TABLE 3.2-1

SELECTED BASIN, CLIMATIC, AND STREAMFLOW CHARACTERISTICS
Western Uinta Basin EIS

		Basin and Climatic Characteristics					Discharge (cubic feet per second)						
Station Number	Station Name	Contributing drainage area (square miles)	Mean basin elevation (feet)	Mean annual precipitation (inches)	Main-channel slope (feet per mile)	Forested Area (percent)	Period Covered	Annual Mean	Highest Annual Mean	Lowest Annual Mean	Highest Daily Mean	Lowest Daily Mean	Annual Runoff (acre ft.)
101486	Diamond Fork below Monks Hollow*	110	---	---	---	---	1988	138	---	---	604	10	100,530
900085	Willow Creek near mouth	44	---	---	---	---	1985	14.5	---	---	174	0	10,498
902691	Strawberry River above Co-op Creek	---	---	---	---	---	1991	29	---	---	283	2.8	21,156
9275500	West Fork Duchesne River near Hanna**	61.6	8,840	26.6	106	49	1987-1992	18.3	23.3	15.1	172	5.7	13,250
9277500	Duchesne River near Tabiona**	356	8,770	25.6	93	59	1919-1992	195	354	68.9	2,490	21	141,500
9279150	Duchesne River above Knight diversion**	623	---	---	---	---	1971-1992	331	580	118	4,700	59	240,000
9280400	Hobble Creek at Daniel's Summit	2.89	9,060	29.3	446	88	1983	5.46	---	---	---	---	3,950
9285000	Strawberry River near Soldier Springs**	213	---	---	---	---	1986-1992	20.3	23.5	18.8	71	8.5	14,720
9285900	Strawberry River at Pinnacles**	372	---	---	---	---	1990-1992	40.6	43.9	35.1	90	19	29,380
9287000	Current Creek below Red Lodge Hollow**	50.1	8,880	27.8	219	72	1983	59.6	---	---	---	---	43,170
9288000	Current Creek near Fruitland**	140	8,360	24.6	82	65	1986-1992	36	58.5	26.1	151	12	26,120
9288150	West Fork Avintaquin Creek	56.1	8,310	22.1	146	56	1983	398	---	---	---	---	288,000
9288180	Strawberry River near Duchesne**	917	---	---	---	---	1984-1992	158	443	76.9	1,640	35	114,200
9288900	Sowers Creek near Duchesne	40.6	---	---	---	---	1983	11.4	---	---	---	---	---
9312000	North Fork White River near Soldier Summit	23.3	8,000	---	138	69	---	---	---	---	---	---	---
9312500	White River near Soldier Summit	53	8,360	26.3	94.4	53	---	---	---	---	---	---	---
9312600	White River below Tabbyune Creek	75.6	8,150	25.4	58.8	57	1968-1992	28.5	61.9	2.21	927	0	20,680
9312800	Willow Creek near Castle Gate	62.8	8,120	14	143	69	1983	31.8	---	---	---	---	23,010
10148200	Tie Fork near Soldier Summit	19.4	---	---	---	---	1964-1992	5.67	14.1	1.66	84	0.2	4,110
10150500	Spanish Fork at Castilla*	652	---	---	---	---	1934-1992	232	569	86.2	3,700	20	167,900

* Includes water imported from Uinta Basin from Strawberry Reservoir

** Affected by transmountain diversions

Source: USGS 1993

TABLE 3.2-2

STREAM TYPE CLASSIFICATION
FOR SELECTED STREAMS IN THE STUDY AREA*
Western Uinta Basin EIS

Stream	Slope Range	Sinuosity (1)	Width/Depth Ratio (2)	Channel Material	Channel Entrenchment/ Valley Confinement	Stream Flow Regime
Sowers Canyon	<0.02 to 0.039	high	mod - high	variable - gravel to silt/clay	single thread channel well confined	intermittent in part
Left Fork Indian Canyon	variable - 0.02 to 0.98	variable - from low to high	variable - from low to moderate -high	variable - sand to silt/clay	single thread channel well confined	perennial
Right Fork Indian Canyon	variable - 0.02 to 0.099		variable - from low to moderate -high	variable - sand to silt/clay	single thread channel well confined	intermittent in part
Avintaquin Creek	variable - <0.02 to 0.099	variable - from low to high	variable - from low to moderate -high	variable - cobble, gravel, and sand	single thread channel well confined to unconfined	intermittent in part
Reserve Canyon	variable - 0.04 to >0.1	low	low	variable - gravel to cobble	single thread channel well confined	intermittent in part
First Canyon	variable - 0.04 - >0.1	variable - from low to moderate	variable - from low to moderate	variable - gravel to cobble	single thread channel well to moderately confined	intermittent in part
Horse Ridge Canyon	variable - 0.04 - >0.1	low	low	variable - gravel to cobble	single thread channel well confined	perennial
Mill Hollow	variable - 0.04 - >0.1	variable - from low to moderate	variable - from low to moderate	variable - gravel to cobble	single thread channel well to moderately confined	intermittent in part
West Fork Avintaquin	0.02 - 0.039	moderate	moderate	variable - gravel to cobble	single thread channel moderately confined	intermittent in part
Timber Canyon	variable - <0.02 to 0.099	variable - from low to high	varibable - from low to moderate -high	variable - from boulders to silt/clay	single thread channel well confined to unconfined	perennial

