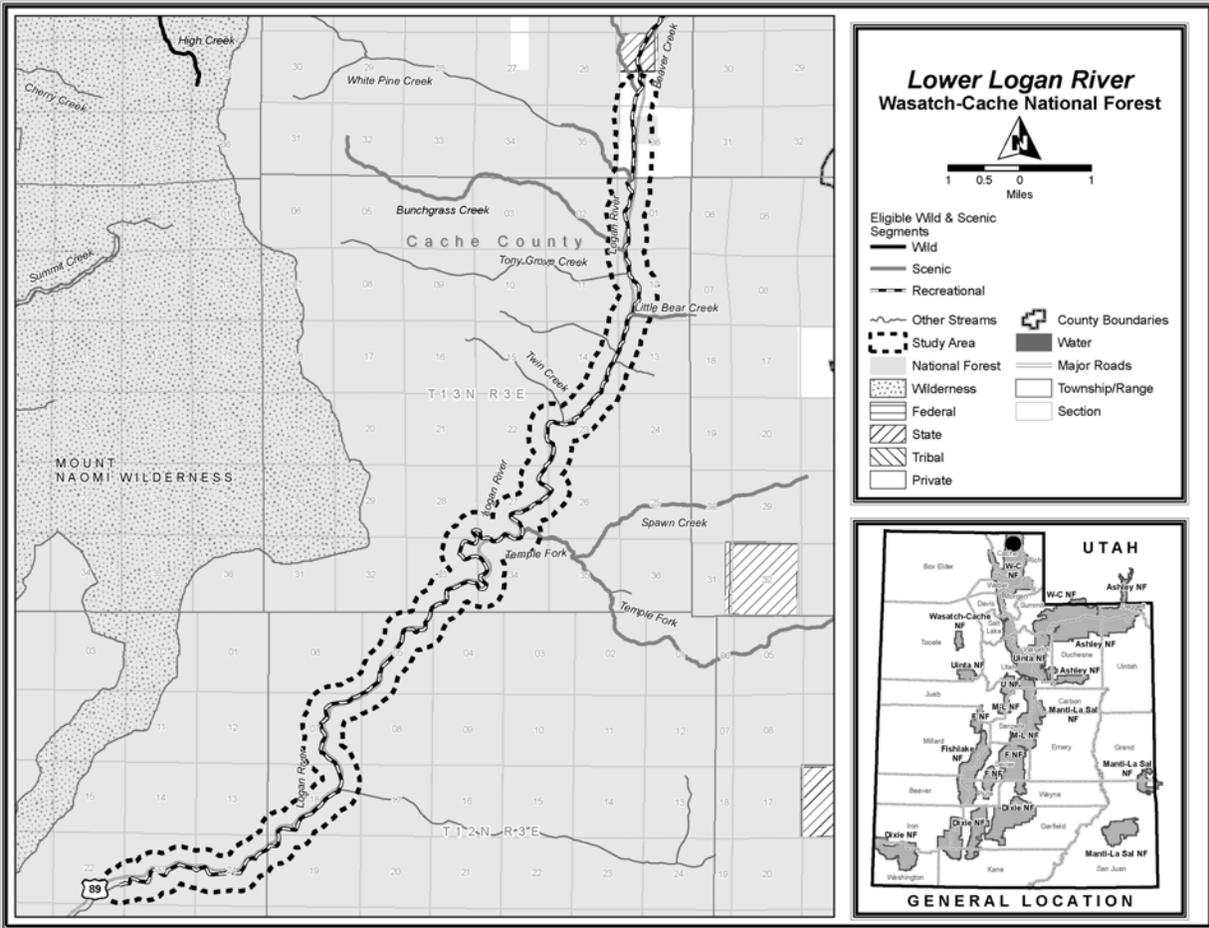
(5) Contribution to river system or basin integrity.

This segment of the Logan River—when combined with White Pine Creek, Spawn Creek, Bunchgrass Creek, Temple Fork, Little Bear Creek, and the downstream portion of the Logan River segments—contributes to the Logan River basin's integrity.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

Local groups such as the Cache County Anglers, Bear River Watershed Council, the Bridgerland Backcountry Horsemen, and the Bridgerland Audubon Society have demonstrated and expressed interest in continuing their projects related to habitat restoration and protection as well as trash pick up.

Logan River Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Logan River

River Mileage:

Studied: 18.9 miles, from confluence with Beaver Creek to bridge at Malibu-Guinavah Campground

Eligible: same

Location:

Logan River	Wasatch-Cache National Forest, Logan Ranger District, Cache County, Utah		Congressional District 1	
	Start	End	Classification	Miles
Segment 1	SE ¼ SW ¼ Sect. 25, T 14 N, R 3 E, SLM	NW ¼ SW ¼ Sect. 23, T 12 N, R 2 E, SLM	Recreational	18.9

Physical Description of River Segment:

