

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

WINDY POINT (4-B)

SCS-34 Rev. 6-66

NAME OF RESERVOIR

63-11

DATA SHEET NO.

DAM	1. OWNER USDI BLM		2. STREAMTRIB.OF BADGER WASH		3. STATE COLO.											
	4. SEC. 36 TWP. 8 S. RANGE 104 W		5. NEAREST P.O. MACK, COLO.		6. COUNTY MESA											
	7. LAT. 39° 19' " LONG. 108 56' "		8. TOP OF DAM ELEVATION 4,970		9. SPILLWAY CREST ELEV. 4,968.5											
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, ACRES		13. ORIGINAL CAPACITY, ACRE-FEET		14. GROSS STORAGE, ACRE-FEET		15. DATE STORAGE BEGAN					
	a. FLOOD CONTROL										Dec. 1953					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY		4,968.5		.81		4.52		4.52		16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION										Dec. 1953					
	g. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR .059 MILES				AV. WIDTH OF RESERVOIR .017 MILES											
	18. TOTAL DRAINAGE AREA .019 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 8.75 (38 yr) INCHES 1/											
	19. NET SEDIMENT CONTRIBUTING AREA .019 SQ. MI.				23. MEAN ANNUAL RUNOFF .46 (17 yr) INCHES											
	20. LENGTH .23 MILES		AV. WIDTH .08 MILES		24. MEAN ANNUAL RUNOFF .47 (17 yr) AC.-FT.											
	21. MAX. ELEV. 5,045		MIN. ELEV. 4,960		25. ANNUAL TEMP: MEAN 51°F RANGE --											
SURVEY DATA	26. DATE OF SURVEY		27. PERIOD YEARS		28. ACCL. YEARS		29. TYPE OF SURVEY		30. NO. OF RANGES OR CONTOUR INT.		31. SURFACE AREA, ACRES		32. CAPACITY, ACRE-FEET		33. C/I. RATIO, AC.-FT. PER AC.-FT.	
	12-6-53		--		--		Range D		7		.81		4.52		9.62	
	7-28-55		1.6		1.6		"		7		.71		4.31		9.17	
	11-4-56		1.3		2.9		"		7		"		4.31		9.17	
	10-25-57		1.0		3.9		"		7		"		4.19		8.91	
	11-20-58		1.1		5.0		"		5		"		4.19		8.91	
	11-12-59		1.0		6.0		"		5		"		4.16		8.85	
	11-2-61		2.0		8.0		"		5		"		4.12		8.80	
	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-FEET			36. WATER INFL. TO DATE, AC.-FT.								
					a. MEAN ANNUAL		b. MAX. ANNUAL	c. PERIOD TOTAL		a. MEAN ANNUAL		b. TOTAL TO DATE				
	12-6-53		--		--		--	--		--		--				
	7-28-55		10.0		.98		.80	1.57		.98		1.57				
	11-4-56		7.1		.12		.15	.15		.59		1.72				
	10-25-57		12.4		.99		.99	.99		.70		2.71				
	11-20-58		8.5		0		0	0		.54		2.71				
	11-12-59		4.9		.29		.29	.29		.50		3.00				
	11-2-61		15.3		.56		1.12	1.16		.52		4.16				
	26. DATE OF SURVEY		37. PERIOD CAPACITY LOSS, ACRE-FEET			38. TOTAL SED. DEPOSITS TO DATE, ACRE-FEET										
			a. PERIOD TOTAL		b. AV. ANNUAL	c. PER SQ. MI.-YEAR		a. TOTAL TO DATE		b. AV. ANNUAL		c. PER SQ. MI.-YEAR				
	12-6-53		--		--	--		--		--		--				
7-28-55		.21		.13	6.85		.21		.13		6.85					
11-4-56		0		0	0		.21		.07		3.68					
10-25-57		.12		.12	6.32		.33		.08		4.20					
11-20-58		0		0	0		.33		.07		3.68					
11-12-59		.03		.03	1.58		.36		.06		3.15					
11-2-61		.02		.01	.53		.38		.05		2.63					
26. DATE OF SURVEY		39. AV. DRY WGT., LBS. PER CU. FT.		40. SED. DEP., TONS PER SQ. MI.-YR.		41. STORAGE LOSS, PCT.		42. SED. INFLOW, PPM								
				a. PERIOD		b. TOTAL TO DATE		a. AV. ANN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE		
12-6-53		90*		--		--		--		--		--		--		
7-28-55		"		13,427		13,427		2.88		4.65		191,308		192,920		
11-4-56		"		--		7,213		1.55		4.65		--		176,096		
10-25-57		"		12,380		8,232		1.77		7.30		174,831		175,632		
11-20-58		"		--		7,213		1.55		7.30		--		175,632		
11-12-59		"		3,095		6,175		1.33		7.96		149,209		173,077		
11-2-61		"		1,032		5,155		1.11		8.41		24,876		131,749		

*Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION												
	12-10	10-8	8-6	6-4	4-2	2-0							
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
10-25-57	6	12	54	23	4	1							
11-10-63	4	9	53	32	1	1							
10-25-67	2	6	34	50	7	1							

26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
11-4-56	23	29	20	17	11	0	0	0	0	0					
11-10-63	16	23	17	15	12	7	4	2	2	2					
10-25-67	9	15	11	9	8	5	10	12	12	9					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1954	60.22	55.5	.80	1966	61.70	60.7	.07
1955	61.77	58.5	.94	1967	62.08	60.8	.42
1956	--	58.8	0	1968	63.41	60.8	1.60
1957	61.32	59.3	.99	1969	--	--	0
1958	--	--	0	1970	--	--	0
1959	60.27	59.3	.29				
1960	59.91	59.3	.04				
1961	61.94	59.4	1.12				
1962	60.55	59.5	.12				
1963	60.59	59.8	.18				
1964	62.33	60.1	.57				
1965	62.66	60.7	.89				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
<u>ORIGINAL CAPACITY 1953</u>			<u>CAPACITY 1967</u>					
55.5	0	0	60.8	0	0			
56	.01	.003	61.0	.06	.006			
58	.06	.06	62.0	.27	.17			
60	.20	.32	64.0	.47	.91			
62	.34	.86	66.0	.60	2.01			
64	.48	1.66	68.0	.76	3.39			
66	.61	2.76	69.0	.84	4.20			
68	.77	4.14						
69	.85	4.95						

47. REMARKS AND REFERENCES
 1/ From National Weather Service Record at Fruita, Colorado.
 2/ Inflow amounts recorded during April 1 to Nov. 1 season. This generally includes most of the inflow for the year.
 3/ Capacity increase.
 Lusby, G. C., Turner, G. T., Thompson, J. R., and Reid, V. H., 1963, Hydrologic and biotic characteristics of grazed and ungrazed watersheds of Badger Wash basin in western Colorado, 1953-58: U.S. Geol. Survey Water-Supply Paper 1532-B.
 Lusby, G. C., Reid, V. H., and Knipe, O. D., Effects of grazing on the hydrology and biology of the Badger Wash basin in western Colorado, 1953-66: U.S. Geol. Survey open-file report.

48. AGENCY MAKING SURVEY U.S. Geological Survey
 49. AGENCY SUPPLYING DATA U.S. Geological Survey
 50. DATE 11/71

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

WINDY POINT (4-B)--Cont.

SCS-34 Rev. 6-66

NAME OF RESERVOIR

63-11

DATA SHEET NO.

