

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Walston Reservoir  
NAME OF RESERVOIR

41-3  
DATA SHEET NO.

|             |                                                        |                                         |                                    |                                                   |                                              |                                 |                                    |                                   |  |  |  |
|-------------|--------------------------------------------------------|-----------------------------------------|------------------------------------|---------------------------------------------------|----------------------------------------------|---------------------------------|------------------------------------|-----------------------------------|--|--|--|
| DAM         | 1. OWNER <b>Floyd Walston</b>                          |                                         |                                    | 2. RIVER <b>Trib. - Pondera Creek</b>             |                                              |                                 | 3. STATE <b>Montana</b>            |                                   |  |  |  |
|             | 4. SEC. <b>34</b> TWP. <b>28N</b> RANGE <b>3W</b>      |                                         |                                    | 5. NEAREST TOWN <b>Conrad</b>                     |                                              |                                 | 6. COUNTY <b>Pondera</b>           |                                   |  |  |  |
|             | 7. STREAM BED ELEV. <b>93.4</b>                        |                                         |                                    | 8. TOP OF DAM ELEV. <b>102.4</b>                  |                                              |                                 | 9. SPILLWAY CREST ELEV. <b>100</b> |                                   |  |  |  |
| RESERVOIR   | 10. STORAGE ALLOCATION                                 | 11. ELEVATION TOP OF POOL               | 12. SURFACE AREA ACRES             | 13. STORAGE ACRE- FEET                            | 14. ACCUMULATED ACRE- FEET                   | 15. DATE STORAGE BEGAN          |                                    |                                   |  |  |  |
|             | a. FLOOD CONTROL                                       |                                         |                                    |                                                   |                                              | 1915                            |                                    |                                   |  |  |  |
|             | b. POWER                                               |                                         |                                    |                                                   |                                              |                                 |                                    |                                   |  |  |  |
|             | c. WATER SUPPLY                                        | <b>100% assumed</b>                     | <b>11.3</b>                        | <b>66.13</b>                                      | <b>66.13</b>                                 | 16. DATE NORMAL OPER. BEGAN     |                                    |                                   |  |  |  |
|             | d. IRRIGATION                                          |                                         |                                    |                                                   |                                              |                                 |                                    |                                   |  |  |  |
|             | e. CONSERVATION                                        |                                         |                                    |                                                   |                                              |                                 |                                    |                                   |  |  |  |
|             | f. INACTIVE                                            |                                         |                                    |                                                   |                                              | 1915                            |                                    |                                   |  |  |  |
| WATERSHED   | 17. LENGTH OF RESERVOIR <b>0.322</b> MILES             |                                         |                                    | AV. WIDTH OF RESERVOIR <b>0.056</b> MILES         |                                              |                                 |                                    |                                   |  |  |  |
|             | 18. TOTAL DRAINAGE AREA <b>2.96</b> SQ. MI.            |                                         |                                    | 22. MEAN ANNUAL PRECIPITATION <b>12.30</b> INCHES |                                              |                                 |                                    |                                   |  |  |  |
|             | 19. NET SEDIMENT CONTRIBUTING AREA <b>2.96</b> SQ. MI. |                                         |                                    | 23. MEAN ANNUAL RUNOFF <b>---</b> INCHES          |                                              |                                 |                                    |                                   |  |  |  |
|             | 20. LENGTH <b>2.73</b> MILES                           |                                         | AV. WIDTH <b>1.42</b> MILES        |                                                   | 24. MEAN ANNUAL RUNOFF <b>---</b> AC.-FT.    |                                 |                                    |                                   |  |  |  |
|             | 21. MAX. ELEV.                                         |                                         | MIN. ELEV.                         |                                                   | 25. CLIMATIC CLASSIFICATION <b>Semi-arid</b> |                                 |                                    |                                   |  |  |  |
| 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/W RATIO AC.-FT. PER SQ. MI. |  |  |  |
|             | 1915                                                   | 0                                       | 0                                  | ---                                               | ---                                          | 11.3                            | 66.13                              | 22.34                             |  |  |  |
|             | Oct. 1955                                              | 40                                      |                                    | Range                                             | 5                                            | 11.3                            | 51.71                              | 17.48                             |  |  |  |
|             | 26. DATE OF SURVEY                                     | 34. PERIOD ANNUAL PRECIPITATION         | 35. PERIOD WATER INFLOW ACRE- FEET |                                                   |                                              | 36. WATER INFL. TO DATE AC.-FT. |                                    |                                   |  |  |  |
|             |                                                        |                                         | d. MEAN ANNUAL                     | b. MAX. ANNUAL                                    | c. PERIOD TOTAL                              | a. MEAN ANNUAL                  | b. TOTAL TO DATE                   |                                   |  |  |  |
|             | Oct. 1955                                              | 1.230                                   | ----- No Gage Data -----           |                                                   |                                              |                                 |                                    |                                   |  |  |  |
|             | 26. DATE OF SURVEY                                     | 37. PERIOD SEDIMENT DEPOSITS ACRE- FEET |                                    |                                                   | 38. TOTAL SED. DEPOSITS TO DATE ACRE- FEET.  |                                 |                                    |                                   |  |  |  |
|             |                                                        | a. PERIOD TOTAL                         | b. AV. ANNUAL                      | c. PER SQ. MI.-YEAR                               | d. TOTAL TO DATE                             | e. AV. ANNUAL                   | f. PER SQ. MI.-YEAR                |                                   |  |  |  |
|             | Oct. 1955                                              | 14.42                                   | 0.36                               | 0.122                                             | 14.42                                        | 0.36                            | 0.122                              |                                   |  |  |  |
|             | 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. ANNUAL                                     | b. TOT. TO DATE                              | a. PERIOD                       | b. TOT. TO DATE                    |                                   |  |  |  |
| Oct. 1955   | 60<br>Estimated                                        | 166.0                                   | 166.0                              | .00545                                            | .219                                         | ---                             | ---                                |                                   |  |  |  |

|                       |                                                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|-----------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 25.<br>DATE OF SURVEY | 43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION            |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       |                                                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |

|                       |                                                                     |       |       |       |       |       |       |       |       |        |      |      |      |      |      |
|-----------------------|---------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|------|
| 26.<br>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 SUPPLYING DATA    Soil Conservation Service

49. DATE    February 1, 1962