Elevations range from 6,400 feet at Beaver Creek to 5,100 feet at the campground. Along this segment the stream runs through an open and rolling setting in the uppermost 8 miles above the Temple Fork confluence to a classic canyon landscape in the lower section. The geological features most apparent along the course of the river are some of the karst features, notably Ricks Springs Cave, Logan Cave, and Wind Cave. Other caves also exist, and undoubtedly many more remain to be discovered. Ordovician quartzite strata near Right Fork contain unusually well formed and preserved fucoidal structures (fossilized casts of ancient worm borrows which appear like seaweed mats frozen in the stone). At the west end of the corridor, lake terrace gravel deposits of prehistoric Lake Bonneville perch above the river bed and mark the upper level of a lake with enormous significance in the Great Basin. Well-defined faults and shear zones cut and displace the sedimentary strata in several road cuts along the corridor, some of which also show geologically interesting small-scale folding of the strata. Uplands are dominated by Douglas fir on cooler north-facing slopes with maple, sagebrush, mountain mahogany, and juniper communities on south-facing and other drier sites. Riparian vegetation is characterized by birch/dogwood, box elder, and yellow willow communities. Crack willow, an introduced species, is a common component of some of the camping and picnicking areas in the lower sections of the segment. One federally listed threatened plant, Primula maguirei (Maguire primrose), occurs along this segment in more mesic limestone cliffs. In addition, several Intermountain Region sensitive species, including Viola frank smithii (franksmith violet), Erigeron cronquistii, and Draba maguirei, occur on the dolomitic limestone outcrops.

ELIGIBILITY

Name and Date of Eligibility Document: Revised Forest Plan, Wasatch-Cache National Forest 2003, Appendix VIII, USDA Forest Service; Draft Inventory of Rivers on Wasatch-Cache National Forest, Eligible for Inclusion in the national Wild and Scenic Rivers System 1999.

Determination of Free-flowing Condition - Although Highway 89 runs the length of this segment and has some effects on its free-flow, these are not substantial. In general the ecological functions of the river are natural along the segment. Over the last several decades construction efforts and active management have intended that natural appearance and functions might be preserved. The segment is free-flowing.

Summary of Outstandingly Remarkable Values (ORV):

Fish - The Bonneville cutthroat trout fishery within this tributary to the upper Logan River is a significant population, because of its size, diversity, distribution within several suitable habitats, self-sustaining natural reproduction and the size and vigor of the fish. The importance of this meta-population of Bonneville cutthroat trout is an outstandingly remarkable value. The range of Bonneville cutthroat includes most of the eastern Great Basin. This portion of the main Logan River along with several tributaries are occupied with a meta-population (that is a genetically interactive larger population of the species) that, if protected, can insure the preservation of the species, which is currently under some considerable pressure to survive due to pressures of exotic species introduction, fishing pressure, and habitat fragmentation, destruction, and/or degradation. The Logan River population of these fish is probably the largest and most diverse subpopulation with habitat connectivity that remains. Fish abundance for the Bonneville cutthroat is high, and the population is self-sustaining through natural spawning in both the main Logan River and these tributaries. This river system is of critical importance to Bonneville cutthroat because of its lack of migratory obstructions, the large number of connected populations, and the overall strength and diversity of the population.

Scenery - Scenery along the segment has been recognized as outstanding by the creation of the National Scenic Byway for Highway 89. This scenery is diverse and variable, a scenic smorgasbord of this part of the Wasatch Range.

Geology - This segment meets the criteria for outstandingly remarkable geological value due to the diversity and abundance of features which together form an area with high educational and scientific interest. In broad scale, the entire river corridor presents an unparalleled cross section of the geologic structure and middle and lower Paleozoic carbonate stratigraphy of the west flank of the Bear River Range. A myriad of smaller geologic features fall within the confines of the corridor which contains the geologically-interesting meanders of the Logan River.

Ecology - Ecologically, this segment contains a wide variety of plant, animal, and aquatic communities that are functioning in a relatively healthy manner, especially when compared to the proximity to local urban populations. The use of the corridor as a setting for education for local schools and the university community has been appreciated for many decades. Due to the location of the river in close proximity to Utah State University, more is known and written about the local natural setting than for most areas of the western U.S. The ecological setting and its value to local and broader communities can be considered outstanding.

Recreation - The recreation opportunities in this segment are about as broad spectrum as are provided in any similar setting northern Utah. If one were to look for a typical northern Utah outdoor recreation, the Logan River area might be a good model for the type. For its variety, length of season, quality, and appropriate scale of facilities, the recreation experience along the Logan River is outstanding.

CLASSIFICATION

Basis for the Classification of River – Recreational

Since this segment of the Logan River is free-flowing and has outstandingly remarkable values, the segment is eligible for the National Wild and Scenic Rivers System. The stream can be classified as a recreational river because the stream and stream corridor is or has:

- This segment is free of impoundment.
- Has some development and substantial evidence of human activity.
- Grazing is present.
- There is evidence of past logging or ongoing timber harvest in canyon, yet forest appears natural from the river bank.
- Readily accessible by road.
- Parallel road exists along stream with bridge crossing.

SUITABILITY REPORT

Landownership and Land Uses – This river is located on the Logan Ranger District in Cache County, Utah. Private inholdings are located along the Logan River just downstream of Beaver Creek.