DAM	1. OWNER			2. STREAM			3. STATE																	
	4. SEC.	TWP.	RANGE	5. NEAREST P.O.			6. COUNTY																	
	7. LAT. " ' " LONG. " ' "			8. TOP OF DAM ELEVATION			9. SPILLWAY CREST ELEV.																	
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, ACRES		13. ORIGINAL CAPACITY, ACRE-Feet		14. GROSS STORAGE, ACRE-Feet		15. DATE STORAGE BEGAN													
	a. FLOOD CONTROL																							
	b. MULTIPLE USE																							
	c. POWER																							
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN													
	e. IRRIGATION																							
	f. CONSERVATION																							
g. INACTIVE																								
WATERSHED	17. LENGTH OF RESERVOIR				MILES				AV. WIDTH OF RESERVOIR				MILES											
	18. TOTAL DRAINAGE AREA						SQ. MI.						22. MEAN ANNUAL PRECIPITATION						INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA						SQ. MI.						23. MEAN ANNUAL RUNOFF						INCHES					
	20. LENGTH				MILES				AV. WIDTH				MILES				24. MEAN ANNUAL RUNOFF				AC. FT.			
	21. MAX. ELEV.				MIN. ELEV.				25. ANNUAL TEMP.: MEAN								RANGE							
SURVEY DATA	26. DATE OF SURVEY		27. PERIOD YEARS		28. ACCL. YEARS		29. TYPE OF SURVEY		30. NO. OF RANGES OR CONTOUR INT.		31. SURFACE AREA, ACRES		32. CAPACITY, ACRE-Feet		33. C/I. RATIO, AC. FT. PER AC. FT.									
	11-10-63		2.0		10.0		Range D		7		.81		4.12		8.76									
	11-5-64		1.0		11.0		"		6		"		4.03		8.57									
	11-4-65		1.0		12.0		"		7		"		3.89		8.28									
	11-3-66		1.0		13.0		"		8		"		3.89		8.28									
	10-25-67		1.0		14.0		"		7		"		3.81		8.11									
	11-9-68		1.0		15.0		"		7		"		3.74		7.96									
	11-4-69		1.0		16.0		"		8		"		3.83		8.15									
	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-Feet ^{2/}				36. WATER INFL. TO DATE, AC.-FT.															
					a. MEAN ANNUAL		b. MAX. ANNUAL		c. PERIOD TOTAL		a. MEAN ANNUAL		b. TOTAL TO DATE											
11-10-63		16.1		.15		.19		.31		.45		4.47												
11-5-64		5.0		.57		.57		.57		.46		5.04												
11-4-65		10.0		.88		.88		.88		.49		5.92												
11-3-66		5.7		0		0		0		.46		5.92												
10-25-67		16.0		.42		.42		.42		.45		6.34												
11-9-68		17.3		1.59		1.59		1.59		.53		7.93												
11-4-69		16.0		0		0		0		.50		7.93												
26. DATE OF SURVEY		37. PERIOD CAPACITY LOSS, ACRE-Feet				38. TOTAL SED. DEPOSITS TO DATE, ACRE-Feet																		
		a. PERIOD TOTAL		b. AV. ANNUAL		c. PER SQ. MI.-YEAR		a. TOTAL TO DATE		b. AV. ANNUAL		c. PER SQ. MI.-YEAR												
11-10-63		.02		.01		.53		.40		.04		2.10												
11-5-64		.09		.09		4.74		.49		.04		2.10												
11-4-65		.14		.14		7.37		.63		.05		2.63												
11-3-66		0		0		0		.63		.05		2.63												
10-25-67		.08		.08		4.21		.71		.05		2.63												
11-9-68		.07 ^{3/}		.07 ^{3/}		3.68		.78		.05		2.63												
11-4-69		-.09 ^{3/}		-.09 ^{3/}		--		.78		.05		2.63												
26. DATE OF SURVEY		39. AV. DRY WGT., LBS. PER CU. FT.		40. SED. DEP., TONS PER SQ. MI.-YR.				41. STORAGE LOSS, PCT.		42. SED. INFLOW, PPM														
				a. PERIOD		b. TOTAL TO DATE		a. AV. ANN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE										
11-10-63		90*		1,032		4,116		.88		8.85		24,876		129,066										
11-5-64		"		9,285		4,116		.88		10.84		227,740		140,224										
11-4-65		"		14,443		5,155		1.11		13.94		229,461		153,489										
11-3-66		"		--		5,155		1.11		13.94		--		153,489										
10-25-67		"		8,253		5,155		1.11		15.71		274,724		161,520										
11-9-68		"		7,222		5,155		1.11		17.26		63,503		141,866										
11-4-69		"		--		5,155		1.11		17.26 ^{4/}		--		141,866										