* Descriptions are only for the part of the stream that occurs in the study area boundary, not the entire length of the stream.
(1) Low sinuosity - <1.2, moderate sinuosity - 1.2 to 1.4, high sinuosity - >1.4
(2) Width/Depth Ratio: low - <12, moderate - 12 to 26, moderate-high - >12

TABLE 3.2-3

DESCRIPTIONS OF SELECTED VALLEYS
Western Uinta Basin EIS

Valley Name	Stream Flow	Valley Form[1]	Valley Bottom Gradient[2]	Valley Bottom Width[3]	Valley Side Slopes[4]	Riparian Areas Present?
Gilsonite Draw	Intermittent	V-shape to Flat bottom	Low	Very narrow to broad	Moderate	No
Left Fork Antelope Canyon	Intermittent	Trough-like to Flat bottom	Low	Narrow to broad	Moderate	No
Chokecherry Canyon	Intermittent	Trough-like to Flat bottom	Low	Moderate to broad	Moderate	No
Right Fork Antelope Canyon	Intermittent	Flat bottom	Low	Narrow to broad	Moderate	No
Nutters Canyon	Intermittent	V-shaped to Flat bottom	High to Low	Narrow to broad	Moderate	No
Brundage Canyon	Intermittent	V-shape to Trough-like	High to Moderate	Narrow to broad	Moderate	No
Wire Fence Canyon	Intermittent	Trough-like to Flat bottom	Low	Moderate to broad	Steep	No
Sowers Canyon	Perennial	V-shaped to Flat bottom	Low to High	Narrow to broad	Moderate to Steep	Yes
Tabby Canyon	Intermittent	Trough-like	Moderate	Narrow to moderate	Moderate	No
Cottonwood Canyon	Intermittent	V-shape to Trough-like	Moderate to Low	Narrow to moderate	Moderate	No
Left Fork Indian Canyon	Perennial	Trough-like to Flat bottom	Very high to Very low	Narrow to broad	Low, Moderate, Steep	Yes
Right Fork Indian Canyon	Perennial	V-shape to Flat bottom	Moderate to Very low	Narrow to broad	Low to Steep	No
Left Fork Lake Canyon	Intermittent	Trough-like	Moderate to Low	Moderate	Moderate	No
Right Fork Lake Canyon	Intermittent	Trough-like to Flat bottom	Low	Moderate to broad	Moderate	No
Wilbur Canyon	Intermittent	Trough-like/V-shape	High to Moderate	Moderate to narrow	Moderate to Steep	No
Avintaquin Creek	Perennial	V-shape to Trough-like	Very Low to Moderate	Very narrow to moderate	Steep	Yes
Reserve Canyon	Intermittent	V-shape to Trough-like	Very High to Low	Very narrow to narrow	Moderate to Steep	Yes
First Canyon	Perennial	V-shape to Trough-like	Very High to Low	Very narrow to narrow	Steep	Yes
Horse Ridge Canyon	Intermittent	V-shape to Trough-like	Very High to Moderate	Very narrow to moderate	Steep	Yes
Mill Hollow	Intermittent	V-shape to Trough-like	Very High to Moderate	Moderate to very narrow	Moderate	Yes

TABLE 3.2-3
(Concluded)

Valley Name	Stream Flow	Valley Form[1]	Valley Bottom Gradient[2]	Valley Bottom Width[3]	Valley Side Slopes[4]	Riparian Areas Present?
West Fork Avintaquin	Perennial	V-shape to Trough-like	Very High to Moderate	Very narrow to moderate	Moderate to Steep	Yes
Timber Canyon	Perennial	V- and U-shape to Flat bottom	Low	Narrow to broad	Moderate to Steep	Yes
Cow Hollow	Perennial	V-shape to Trough-like	Very High to Moderate	Narrow	Moderate to Steep	No
Slab Canyon	Perennial	V-shape to Trough-like	Moderate to Low	Narrow to very broad	Steep to Low	No
Beaver Canyon	Intermittent	V-shape	Moderate	Narrow	Steep	No

Shading indicates those drainages which have a narrow valley bottom width, V-shape, steep side slopes, and riparian areas.