River Mile	Ownership	Acres
0-.5	Private Land	178.1
0.5-.7	Wasatch-Cache National Forest	60.8
0.7-1.7	Private Land	178.1
1.7-14.7	Wasatch-Cache National Forest	4318.2
14.7-14.9	Private Land	6.3
14.9-18.9	Wasatch-Cache National Forest	1268.8
	Total:	6010.3 acres

Readers Note: The study area boundaries displayed in Appendix A, Suitability Evaluation Reports, do not represent actual Wild and Scenic River boundaries, but the area of interest for eligible river segments. It should be noted that of the eligible rivers studied, 14 of the 86 river segments appear to include portions

of private land, at the end of segments near the National Forest boundary. These typically short river stretches (1/4 to 4 miles long) were included in the eligibility study as part of the river segment length because they brought the river segment to a logical terminus at a confluence with a larger stream, also contained the ORV's of the National Forest portion of the segment, or National Forest land was located within ¼ mile of these segments. These lengths are also included in the tables found in this suitability study. The magnitude of this effect is small, representing approximately 22 miles total over 14 segments, or less than 3 percent of the total mileage in the study. Prior to finalization of this EIS, the actual miles of river segments recommended for designation will be calculated and the maps redrawn to exclude the private lands outside of the National Forest ownership to avoid the appearance of including these private lands in recommended river segments.

Private lands are zoned Forest Recreation. The purpose of the forest-recreation zone is to permit the proper use of the forest areas of the county for grazing, forestry, mining, recreation and other activities to the extent compatible with the protection of the natural and scenic resources of the forests for the benefit of present and future generations (Ord. 2004-10, 8-10-2004).

Mineral and Energy Resource Activities – There are no known locatable mineral deposits of economic value within the area of this eligible Logan River segment and there are no known valuable deposits known on patented mining claims that now appear as private land in-holdings on the forest. Presently, there are no significant mining activities on the Forest. Also, this area is not a high oil and gas potential area.

Water Resources Development – There are no dams, diversions, or other channel modifications on this segment. Although some of the several stream-crossing structures may impede peak stream flows, there are no full-scale impoundments in this reach above the inundated area above the Third Dam, which is downstream from the end of this segment at the campground bridge. No significant diversions have been made that could have any noticeable effects on stream flows or in-stream water uses; however, there are probably several minor diversions for adjacent domestic and irrigation uses. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – Parallel access is provided by State Highway 89, a designated National Scenic Byway. This highway is used by through travelers driving between the Wasatch Front and Idaho or Wyoming, or by recreation users who are interested in destinations along the river and highway. The Forest Service provides many developed campgrounds and picnic sites in the lower portion of the segment; upstream the most notable is the Tony Grove recreation complex, with snowmobile parking and other facilities.

There are 11 Recreation Residences Areas administered by the Forest Service under special use permit along this segment of stream. Bridges across the river access each area. Some of the 93 recreational residences are within the floodplain of the Logan River. Riparian Management Objectives (RMO) have been developed to manage recreational residences within riparian corridors.

Grazing Activities – This segment is within the valley bottom portion of the Franklin Basin Cattle Allotment and the Logan Canyon Cattle Allotment. The river corridor itself is used by permitted livestock for short periods while trailing or herding. The grazing allotment permittee must operate in compliance with an Allotment Management Plan (AMP) and Annual Operating Instructions (AOI) administered by the Wasatch-Cache National Forest.

Recreation Activities –Recreation pressure in the corridor, both dispersed and developed, can be considered moderate to heavy depending on season and day of the week. Access to the river for fishing and tubing is very easy. Two geological markers are present: one discusses ancient Lake Bonneville and the other talks about deposits of fucoidal quartzite. Other interesting viewing sites include Ricks Springs. Logan Wind Cave is also a destination for hikers. Rock climbing is very popular along the segment. Below Ricks Springs some kayaking occurs depending on the water level.

Other Resource Activities –There are no current or planned Forest projects planned on this segment. The Utah State University Field Station is located in the upper portion of the segment. There are no commercial fishing, hunting, or recreation activities on the segment.

Special Designations – The Logan River is a fish bearing stream and is managed by the Wasatch-Cache National Forest as a Category 1 Fish-Bearing Stream Riparian Habitat Conservation Areas (RHCA). A RHCA includes traditional riparian corridors, wetlands, intermittent streams, and other areas that help maintain the integrity of aquatic ecosystems by (1) influencing the delivery of coarse sediment, organic matter, and woody debris to streams, (2) providing root strength for channel stability, (3) shading the stream, and (4) protecting water quality. This designation still allows for a full range of activities but it emphasizes the achievement of riparian management objectives that are identified on a site-by-site basis. These objectives should include riparian vegetation and instream habitat conditions consist of the stream and the area on either side of the stream extending from the edges of the active stream channel to 300 feet slope distance (600 feet, including both sides of the stream channel).

This segment of the Logan River is managed by the State of Utah as a Blue Ribbon fishery. Blue Ribbon Fishery waters are to be managed principally by protecting their watersheds, maintaining and restoring habitat, and implementing appropriate angling regulations. Waters classified as a Blue Ribbon Fishery are given protective legal status through the Division of Water Quality and the Division of Wildlife Resources. The UDWR is currently developing management strategies and regulations that would implement and support the Blue Ribbon Fishery program.

