

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

BOCO MOUNTAIN NO. 1
NAME OF RESERVOIR

63-15

DATA SHEET NO.

| DAM | 1. OWNER USDI BLM | | 2. STREAM TRIB. ALKALI CR. | | 3. STATE COLO. | | | |
|--------------------------------------|---|-------------------------------------|------------------------------------|--|--|----------------------------------|-------------------------|-------------------------------------|
| | 4. SEC. 3 TWP. 3 S. RANGE 83 W. | | 5. NEAREST P.O. WOLCOTT, COLO. | | 6. COUNTY EAGLE | | | |
| 7. LAT 39° 44' 27" LONG 106° 40' 49" | | 8. TOP OF DAM ELEVATION 43.00* | | 9. SPILLWAY CREST ELEV. 40.00* | | | | |
| 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 | | | | | 7-18-65 | | |
| | b. MULTIPLE USE | | | | | | | |
| | c. POWER | | | | | 16. DATE NORMAL OPER. BEGAN | | |
| | d. WATER SUPPLY | 40.00* | 0.36 | 1.88 | 1.88 | | | |
| | e. IRRIGATION | | | | | 7-18-65 | | |
| | f. CONSERVATION | | | | | | | |
| g. INACTIVE | | | | | | | | |
| WATERSHED | 17. LENGTH OF RESERVOIR 170 feet | | MILES | | AV. WIDTH OF RESERVOIR 92 feet | | | |
| | 18. TOTAL DRAINAGE AREA 7.41 acres | | .0116 SQ. MI. | | 22. MEAN ANNUAL PRECIPITATION 14.0 (6 yr) INCHES | | | |
| | 19. NET SEDIMENT CONTRIBUTING AREA 7.05 ac. (.0116 SQ. MI.) | | | | 23. MEAN ANNUAL RUNOFF 1.13 (6 yr) INCHES | | | |
| | 20. LENGTH 1,050 ft | | MILES | | AV. WIDTH 307 ft. MILES | | | |
| | 24. MEAN ANNUAL RUNOFF .70 (6 yr) AC.-FT. | | | | | | | |
| 21. MAX. ELEV. 87.2* | | MIN. ELEV. 29.2* | | 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. |
| | 7-18-65 | | | Range D | 5 | 0.36 | 1.877 | |
| | 11-2-65 | .30 | .30 | " | 5 | .36 | 1.851 | 2.64 |
| | 10-31-66 | 1.00 | 1.30 | " | 5 | .36 | 1.860 ^{1/} | 2.66 |
| | 11-1-67 | 1.00 | 2.30 | " | 5 | .36 | 1.852 | 2.65 |
| | 11-6-68 | 1.00 | 3.30 | " | 5 | .36 | 1.842 | 2.63 |
| | 11-6-69 | 1.00 | 4.30 | " | 5 | .36 | 1.841 | 2.63 |
| | 11-3-70 | 1.00 | 5.30 | " | 5 | .36 | 1.837 | 2.62 |
| | 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 | |
| | 7-18-65 | -- | -- | -- | -- | -- | -- | |
| | 11-2-65 | 7.44 | -- | -- | .764 | -- | .764 | |
| | 10-31-66 | 11.31 | -- | -- | .739 | -- | 1.503 | |
| | 11-1-67 | 14.39 | -- | -- | .624 | -- | 2.127 | |
| | 11-6-68 | 12.05 | -- | -- | .045 | -- | 2.172 | |
| 11-6-69 | 17.24 | -- | -- | 1.350 | -- | 3.522 | | |
| 11-3-70 | 13.04 | -- | -- | .648 | -- | 4.170 | | |
| 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 | | |
| 7-18-65 | -- | -- | -- | -- | -- | -- | | |
| 11-2-65 | 0.026 | 0.087 | 7.91 | 0.026 | 0.087 | 7.91 | | |
| 10-31-66 | 0 | 0 | 0 | .026 | .020 | 1.82 | | |
| 11-1-67 | .008 | .008 | .73 | .034 | .015 | 1.36 | | |
| 11-6-68 | .010 | .010 | .91 | .044 | .013 | 1.18 | | |
| 11-6-69 | .001 | .001 | .09 | .045 | .010 | .91 | | |
| 11-3-70 | .004 | .004 | .36 | .049 | .009 | .82 | | |
| 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 | |
| 7-18-65 | -- | -- | -- | -- | -- | -- | -- | |
| 11-2-65 | 90* | 15,500 | 15,500 | 4.6 | 1.4 | 49,300 | 49,100 | |
| 10-31-66 | " | 0 | 3,570 | 1.1 | 1.4 ^{2/} | 0 | 24,900 | |
| 11-1-67 | " | 1,420 | 2,670 | .8 | 1.8 | 18,400 | 23,100 | |
| 11-6-68 | " | 1,780 | 2,310 | .7 | 2.3 | 320,000 | 29,200 | |
| 11-6-69 | " | 178 | 1,780 | .5 | 2.4 | 1,060 | 18,400 | |
| 11-3-70 | " | 710 | 1,610 | .5 | 2.6 | 8,860 | 16,900 | |

2/ Capacity increase was not considered in computations of storage loss.

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Boco Mountain No. 1

NAME OF RESERVOIR

63-15a

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 | | | | | | | | 1.88 | | 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 | | | | | | .011 SQ. MI. | | | 23. MEAN ANNUAL RUNOFF | | | | | | INCHES | | |
| | 20. LENGTH | | | MILES | | | AV. WIDTH | | | MILES | | | 24. MEAN ANNUAL RUNOFF | | | .70 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. | | | | | |
| | 10-27-71 | | 1 | 6.30 | Range D | | 5 | | 0.36 | | 1.831 | | 2.62 | | | | | |
| | 11-06-72 | | 1 | 7.30 | " | | 5 | | .36 | | 1.826 | | 2.61 | | | | | |
| | 10-02-73 | | 1 | 8.30 | " | | 5 | | .36 | | 1.831 ^{1/} | | 2.62 | | | | | |
| | 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 | | | | | |
| | 10-27-71 | | 12.64 | | 1.214 | | 1.214 | | 1.214 | | -- | | 5.384 | | | | | |
| | 11-06-72 | | 10.16 | | .730 | | .730 | | .730 | | -- | | 6.114 | | | | | |
| | 10-02-73 | | 9.25 | | .002 | | .002 | | .002 | | -- | | 6.116 | | | | | |
| | 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 | | | | | | |
| 10-27-71 | | .006 | | .006 | | 0.52 | | .055 | | 0.009 | | 0.78 | | | | | | |
| 11-06-72 | | .005 | | .005 | | .43 | | .060 | | .008 | | .69 | | | | | | |
| 10-02-73 | | -.005 ^{1/} | | -.005 ^{1/} | | -- | | .060 | | .007 | | .60 | | | | | | |
| 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 | | | | |
| 10-27-71 | | 90* | | 1,019 | | 1,529 | | .4 | | 2.9 | | -- | | -- | | | | |
| 11-06-72 | | " | | 843 | | 1,353 | | .4 | | 3.2 | | -- | | -- | | | | |
| 10-02-73 | | " | | 0 | | 1,176 | | .3 | | 3.2 ² | | -- | | -- | | | | |

| | | | | | | | | | | | | | | |
|--------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 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

2/ Capacity increase was not considered in computation of storage loss.

48. AGENCY MAKING SURVEY U. S. Geological Survey
 49. AGENCY SUPPLYING DATA
 50. DATE January 1977