(1) Valley Form:
- U-shape
- V-shape
- Trough-like
- Flat bottom

(2) Valley Bottom Gradient:

Very Low	<2%
Low	2-4%
Moderate	>4-6%
High	>6-8%
Very High	8%

(3) Valley Bottom Width:

Very Narrow	<10 meters
Narrow	10-30 meters
Moderate	30-100 meters
Broad	100-300 meters
Very Broad	>300 meters

(4) Valley Side Slopes:

Low	<30%
Moderate	30-60%
Steep	>60%

Source: USFS 1992d

TABLE 3.2-4

DRAINAGES IN THE STUDY AREA WITH DETERIORATED OR VULNERABLE STREAMBANK OR GULLY CONDITIONS
Western Uinta Basin EIS

Drainage	Indicators of Deteriorated Condition	Indicator of Vulnerable Conditions
Antelope Canyon (Left and Right Forks)	---	Active gullies
Brundage Canyon	Immature discontinuous gullies	---
Wire Fence Canyon	Immature discontinuous gullies	Active gullies
Sowers Canyon	Immature discontinuous gullies Excessive mass wasting	Inadequate bank protection Inadequate bank rock content
Tabby Canyon	Immature discontinuous gullies	
Left Fork Indian Canyon	Immature discontinuous gullies Excessive mass wasting	Inadequate bank protection Inadequate bank rock content
Right Fork Indian Canyon	Immature discontinuous gullies Excessive mass wasting Excessive bank cutting	Inadequate bank protection Inadequate bank rock content
Left Fork Lake Canyon	Immature discontinuous gullies	---
Wilbur Canyon	Immature discontinuous gullies	---
Avintaquin Creek	Excessive mass wasting	Inadequate bank protection Inadequate bank rock content
Timber Canyon	Immature discontinuous gullies	Inadequate bank rock content

Source: USFS 1992c

TABLE 3.2-5

SURFACE WATER QUALITY - SELECTED STREAMS
Western Uinta Basin EIS

Parameter	Units	Trail Hollow Creek	Horse Creek	Soldier Creek	White River	Diamond Fork	Sixth Water	Strawberry River	Indian Canyon	Sowers Creek	Timber Canyon	Willow Creek	Strawberry Aqueduct	Utah Surface Water Standards
Aluminum	ug/l									59.347		100		
Arsenic	ug/l				7.05		5				5	1.05		.002 ug/l (1)
Barium	ug/l				419.17		65				70	100		1.0 mg/l (2)
Boron	mg/l		20	20					3900 ug/l					0.75 mg/l (2)
Cadmium	ug/l				0.3167		1				1	0.3		10 ug/l (1)
Calcium	mg/l	93.75	63	32	49.4	41.572	44	57.5	51	103.54	46	75		
Chloride	mg/l		5.3	23	3.4143		8.5		13	48.338	3.5	2.266		
Chromium	ug/l				7.5		5				5	5		50 ug/l (1)
Conductivity	Micromho	709.00	454	560	3.3	371.57	500	463.57	1250		595	494.33	231.88	
CO2	mg/l	6.40	2.7	2.7		2.1429	2	1.5714	2.6		4		2.25	
CO3 Ion	mg/l	0.00	0	0	3.4286	0	0	0	29	21.053	0	0.7	0	
Copper	ug/l				8		20			1.0816	20			100 ug/l (1)
Diss. Sol.	mg/l		262	227					847					1200 mg/l (2)
DO	mg/l	7.75			8.4	7.8	9.5	7.5					9.1167	
Fluoride	mg/l		0.2	0.3	0.3117				1.5	3.8146		0.24		1.4 - 2.4 mg/l (2)
Flow	cfs	1.35	0.1	3	15.26	131.48	351	18	0.7				140.83	
H20 Temp	cent.	12.667	17	14	11.03	7.7333	19.2	15.5	27.5	9.6237	17.8		9.55	maximum 20 C (3)
HC03 Ion	mg/l	357.25	272	216	362	192.72	295	190.72	462	354.93	385	320.67	138.75	
Iron	ug/l				284.83				80	139.8		34.5		1000 ug/l (3)
Lead	ug/l				4.1667					1.0816	5	2		5 ug/l (1)
Magnesium	mg/l	30.50	20	32	33.6	15.572	28	15.8	59	86.47	33	32		
NH3+ NH4-	mg/l				0.0435	0.05	0.05				0.05	0.157	0.19	
Nickel	ug/l				28.75							7		160 ug/l (3)
pH	su	8.64	8.2	8.1	8.4563	7.6	8.4	8.7429	8.5	8.2826	8.2	8.1833	7.8167	6.5 - 9.0 (2)
Phosphorus	mg/l	0.0753	0.02	0.02		0.037	0.02	0.0346	0.03		0.657		0.0145	0.05 mg/l (3)
Potassium	mg/l	2.00	1	1.7	1.528		1	1	6.9	5.5626	1	27.78		
Selenium	ug/l										1	0.3		10 ug/l (1)
Silica	mg/l		8.4	8.8	24				33	17.984		19		
Silver	ug/l										2	2		50 ug/l (1)
Sodium	mg/l	9.38	8.6	10	38.4		31	3.1	150	116.62	42	6.975		
Sulfate	mg/l	64.50	21	12	19		35	79.475	270	258.49	22	48		