This entire stream segment flows within the Logan Canyon Scenic Byway, is a National Scenic Byway. This program is a collaborative effort established to help recognize, preserve and enhance selected roads throughout the United States.

Approximately 10.4 miles of this stream corridor a within a Wasatch-Cache National Forest inventoried roadless area. These are areas that do not have developed and maintained roads, and that are substantially natural.

Approximately 2.0 miles of stream fall within Drinking Water Source Protection Zones; one is a small section of the Logan River that flows through Red Banks campground and the other section flows from the confluence with Right Fork downstream to Card Picnic Area.

Land management direction for land within the stream corridor:

Management Prescription 3.1A Aquatic Habitat Emphasis: consists of the stream and adjacent riparian areas (or 300 feet either side of the stream whichever is greater). Because of the large number of existing facilities (roads, developed recreation sites, trails), already located within areas mapped as 3.1A, and because of their relatively high value and small proportion of the landscape, development outside already developed areas within this prescription is to be avoided. Protect or restore proper hydrologic functioning.

- (S3.1A-1) New recreation facility development is not allowed.
- (S3.1A-2) Cutting fuelwood larger than 5 inches in diameter is not allowed.
- (G3.1A-1) Timber harvest, vegetation/fuel treatments, prescribed fire, and wildland fire use are allowed only for the purposes of maintaining, improving or restoring riparian and aquatic habitat to desired conditions or to protect property in the wildland urban interface.
- (G3.1A-2) Livestock grazing is allowed with the utilization standard for Riparian Class 1, and to meet site-specifically developed desired conditions.
- (G3.1A-3) Road construction is not allowed except for road crossings.
- (G3.1A-4) New trail construction is allowed if consistent with site-specifically defined riparian management objectives.

Land management direction for Wasatch-Cache National Forest land within the ½ mile wide stream corridor:

Management Prescription 2.5 Scenic Byways: Manage Scenic Byways to protect and maintain their outstanding scenic quality. Scenic Byway Corridor Management Plans may be developed for designated Byways to further define desired conditions and tailor management direction.

- (G2.5-1) Timber harvest, vegetation/fuel treatments, prescribed fire and wildland fire use are allowed when these activities are necessary to maintain or enhance the scenic setting for the long term.
- (G2.5-2) Grazing is allowed and managed for compatibility with other elements of Scenic Byway Corridor Management Plans.
- (G2.5-3) Road building, new recreation development, and new trail construction are allowed for purposes of enhancing use and enjoyment of the scenic byway corridor, while maintaining or enhancing the scenic setting.

Socio-Economic Environment – The Logan River supplies hydroelectric power, culinary, and agricultural water to the Cache Valley. The Logan River has multiple dams below the eligible segments. The First Dam (upstream from the town of Logan) is one of three hydroelectric dams built to generate electricity for Logan City. Unlike the other two, First Dam was not built by Logan City but by Utah State University. About two miles further up the canyon is Second Dam, site of the Logan City Power Plant and the Morgan Smith Turbine. Logan City has been using Second Dam for power since the beginning of the 20th century. The Third Dam is used for storage of spring runoff until it is needed in the drier months of summer.

The local population of Cache Valley (estimated population of 98,622 in 2006) relies primarily on the university, agriculture, some light industry, and to increasing extent tourism and the services that support it. There is a high rate of growth expected in Cache Valley. As the population grows, a change in landscape is occurring, and agricultural and open lands are being converted for urban, commercial and industrial development. Off highway vehicle (OHV) use, hiking, fishing, biking, rock climbing, whitewater boating, skiing and snowmobiling are popular recreation activities for locals and visitors in Logan Canyon.

Current Administration and Funding Needs if Designated – The current administering agencies for lands along this segment are the Wasatch-Cache National Forest, the State of Utah School and Institutional Trust Lands Administration (SITLA), and Cache County. The National Forest System lands along the segment are managed by the Wasatch-Cache National Forest, through the use of the Revised Forest Plan, Wasatch Cache-National Forest, 2003. The State land along this segment is managed by the SITLA, where the general land management objective for school and institutional trust lands is to

optimize and maximize trust land uses for support of the beneficiaries over time through development of surface and mineral resources and real estate development. The private lands within this segment are subject to Cache County Countywide Comprehensive Plan, the primary land use ordinance for private land. The Comprehensive Plan is a planning tool for making policy decisions. The Land Use Ordinance is the instrument by which these policies are implemented.

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 and determination of the degree to which the agency proposes or a State or its political subdivisions might participate in the shared preservation and administration of the river, including the costs thereof, should it be proposed for inclusion in the System.

Eligible rivers are protected and managed by the Forest Service according to standards included in Appendix VIII of the Revised Forest Plan until designated by Congress, or otherwise directed by other legal means. The Wasatch-Cache National Forest Revised Plan provides direction to implement Management Prescriptions for stream segments that are suitable for Wild and Scenic River designation by Congress. Once designated, the Wasatch-Cache National Forest will apply Management Prescription numbers to the designated Wild (2.1), Scenic (2.2), and Recreational (2.3) Rivers on Forest, which include land corridors that extend 1/4 mile from each bank.

The State of Utah has not shown interest or disinterest in having the river deemed wild and scenic or in sharing the costs.