^{4/} Note: Capacity increase was not considered in computations of storage loss.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.								
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
47. REMARKS AND REFERENCES															
48. AGENCY MAKING SURVEY				49. AGENCY SUPPLYING DATA											
				USGS											
						50. DATE <u>11/71</u>									

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Windy Point (4-B)

63-11 a

SCS-34 Rev. 6-66

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER			2. STREAM			3. STATE					
	4. SEC.		TWP.	RANGE		5. NEAREST P.O.			6. COUNTY			
	7. LAT.		" LONG.		8. TOP OF DAM ELEVATION			9. SPILLWAY CREST ELEV.				
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, ACRES		13. ORIGINAL CAPACITY, ACRE-Feet		14. GROSS STORAGE, ACRE-Feet		15. DATE STORAGE BEGAN	
	a. FLOOD CONTROL											
	b. MULTIPLE USE											
	c. POWER											
	d. WATER SUPPLY								4.52		16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION											
	f. CONSERVATION											
g. INACTIVE												
WATERSHED	17. LENGTH OF RESERVOIR				MILES		AV. WIDTH OF RESERVOIR				MILES	
	18. TOTAL DRAINAGE AREA				SQ. MI.		22. MEAN ANNUAL PRECIPITATION				INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA				.019 SQ. MI.		23. MEAN ANNUAL RUNOFF				INCHES	
	20. LENGTH		MILES		AV. WIDTH		MILES		24. MEAN ANNUAL RUNOFF		.47 AC.-F.T.	
	21. MAX. ELEV.		MIN. ELEV.		25. ANNUAL TEMP.: MEAN				RANGE			
SURVEY DATA	26. DATE OF SURVEY	27. PERIOD YEARS	28. ACCL. YEARS	29. TYPE OF SURVEY	30. NO. OF RANGES OR CONTOUR INT.	31. SURFACE AREA, ACRES	32. CAPACITY, ACRE-Feet	33. C/I. RATIO, AC.-FT. PER AC.-FT.				
	10-28-70	1	17	Range D	8	.81	3.83	8.15				
	10-28-71	1	18	"	8	"	3.83	8.15				
	11-09-72	1	19	"	10	"	3.82	8.13				
	10-17-73	1	20	"	10	"	3.81	8.11				
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-Feet			36. WATER INFL. TO DATE, AC.-FT.					
				a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL		a. MEAN ANNUAL	b. TOTAL TO DATE			
	10-28-70	7.34		0	0	0		.47	7.93			
	10-28-71	6.94		.12	.12	.12		.45	8.05			
	11-09-72	7.92		.26	.26	.26		.44	8.31			
	10-17-73	10.08		T	T	T		.42	8.31			
	26. DATE OF SURVEY	37. PERIOD CAPACITY LOSS, ACRE-Feet			38. TOTAL SED. DEPOSITS TO DATE, ACRE-Feet							
		a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR					
	10-28-70	0	0	0	.78	.05	2.63					
	10-28-71	T	T	T	.78	.04	2.11					
11-09-72	.01	.01	.53	.79	.04	2.11						
10-17-73	.01	.01	.53	.80	.04	2.11						
26. DATE OF SURVEY	39. AV. DRY WGT., LBS. PER CU. FT.	40. SED. DEP., TONS PER SQ. MI.-YR.		41. STORAGE LOSS, PCT.		42. SED. INFLOW, PPM						
		a. PERIOD	b. TOTAL TO DATE	a. AV. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE					
10-28-70	90*	0	5,155	1.02	17.26	--	--					
10-28-71	"	T	4,136	.96	17.26	--	--					
11-09-72	"	1,039	4,136	.92	17.48	--	--					
10-17-73	"	1,039	4,136	.88	17.70	--	--					

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.								
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
47. REMARKS AND REFERENCES															
48. AGENCY MAKING SURVEY															
49. AGENCY SUPPLYING DATA U. S. Geological Survey															
50. DATE <u>January 1977</u>															