TABLE 3.2-5

SURFACE WATER QUALITY - SELECTED STREAMS
Western Uinta Basin EIS

Parameter	Units	Trail Hollow Creek	Horse Creek	Soldier Creek	White River	Diamond Fork	Sixth Water	Strawberry River	Indian Canyon	Sowers Creek	Timber Canyon	Willow Creek	Strawberry Aqueduct	Utah Surface Water Standards
T Alk	mg/l	303.33	223	177	301.57	158.29	242	156.25	427	379.82	315	263	113.5	
Tot Hard CAC03	mg/l		240	210	250.72	167.77	225		370	614.89	250.5	327.33	121.36	
Turb	hach ftu	9.7167			21.766	11.05	1.3	3.8		68.641	3	0.37667	2.085	max. 10 NTU increase (2)
Un-ionized NH3-l	mg/l				0.0022	0.0007					0.0025	2	0.0018	0.001 - 0.214 mg/l
Zinc	ug/l										20	5		5000 ug/l (1)
Class *		1C, 3A,4	1C, 3A, 4	3A,4	1C,3A,4	3A,4	3A,4	1C,3A,4	1C,3A,4	1C,3A,4	1C,3A,4	1C,3A,4		

Source: EPA STORET

Note: Phenols have been analyzed within Sowers Canyon for two years to establish baseline information. The results have shown no evidence of phenols.

(1) based on Utah water quality standards for the protection of human health

(2) based on water quality standards for recreational and agricultural uses

(3) based on water quality standards for aquatic wildlife

*(1C) Protected for domestic purposes with prior treatment processes.

*(3A) Protected for cold water species of game fish and other cold water aquatic life.

*(4) Protected for agricultural uses.

Tot Hard CAC03

TABLE 3.2-6

GROUNDWATER QUALITY - SELECTED WELLS
Western Uinta Basin EIS

		Well Identification and Date Sampled								
Parameter	Units	USGS Bluegate Well #2 Aug. 1978	Soldier Creek Rec. Complx - Well Aug. 1984	Strawberry Bay Rec. Complx - Well Aug. 1984	Ambient Well U(C-3-10)32BCD-2 Nov. 1971	Ambient Well U(C-3-10)32BCS-1 Nov. 1971, 1973	Ambient Well U(C-3-10)22CAC-1 Nov. 1973	Ambient Well U(C-3-9)6CBC-1 1971 and 1972	Ambient Well U(C-3-10)5DBA-1 Jun. 1971	Utah State Groundwater Quality Standards
Total Depth of Well	ft.				200	120	213	201	184	
Temperature	cent.	14				7	7			
Conductivity at 25C	micromho	3,100	495	470	320	338	634	605	736	
pH		7			7.9	7.9	8.2	7.4	7.2	6.5 - 8.5
Dissolved Solids	mg/l	19,400			158	183.5	359	301	324	
Arsenic, total	mg/l		0.002	0.002						0.05 mg/l
Barium, total	mgl		0.00005	0.00015						1 mg/l
Boron, dissolved	ug/l	1,500			90	230	60	95	0	
Cadmium, total	mg/l		0.001	0.001						0.01 mg/l
Calcium Hardness	mg/l	1,007	580	252.12	150.52	165.27	317	117.58	228.68	
Calcium, dissolved	mg/l	90	38	35	24	36.5	63	24	52	
Chloride, total	mg/l	4,100	5	2	1	5.9	14	12.9	12	
Chromium, total	mg/l		0.005	0.005						0.05 mg/l
CO2	mg/l	95	3	10	3.3	4.25	4.1	6.7		
CO3 Ion	mg/l	0			1	0.5	0	0	0	
Copper, total	mg/l		0.01	0.01	0	0		0.0003	0.5	1 mg/l
Fluoride, dissolved	mg/l		0.15	0.19	0.1	0.15	0.2	0.6	0.1	2.4 mg/l
HCO3 Ion	mg/l	750	266	300	162	188.5	403	291	293	
Iron	mg/l		0.04	0.1	0	0		90	130	
Lead, total	mg/l		0.005	0.011	0	0		0	0	0.05 mg/l
Magnesium, dissolved	mg/l	190	118	40	22	18	39	14	24	
Manganese	ug/l		15	15	0.08	120		20		
Mercury, total	mg/l		0.0001	0.0003						0.002 mg/l
Nitrate	mg/l		0.35	0.2	0.45	0				10 mg/l
Nitrate and Nitrite	mg/l				2	0.65	0.09	0.3	1.8	
Potassium, dissolved	mg/l	29	1	3	1	1.5	3	4.5	18	
Selenium, total	mg/l		0.0005	0.0005						0.01 mg/l
Silica, dissolved	mg/l	12	24	9	0.8	5.2	8.9	6.7	0	
Silver, total	mg/l		0.002	0.002						0.05 mg/l