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

The private and SITLA lands at the beginning of this segment could be developed in the future. This development would be directed by the County Comprehensive Plan and zoning ordinances for the Forest Recreation (FR 40) zone, which allows for one seasonal cabin per forty acres. Regulations for sensitive areas, steep slopes, jurisdictional wetlands, natural waterways and areas lying within the floodplain, and areas of wildlife habitat are declared under Title 17.18.020. Title 17.18.060 specifies setbacks for development from natural waterways of 50 ft. for dwellings, 100 ft. for septic systems, and up to 100' for dwellings if within the FEMA mapped floodplain.

(3) Support or opposition to designation.

One public comment to the Draft Inventory of Rivers on Wasatch-Cache National Forest, Eligible for Inclusion in the national Wild and Scenic Rivers System, USDA Forest Service, 1999, from the State of Utah Division of Wildlife provided clarifying information for some of the fish data used in the Draft Inventory. Many comments were in support of the Logan River for listing as eligible for inclusion in the national Wild and Scenic Rivers system. Comments from Logan City expressed concerns with implications of designation; therefore the original length of the stream segment was shortened.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Designation of this segment of the Logan River complements the State's Blue Ribbon Fishery designation for this river and current Forest management. Designation may conflict with the density of subdivision development on private and SITLA land. Scenic classification allows the presence of small communities or dispersed dwellings or farm structures but not more extensive residential or commercial developments. The designation also complements the Scenic Byway corridor at the bottom of the stream segment.

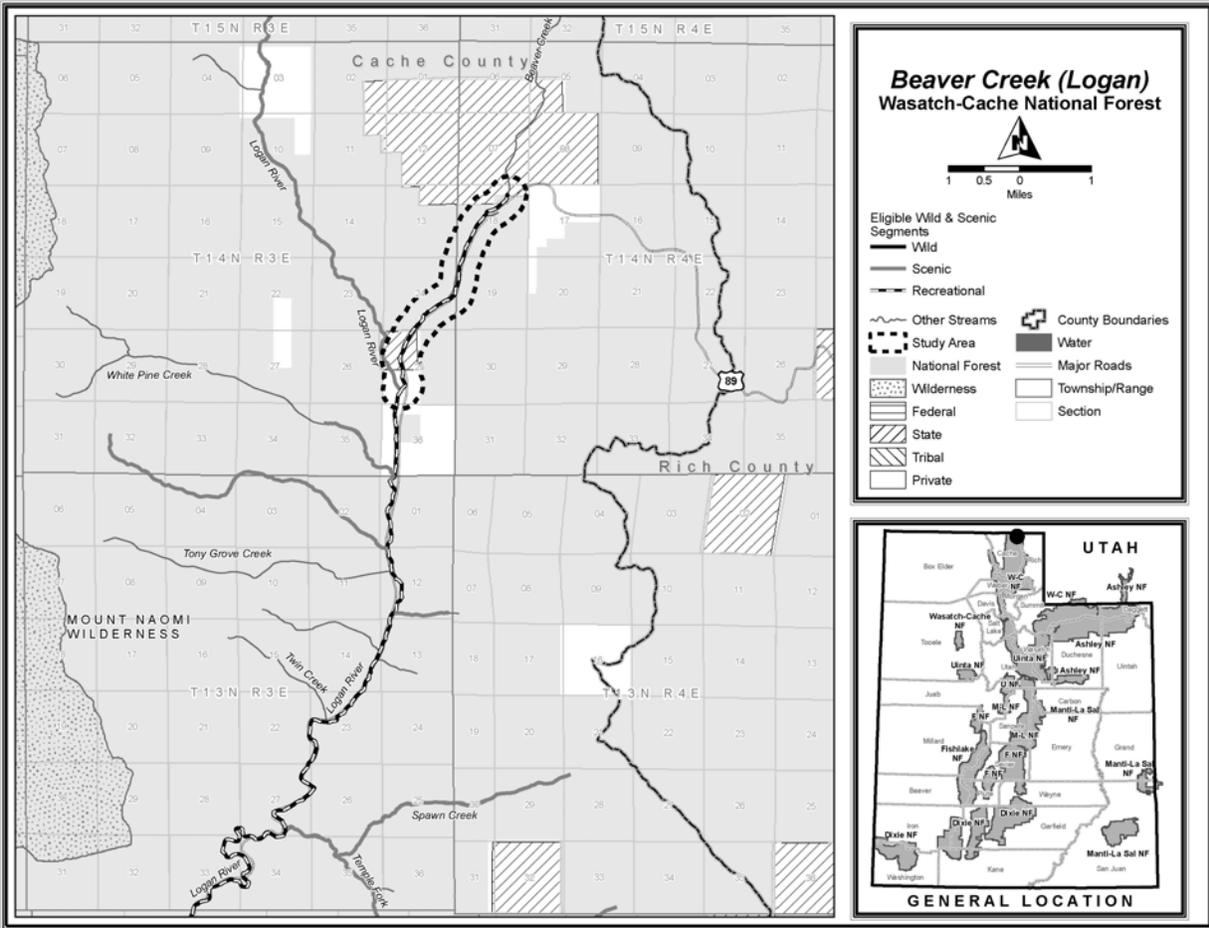
(5) Contribution to river system or basin integrity.