TABLE 3.2-6

GROUNDWATER QUALITY - SELECTED WELLS
Western Uinta Basin EIS

		Well Identification and Date Sampled								
		USGS Bluegate Well #2	Soldier Creek Rec. Complx - Well	Strawberry Bay Rec. Complx - Well	Ambient Well U(C-3-10)32BCD-2	Ambient Well U(C-3-10)32BCS-1	Ambient Well U(C-3-10)22CAC-1	Ambient Well U(C-3-9)6CBC-1	Ambient Well U(C-3-10)5DBA-1	Utah State Groundwater
Parameter	Units	Aug. 1978	Aug. 1984	Aug. 1984	Nov. 1971	Nov. 1971, 1973	Nov. 1973	1971 and 1972	Jun. 1971	Quality Standards
Sodium, dissolved	mg/l	7,600	51	4	8	6.55	24	68.5	33	
Sulfate, total	mg/l	7,000	53	7.5	20	14.5	8	26.5	39	
Total Alkalinity	mg/l	620	217	242	135	155.5	331	239	240	
Total Hardness	mg/l	1,000	166	258	150	167.5	320	119	230	
Zinc, total	mg/l		0.13	0.05	0	0		0	0.4	5 mg/l

Source: EPA STORET

TABLE 3.3-1

SUMMARY OF STATE AND FEDERAL AMBIENT AIR QUALITY STANDARDS AND PSD INCREMENTS FOR CRITERIA POLLUTANTS
(micrograms per cubic meter, ug/m^3)
Western Uinta Basin EIS

Pollutant(1)	Averaging Period	State and Federal Standards(2)		PSD Increments	
		Primary	Secondary	Class I	Class II
Particulate Matter (PM 10)	Annual	50	NA	NA	NA
	24-Hour	150	NA	NA	NA
Total Suspended Particulates (TSP)	Annual	NA	NA	5	19
	24-Hour	NA	NA	10	37
Sulfur Dioxide (SO2)	Annual	80	NA	2	20
	24-Hour	365	NA	5	91
	3-Hour	1,300	NA	25	512
Carbon Monoxide (CO)	8-Hour	10,000	10,000	NA	NA
	1-Hour	40,000	40,000	NA	NA
Nitrogen Dioxide (NO2)	Annual	100	NA	2.5	25
Lead (Pb)	3-Month	1.5	NA	1.5	1.5
Ozone (O3)	1-Hour	235	NA	235	235

(1) Gaseous concentrations are corrected to a reference temperature of 25 degrees Celsius and to a reference pressure of 760 millimeters of mercury.
(2) All maximum values are not to be exceeded more than once per year and ozone standard is not to be exceeded during more than one day per year.
NA Not applicable

Source: 40 CFR Part 50 Sections 4-12

TABLE 3.4-1

MANAGEMENT INDICATOR SPECIES OF THE ASHLEY AND UINTA NATIONAL FORESTS
Western Uinta Basin EIS

Species	Habitat
MAMMALS	
Elk	late successional plant stages
Mule Deer	late successional plant stages
Spotted Bat	Riparian, Pinyon Juniper
Townsends Big-Eared Bat	Caves, Pinyon Juniper
Red Squirrel	coniferous forest
Beaver	riverine
Uinta Ground Squirrel	sagebrush
Moose	deciduous woodland, riparian shrub
BIRDS	
Golden Eagle	cliffs/rock
Northern Goshawk	old growth timber
Flammulated Owl	old growth timber
Sage Grouse	sagebrush
White Tailed Ptarmigan	alpine meadow
Red-Napped Sapsucker	aspen, riparian
Northern Three-Toed Woodpecker	coniferous forest
Lincoln's Sparrow	riparian shrub
Song Sparrow	riparian shrub
Warbling Vireo	deciduous woodlands
Bald Eagle	riparian, woodland, grassland
Common Flicker	riparian woodlands, forest
Peregrine Falcon	cliffs/rock
Mountain Chickadee	coniferous forest, aspen
Sand Hill Crane	riparian, meadows, agriculture
Great Horned Owl	riparian forest, agriculture
Scrub Jay	oak shrublands, pinyon-juniper
Sage Thrasher	sagebrush, riparian, pinyon-juniper
Vesper Sparrow	grassland, shrubland, pinyon-juniper