The scenic segments of White Pine Creek, Bunchgrass Creek, Temple Fork, Spawn Creek, Little Bear Creek, the upper Logan River when combined with the lower Logan River contributes to the basins integrity.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

Local groups such as the Cache County Anglers, Bear River Watershed Council, Bridgerland Backcountry Horsemen, and Bridgerland Audubon Society have demonstrated and expressed interest in continuing their projects related to habitat restoration and protection as well as trash pick up.

Beaver Creek Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Beaver Creek

River Mileage:

Studied: 3.4 miles, south boundary of State land to confluence with Logan River

Eligible: Same

Location:

Beaver Creek	Wasatch-Cache National Forest, Logan Ranger District, Cache County, Utah		Congressional District 1	
	Start	End	Classification	Miles
Segment 1	NW ¼ NE ¼ Sect. 18, T 1 N, R 14 E, SLM	SE ¼ SW ¼ Sect. 25, T 14 N, R 3 E, SLM	Recreational	3.4

Physical Description of River Segment:

This stream is a tributary to the upper Logan River. Vegetation in uplands of this drainage includes sagebrush, lodgepole pine, subalpine fir, aspen, Douglas fir and some limber pine. Riparian communities are typically narrow and include willows, dogwood, aspen and conifers. Several beaver ponds lie within these corridors, and the lower reaches of some provide big game winter range (moose, elk and deer).

ELIGIBILITY

Name and Date of Eligibility Document: Revised Forest Plan 2003, Wasatch-Cache National Forest, Appendix VIII, USDA Forest Service; Draft Inventory of Rivers on Wasatch-Cache National Forest, Eligible for Inclusion in the national Wild and Scenic Rivers System 1999, USDA Forest Service.

Determination of Free-flowing Condition: The segment is free from channel modifications and structures. The natural stream flow of the river is unimpaired. The segment is free-flowing.

Summary of Outstandingly Remarkable Values (ORV):

Fish - Fish species include brook trout, sculpin and Bonneville cutthroat trout (a sensitive species). While all the fish species in these tributaries can add to visitor enjoyment or the overall wildlife diversity in the upper Logan River drainage, the Bonneville cutthroat trout population is of special interest and value. The range of Bonneville cutthroat includes most of the eastern Great Basin. These several streams in addition to the upper portions of the main Logan River are occupied with a meta-population (that is a genetically interactive larger population of the species) that, if protected, can insure the preservation of the species, which is currently under some considerable pressure to survive due to pressures of exotic species introduction, fishing pressure, and habitat fragmentation, destruction, and/or degradation. The upper Logan River population of these fish is probably the largest and most diverse subpopulation with habitat connectivity that remains. Fish abundance for the Bonneville cutthroat is high, and the population is self-sustaining through natural spawning in both the main Logan River and these tributaries. This river system is of critical importance to Bonneville cutthroat because of its lack of migratory obstructions, the large number of connected populations, and the overall strength and diversity of the population. The importance of this meta-population of Bonneville cutthroat trout is an outstandingly remarkable value.

CLASSIFICATION**Basis for the Classification of River – Recreational**

This stream is listed is eligible for the National Wild and Scenic Rivers System and are free-flowing and for its remarkable fish value. This segment is classified as a recreational stream because:

- This stream is free of impoundment.
- Some developments exist. Substantial evidence of human activity.
- Small communities or dispersed dwellings or farm structures.
- The presence of grazing, hay production or row crops is acceptable.
- Little or no evidence of past timber harvest and no ongoing timber harvests.
- Readily accessible by road or railroad.
- The existence of parallel roads or railroads on one or both banks as well as bridge crossings and other river access points is acceptable.

SUITABILITY REPORT

Landownership and Land Uses – This segment is located on the Logan Ranger District, and is a tributary stream to the upper Logan River. This stream segment begins at the southern State land/Forest boundary and flows through mostly National Forest land, until the stream flows through State and private land near the end of the segment.

River Mile	Ownership	Acres
0-2.5	Wasatch-Cache National Forest	793
2.5-3.1	Utah State Land	251
3.1-3.4	Private Land	167
	Total:	1211 acres

Readers Note: The study area boundaries displayed in Appendix A, Suitability Evaluation Reports, do not represent actual Wild and Scenic River boundaries, but the area of interest for eligible river segments. It should be noted that of the eligible rivers studied, 14 of the 86 river segments appear to include portions of private land, at the end of segments near the National Forest boundary. These typically short river stretches (1/4 to 4 miles long) were included in the eligibility study as part of the river segment length because they brought the river segment to a logical terminus at a confluence with a larger stream, also contained the ORV's of the National Forest portion of the segment, or National Forest land was located within ¼ mile of these segments. These lengths are also included in the tables found in this suitability study. The magnitude of this effect is small, representing approximately 22 miles total over 14 segments, or less than 3 percent of the total mileage in the study. Prior to finalization of this EIS, the actual miles of river segments recommended for designation will be calculated and the maps redrawn to exclude the private lands outside of the National Forest ownership to avoid the appearance of including these private lands in recommended river segments.

These areas are zoned Forest Recreation for the purpose of the forest-recreation zone is to permit the proper use of the forest areas of the county for grazing, forestry, mining, recreation and other activities to the extent compatible with the protection of the natural and scenic resources of the forests for the benefit of present and future generations (Ord. 2004-10, 8-10-2004).

Mineral and Energy Resource Activities – There are no known locatable mineral deposits of economic value within the area of the eligible Beaver Creek segment and there are no known valuable deposits known on patented mining claims that now appear as private land in-holdings on the forest. Presently, there are no significant mining activities on the Forest. Also, this area is not a high oil and gas potential area.

Water Resources Development – There are no dams or diversions on these segments. In some places U.S. Highway 89, Forest Roads, and other old roads affect the stream channels, flood plains, and water quality by crossing the segments or running parallel to them.

Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – This segment is adjacent to the Logan Canyon National Scenic Byway, U.S. Highway 89. There is one bridge across the stream (Highway 89) and one culvert, which does not constrict flows and passes fish.

Recreation Activities – This stream sees some light fishing activity. Most of the recreational visits are from viewing the area from the Scenic Byway.

Grazing Activities - Sheep and cattle graze most of the areas within which these rivers flow on the Beaver Mountain Sheep Allotment and the Franklin Basin Cattle Allotment. The river corridor itself is used by permitted livestock for short periods while trailing or herding and occasionally by recreation

stock. The grazing allotment permittee must operate in compliance with an Allotment Management Plan (AMP) and Annual Operating Instructions (AOI) administered by the Wasatch-Cache National Forest.

Other Resource Activities – There are no current or planned Wasatch-Cache National Forest projects in this stream corridor.

Special Designations – Beaver Creek is a fish bearing stream and is managed by the Wasatch-Cache National Forest as a Category 1 Fish-Bearing Stream Riparian Habitat Conservation Areas (RHCA). A RHCA includes traditional riparian corridors, wetlands, intermittent streams, and other areas that help maintain the integrity of aquatic ecosystems by (1) influencing the delivery of coarse sediment, organic matter, and woody debris to streams, (2) providing root strength for channel stability, (3) shading the stream, and (4) protecting water quality. This designation still allows for a full range of activities but it emphasizes the achievement of riparian management objectives that are identified on a site-by-site basis. These objectives should include riparian vegetation and instream habitat conditions consist of the stream and the area on either side of the stream extending from the edges of the active stream channel to 300 feet slope distance (600 feet, including both sides of the stream channel).

The area adjacent to the stream segment on the west side is recognized by the State of Utah as a Transient Drinking Water Source Protection Zone for the Beaver Mountain Ski Area. This designation defines the area where contaminants are limited from the surface and subsurface areas surrounding a surface source of drinking water supplying a public water system (PWS), over which or through which contaminants are reasonably likely to move toward and reach the source. Surface water means all water which is open to the atmosphere and subject to surface runoff, and subsurface water relates to any well, spring, tunnel, adit, or other underground opening from or through which ground-water flows or is pumped from subsurface water-bearing formations.

This segment is adjacent to the Logan Canyon National Scenic Byway, U.S. Highway 89. The National Scenic Byways Program is a collaborative effort established to help recognize, preserve and enhance selected roads throughout the United States.

Approximately 1.8 miles of this stream corridor are within a Wasatch-Cache National Forest inventoried roadless area. These are areas that do not have developed and maintained roads, and that are substantially natural.

Land management direction for Wasatch-Cache National Forest land within the stream corridor:

Management Prescription 3.1A Aquatic Habitat Emphasis consists of the stream and adjacent riparian areas (or 300 feet either side of the stream whichever is greater). Because of the large number of existing facilities (roads, developed recreation sites, trails), already located within areas mapped as 3.1A, and because of their relatively high value and small proportion of the landscape, development outside already developed areas within this prescription is to be avoided. Protect or restore proper hydrologic functioning.

(S3.1A-1) New recreation facility development is not allowed.

(S3.1A-2) Cutting fuelwood larger than 5 inches in diameter is not allowed.

(G3.1A-1) Timber harvest, vegetation/fuel treatments, prescribed fire, and wildland fire use are allowed only for the purposes of maintaining, improving or restoring riparian and aquatic habitat to desired conditions or to protect property in the wildland urban interface.

(G3.1A-2) Livestock grazing is allowed with the utilization standard for Riparian Class 1, and to meet site-specifically developed desired conditions.

(G3.1A-3) Road construction is not allowed except for road crossings.

(G3.1A-4) New trail construction is allowed if consistent with sitespecifically defined riparian management objectives.

Management Prescription 3.1W consists of uplands identified as important watersheds.

(S3.1W) Timber harvest, road construction and new recreation facility development are not allowed.

(G3.1W-1) Vegetation/fuel treatment, prescribed fire, and wildland fire use are allowed for the purposes of maintaining, improving or restoring watersheds to desired conditions, and to protect property in the wildland urban interface.

(G3.1W-2) Livestock grazing is allowed on open allotments to meet site specifically defined desired conditions.

(G3.1W-3) New trail construction is allowed with consideration of existing road/trail densities.