TABLE 3.4-1
(Concluded)

Species	Habitat
FISH	
Cutthroat Trout	aquatic
Brown Trout	aquatic
Brook Trout	aquatic
Rainbow Trout	aquatic
INSECTS	
Epedrus Mayfly	aquatic
Rhithrogena Mayfly	aquatic
Arctopsyche Caddis	aquatic

Source: USFS 1985a, USFS 1986b

TABLE 3.7-1

ROADLESS AREAS
Western Uinta Basin EIS

DEFINITION	Roadless areas are defined as being those areas included in the RARE II inventory, which was part of the wilderness classification process.
WILDERNESS ACT OF 1964	With the passage of the Wilderness Act of 1964, USFS lands previously classified as wilderness, wild or canoe areas were included as part of the Wilderness Preservation System. The Act directed the Secretary of Agriculture to review lands previously classified as primitive areas for their suitability for classification as wilderness. The USFS also directed forest supervisors to identify potential new additions to the wilderness system which would come from de facto wilderness lands in the national forest system that lacked any official designation, but were generally roadless and undeveloped.
1972 ROADLESS AREA REVIEW & EVALUATION	The first Roadless Area Review and Evaluation (RARE) was completed in 1972 and identified 1,449 areas with wilderness potential.
ROADLESS AREA & REVIEW EVALUATION II	A second review and evaluation (RARE II) was completed in 1979, and designated forest service roadless areas as either; recommended wilderness, nonwilderness, or further planning.
NATIONAL FOREST EIS AND LAND AND RESOURCE MANAGEMENT PLAN	In January 1980 a U.S. District Court, in California vs. Bergland, ruled that the RARE II EIS designation of certain roadless areas in California was legally inadequate. Because of this court ruling, the Forest Service was directed to reevaluate roadless areas in Land and Resource Management Plans (Forest Plans). Appendix C in the Uinta National Forest EIS and Land and Resource Management Plan contains the Roadless Area Evaluation.
UTAH WILDERNESS ACT OF 1984	The U.S. Congress, based on the RARE II program and its own review and examination of National Forest system roadless areas in Utah, passed the Utah Wilderness Act of 1984, which established approximately 734,000 acres of wilderness in Utah. The Act also directed that those areas not designated as components of the National Wilderness Preservation System be available for nonwilderness multiple use, under the land management planning process. Since the Ashley National Forest Land and Resource Management Plan was prepared after the Utah Wilderness Act was passed it was not necessary to include a roadless areas evaluation. At the next revision of the forest plans, these roadless areas will be reviewed again for possible wilderness designation. In the interim, these roadless areas need not be managed for the purpose of protecting their suitability for wilderness designation (Section 201(b) (3). These roadless areas do, however, represent a roadless resource which provides for semi-primitive recreation opportunities, wildlife habitat and other resource values which are managed for by the Forest Service.

TABLE 3.8-1

RECREATION VISITOR DAYS (RVDs) BY ACTIVITY FOR THE SPANISH FORK AND HEBER RANGER DISTRICTS, AND THE SOUTH UNIT OF THE DUCHESNE RANGER DISTRICT
Western Uinta Basin EIS

Activity	RVDs (thousands)					
	Heber RD[1]		Spanish Fork RD[1]		South Unit Duchesne RD	
	1991	1992	1991	1992	1991	1992
Camping, Picnicking, and Swimming	408.6	589.6	427.6	478.9	22.82	23.70
Mechanized Travel and Viewing Scenery	198.5	295.4	290.1	308.6	15.07	15.85
Hiking, Horseback Riding and Water Travel	29	40.4	278.9	312.0	22.05	22.90
Winter Sports	5.5	11.5	3.1	3	1.54	1.58
Resorts, Cabins, and Organizational Camps	61.4	88.7	28	30.9	0	0
Hunting	45.4	62.5	54	45.6	10.40	10.75
Fishing	81.6	116.8	36	37.8	3.32	3.44
Non Consumptive Fish & Wildlife Use	.1	.2	8.5	4.2	.45	.55
Other[2]	35.2	108.8	44.7	28.7	11.72	12.14
Total	865.3	1,313.9	1,171.2	1,249.7	87.37	90.91

[1] RVDs for entire Ranger District.
[2] Other category includes gathering forest products, team and individual sports, and general information.

Source: Uinta and Ashley National Forests

TABLE 3.8-2

RECREATION OPPORTUNITY SPECTRUM CLASSES
Western Uinta Basin EIS

URBAN

Urban ROS class settings are characterized by high levels of human activity and by concentrated development, including developments for recreation opportunities. In urban settings, levels of recreation use vary and can be extremely high or dense. There are a preponderance of signs and other indications of regulations on the users' behavior. The landscape is dominated by human structures, and green-space is only sporadically dominant.

RURAL

In the Rural class settings, the sights and sounds of human activity are readily evident, though less pronounced and less concentrated than in the Urban class. Levels of use vary, but do not reach those concentrations of the Urban class except at specialized and developed sites. While the characteristic landscape is often dominated by human-caused geometric patterns, there is also a dominant sense of open, green-space.

ROADED NATURAL

The Roaded Natural class is characterized by predominately natural-appearing settings, with moderate sights and sounds of human activities and structures. The overall perception is one of naturalness. Evidence of human activity varies from area to area and incudes improved highways, railroads, developed campgrounds, small resorts and ski areas, livestock grazing, timber harvesting operations, watershed restoration activities, and water diversion structures. Roads and motorized equipment and vehicles are common in this setting. Density of use is moderate except at specific developed sites, and regulations on user behaviors are generally less evident than in the Urban or Rural classes.

SEMI-PRIMITIVE

Both the Semi-Primitive Motorized and Semi-Primitive Non-Motorized classes are characterized by predominately natural or natural-appearing landscapes. The size of these areas gives a strong feeling of remoteness from the more heavily used and developed areas. Within these settings, there are ample opportunities to practice wildland skills and to achieve feelings of self-reliance. The most significant difference between the semi-primitive motorized and non-motorized settings is the presence or absence of motorized vehicles.

PRIMITIVE

The Primitive settings are characterized by essentially unmodified natural environments and their size and configuration assure remoteness from the sights and sounds of human activity. The use of motorized vehicles and equipment is not permitted except in extreme emergencies, such as preserving a life or the resource. In the Primitive class, the user is forced to be self-reliant and expects low levels of user density.

Source: U.S. Forest Service

TABLE 3.8-3

MODERATE TO HIGH USE FOREST SERVICE TRAILS
WITHIN STUDY AREA
Western Uinta Basin EIS

Trail No.	Name	Use
Uinta National Forest		
7126	Monks Hollow	M
7125	Long Hollow	M
7018	Second Water & Cottonwood	M
7010	Wardsworth Canyon	M
7009	Center Ridge[1]	H
7014	Sixth Water	M
7015	Fifth Water	H
7017	Fourth Water	M
7023	Tie Fork[1]	M
7155	White River Main	M
7028	Middle Fork White River	M
7104	Trail Canyon	M
129	Right Fork Maple Canyon	H
7004	Little Diamond	M
7003	Dry Canyon	H
7071	Foreman Hollow	M
7308	Bird Trail	H
Ashley National Forest		
No moderate to high use trails were identified on Ashley National Forest lands within the study area. This includes the Sowers Canyon Area.		

[1] Part of Great Western Trail System

Source: Uinta and Ashley National Forests

TABLE 3.9-1

VISUAL QUALITY OBJECTIVES
Western Uinta Basin EIS

Preservation (P)	This objective allows for ecological changes only. Management activities, except for very low visual impact recreation facilities, are prohibited. Applies to wilderness areas and other special or unique areas
Retention (R)	This objective provides for management activities which are not visually evident. Activities may only repeat the form, line, color, and texture of those found in the characteristic landscape.
Partial Retention (PR)	Management activities remain visually subordinate to the characteristic landscape. Activities may introduce form, line, color, and texture, which are not common to the area but must not dominate the view.
Modification (M)	Management activities may visually dominate the landscape; however, these activities must repeat the naturally established form, line, color, and texture so that its visual characteristics are compatible with the natural surroundings.
Maximum Modification (MM)	Management activities may dominate the characteristic landscape; however, when viewed as background, the visual characteristics of the disturbance should copy those of natural occurrence within the surrounding area.