Land management direction for Wasatch-Cache National Forest land within the ½ mile wide stream corridor:

Management Prescription 2.5 Scenic Byways: Manage Scenic Byways to protect and maintain their outstanding scenic quality. Scenic Byway Corridor Management Plans may be developed for designated Byways to further define desired conditions and or management direction.

(G2.5-1) Timber harvest, vegetation/fuel treatments, prescribed fire and wildland fire use are allowed when these activities are necessary to maintain or enhance the scenic setting for the long term.

(G2.5-2) Grazing is allowed and managed for compatibility with other elements of Scenic Byway Corridor Management Plans.

(G2.5-3) Road building, new recreation development, and new trail construction are allowed for purposes of enhancing use and enjoyment of the scenic byway corridor, while maintaining or enhancing the scenic setting.

Socio-Economic Environment – The Logan River and its tributaries supply agricultural water to the Cache Valley. The Logan River has multiple dams below the eligible segments. The First Dam (upstream from the town of Logan) is one of three hydroelectric dams built to generate electricity for Logan City. Unlike the other two, First Dam was not built by Logan City but by Utah State University. About two miles further up the canyon is Second Dam, site of the Logan City Power Plant and the Morgan Smith Turbine. Logan City has been using Second Dam for power since the beginning of the 20th century. The Third Dam is used for storage of spring runoff until it is needed in the drier months of summer.

The local population of Cache Valley (estimated population of 98,622 in 2006) relies primarily on the university, agriculture, some light industry, and to an increasing extent, tourism and the services that support it. There is a high rate of growth expected in Cache Valley. As the population grows, a change in landscape is occurring, and agricultural and open lands are being converted for urban, commercial and industrial development. Off highway vehicle (OHV) use, hiking, fishing, biking, rock climbing, whitewater boating, skiing and snowmobiling are also popular recreation activities for locals and visitors in Logan Canyon.

Current Administration and Funding Needs if Designated – The current administering agencies for lands along this segment are the Wasatch-Cache National Forest and Cache County. The National Forest System lands along the segment are managed under the direction of the Revised Forest Plan, Wasatch Cache-National Forest, 2003. The private lands within this segment are subject to Cache County

Countywide Comprehensive Plan, the primary land use ordinance for private land. The Comprehensive Plan is a planning tool for making policy decisions. The Land Use Ordinance is the instrument by which these policies are implemented.

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 and determination of the degree to which the agency proposes or a State or its political subdivisions might participate in the shared preservation and administration of the river, including the costs thereof, should it be proposed for inclusion in the System.

Eligible rivers are protected and managed by the Forest Service according to standards included in Appendix VIII of the Revised Forest Plan until designated by Congress, or otherwise directed by other legal means. The Wasatch-Cache National Forest Revised Plan provides direction to implement Management Prescriptions for stream segments that are suitable for Wild and Scenic River designation by Congress. Once designated, the Wasatch-Cache National Forest will apply Management Prescription numbers to the designated Wild (2.1), Scenic (2.2), and Recreational (2.3) Rivers on Forest, which include land corridors that extend 1/4 mile from each bank.

The State of Utah has not demonstrated interest or disinterest in having the river deemed wild and scenic, or in sharing of the costs.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands.

The private and SITLA land could be developed in the future. This development would be directed by the County Comprehensive Plan and zoning ordinances for the Forest Recreation (FR 40) zone; which allows for one seasonal cabin per forty acres. Regulations for sensitive areas: steep slopes, jurisdictional wetlands, natural waterways and areas lying within the floodplain, and areas of wildlife habitat are declared under Title 17.18.020. Title 17.18.060 specifies setbacks for development from natural waterways of 50 ft. for dwellings, 100 ft. for septic systems, and up to 100' for dwellings if within the FEMA mapped floodplain.

(3) Support or opposition to designation.

Public comments to the Draft Inventory of Rivers on Wasatch-Cache National Forest, Eligible for Inclusion in the national Wild and Scenic Rivers System, USDA Forest Service, 1999 were in favor and in opposition to listing of Beaver Creek as a recreational river for its fisheries values. One public comment from the State of Utah Division of Wildlife provided clarifying information for some of the fish data used in the Draft inventory.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Designation of this segment of Beaver Creek complements current Forest management for Scenic Byways, aquatic habitat and watershed protection, and roadless areas. Designation may conflict with the

density of subdivision development on private and SITLA land. The recreational classification allows for more extensive residential or commercial developments than are currently present in this stream corridor.

(5) Contribution to river system or basin integrity.

The segments of White Pine Creek, Bunchgrass Creek, Temple Fork, Spawn Creek, Little Bear Creek, the Logan River combined contributes to the Logan River basin integrity.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment. Local groups such as the local Trout Unlimited chapter, the Cache County Anglers and the Bridgerland Backcountry Horsemen, Bear River Watershed Coalition and the Bridgerland Audubon Society have demonstrated and expressed interest in continuing their projects related to habitat restoration and protection and trash pick up.

The Beaver Creek Project, in cooperation with UDWR, Cache Anglers Chapter, and Wasatch-Cache National Forest and sponsored by Trout Unlimited emphasizes recreational fisheries and Bonneville cutthroat trout restoration through the Embrace-A-Stream Program.