Source: U.S. Forest Service

TABLE 3.11-1

AVERAGE DAILY TRAFFIC FOR ROADS IN THE STUDY AREA
Western Uinta Basin EIS

Major Highway	ADT 1991
U.S. Highway 40	2,990
U.S. Highway 6	4,520
U.S. Highway 191	380

Forest Service Roads	ADT Weekdays	ADT Weekends	ADT Hunting Season
Paved Forest Service Roads (Average)	200	600	800
Gravel Forest Service Roads (Average)	40	100	400
Dirt Forest Service Roads (Average)	8	30	100

Sources: Utah Department of Transportation (UDOT 1991); USFS 1992

TABLE 3.12-1

STUDY AREA POPULATIONS AND TRENDS
Western Uinta Basin EIS

Jurisdiction	Population in Thousands							Growth Rate (%)	
	1980	1982	1984	1986	1988	1990	1992*	Average 1980-92	Average 1991-92
State of Utah	1,474	1,558	1,622	1,663	1,690	1,729	1,820	1.7	2.5
Duchesne County	12.7	13.7	14.8	14.3	13.1	12.6	12.9	0.1	0.8
-Town of Duchesne	1.7				1.6	1.3			
-Town of Roosevelt	3.8					3.9			
Uintah County	20.7	24.8	25.2	24.0	22.7	22.2	23.7	1.1	2.6
-Town of Vernal	7.2					6.6			

Sources: 1. State of Utah Economic Coordinating Committee 1993. Economic Report to the Governor.
2. U.S. Forest Service 1993. North Slope Oil and Gas Leasing DEIS.
3. Duchesne County. 1991a. Economic Facts.

* Preliminary

TABLE 3.12-2

STUDY AREA
POPULATION GENDER AND ETHNICITY BY TRACT, 1990
Western Uinta Basin EIS

		Sex		Race						Not of Hispanic Origin				
County	All Persons	Male	Female	White	Black	American Indian, Eskimo, or Aleut	Asian or Pacific Islander	Other Race	Hispanic Origin (Of any Race)	White	Black	American Indian, Eskimo, or Aleut	Asian or Pacific Islander	OtherRace
Duchesne County	12,645	6,385	6,260	11,807	10	664	39	125	350	11,630	8	623	31	3
Duchesne Division	2,500	1,289	1,211	2,454	--	19	6	21	55	2,421	--	18	6	--
Duchesne City	1,308	675	633	1,282	--	9	6	11	37	1,257	--	8	6	--
Roosevelt Division	10,126	5,086	5,040	9,335	10	645	33	103	295	9,191	8	605	25	2
Roosevelt City	3,915	1,874	2,041	3,578	3	294	7	33	81	3,542	1	284	6	1
Uintah County	22,211	10,991	11,220	19,537	9	2,335	82	248	691	19,178	9	2,238	80	15
Uintah and Ouray Division	4,584	2,259	2,325	2,552	2	1,986	14	30	109	2,530	2	1,922	14	7
Vernal Division	17,627	8,732	8,895	16,985	7	349	68	218	582	16,648	7	316	66	8
Vernal City	6,644	3,224	3,420	6,299	6	165	44	130	264	6,174	6	150	44	6

Source: Uintah Basin Association of Governments 1993.

TABLE 3.12-3

SUMMARY OF GENERAL CHARACTERISTICS OF PERSONS IN THE STUDY AREA, 1990
Western Uinta Basin EIS

		Percent of All Persons								
	All persons	Under 5 years	Under 18 years	18 to 24 years	25 to 44 years	45 to 64 years	65 years and over	80 years and over	Median age	Persons 18 years and over -- Males per 100 females
State of Utah	1,722,850	9.8	36.4	11.6	29.0	14.3	8.7	1.9	26.3	95.0
County										
Duchesne County	12,645	10.7	43.0	7.0	26.2	15.3	8.5	1.7	25.0	96.1
Uintah County	22,211	10.3	41.4	7.2	28.3	15.3	7.8	1.6	26.2	94.0
Subdivision										
Duchesne City	1,308	8.0	40.9	8.3	26.1	16.6	8.1	1.7	25.8	106.7
Roosevelt City	3,915	12.2	43.8	8.3	27.5	12.2	8.3	2.0	23.3	85.6
Vernal City	6,644	10.5	37.9	8.1	27.7	15.5	10.9	2.6	28.0	90.0

Source: U.S. Department of Commerce 1990a.

TABLE 3.12-4

DUCHESNE COUNTY REVENUE
FISCAL YEAR JANUARY 1 - DECEMBER 31, 1991
Western Uinta Basin EIS

Source	Revenue $
Taxes	3,681,923
Licenses and Permits	28,720
Intergovernmental Grants and Payments in Lieu of Taxes (PILT)	1,467,452
Charges for Services	773,625
Miscellaneous	101,381
Total Revenues	6,053,101

Source: Duchesne County 1992.

TABLE 3.12-5

UINTAH COUNTY REVENUE
GENERAL FUND, FISCAL YEAR JANUARY 1 - DECEMBER 31, 1991
Western Uinta Basin EIS

Source	Revenue $
Taxes	3,740,955
Licenses and Permits	39,609
Intergovernmental Grants and Payments in Lieu of Taxes (PILT)	1,507,298
Charges for Services	91,812
Miscellaneous	1,115,687
Total Revenues	6,495,361

Source: Uintah County 1993.