

RESERVOIR SEDIMENT  
DATA SUMMARY

CS-34 Rev. 6-66

High Pine Dam No. 5

NAME OF RESERVOIR

Sheet 1 of 2  
U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

12 - 8a

DATA SHEET NO.

DAM	1. OWNER W/S Conservancy Dist.		2. STREAM Trib. of High Pine		3. STATE Alabama			
	4. SEC. 10 TWP. 21S RANGE 12E		5. NEAREST P.O. Roanoke 4.5NNW		6. COUNTY Randolph			
	7. LAT. 33° 14' " LONG. 85° " "		8. TOP OF DAM ELEVATION 959.0		9. SPILLWAY CREST ELEV. 956.5			
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	956.5	33	341	390	3/16/61		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION					3/16/61		
	f. CONSERVATION							
	g. INACTIVE	939.5	10	49	49			
17. LENGTH OF RESERVOIR	0.445	MILES	AV. WIDTH OF RESERVOIR	0.07	MILES			
WATERSHED	18. TOTAL DRAINAGE AREA (1168 ac)		1.80	SQ. MI.	22. MEAN ANNUAL PRECIPITATION 52.6 (57)		INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA		1.55	SQ. MI.	23. MEAN ANNUAL RUNOFF 1/ 24.88 (6)		INCHES	
	20. LENGTH	1.65	MILES	AV. WIDTH	1.09	MILES	24. MEAN ANNUAL RUNOFF 2388	
	21. MAX. ELEV.	1250	MIN. ELEV.	928	25. ANNUAL TEMP: MEAN 64.0° RANGE (102°)-(-1°) F			
	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.
3/16/61	-	-	Range-Contour (D)	2' CI	2/ 33 3/ 10	2/ 390. 3/ 49.	0.148	
5/ /70	9.17	9.17	Range-Contour (D)	2' CI	2/ 385.3 3/ 44.9	2/ 385.3 3/ 44.9	0.146	
2/ /81	10.7	19.9	Range-Contour (D)	2' CI	2/ 378.5 3/ 40.4	2/ 378.5 3/ 40.4	0.142	
SURVEY DATA	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	
	5/70	57.18"	2388*1/	3032	21899	2388*	21899	
	2/81	53 "	2388*		25552	2388*	47451*	
	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	
	5/70	2/ 4.46 3/ 4.14	2/ 0.49 3/ 0.45	2/ 0.32 3/ 0.29	2/ 4.46 3/ 4.14	2/ 0.49 3/ 0.45	2/ 0.32 3/ 0.29	
	2/81	2/ 7.06 3/ 4.49	2/ 0.66 3/ 0.42	2/ 0.43 3/ 0.27	2/ 7.06 3/ 4.49	2/ 0.58 3/ 0.44	2/ 0.37 3/ 0.28	
	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
5/70	4/* 54.99 51.75	2/ 376.3 3/ 327.0	2/ 376.3 3/ 327.0	2/ 0.13 3/ 0.92	2/ 1.14 3/ 8.5	5/ 149.5	6/ 180.5	
2/81	4/ 54	2/ 499.2	2/ 435.2	2/ 0.15 3/ 0.9	2/ 2.95 3/ 17.76	5/ 238.3	6/ 209.4	

26. DATE OF SURVEY	43. 30.5 DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	-28	28-26	26-24	24-22	22-20	20-18	18-16	16-14	14-12	12- 8	8- 4	4-CR			
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
5/70	Trace	7	14	14	20	23	18	3	0	1	0	0			
2/81	1	5	13	18	20	20	11	3	-1	-4	7	19			
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														
Not available. Area-capacity data developed by contour method.															
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.								
46. 1961 Capacity ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
928	0.07	0.04	944	14.59	103.55	936	5.85	18.65							
930	0.62	0.64	948	19.70	171.98	938	7.85	32.31							
932	2.50	3.55	952	24.76	260.77	939.5	9.11	45.01							
934	4.40	10.36	956.5	32.56	389.72	940	10.01	49.79							
936	6.40	21.10	1970 Capacity			942	12.39	72.15							
938	8.31	35.77	928	0.05	0.03	944	14.59	99.10							
939.5	9.55	49.15	930	0.31	0.35	948	19.70	167.53							
940	10.17	54.08	932	2.23	2.60	952	24.76	256.32							
942	12.39	76.60	934	4.06	8.80	956.5	32.56	385.26							
47. REMARKS AND REFERENCES (Continued on second sheet)															
1/ Wedowee Creek 2-4134. Water years 61-66 only.															
2/ Total reservoir below spillway crest (956.5).															
3/ Sediment pool only.															
4/ Weighted average; submerged sediment 51.75 pcf., aerated assumed @ 83 pcf.															
5/ Sediment contributing area only.															
6/ Total drainage area.															
* Assumed															
48. AGENCY MAKING SURVEY	USDA-SCS Watershed-River Basin Office, Auburn, AL 36830														
49. AGENCY SUPPLYING DATA	USDA-SCS														
SO. DATE _____															



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
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. 1981 Capacity ELEVATION-AREA-CAPACITY DATA														
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY						
928	0.0		944	14.69	94.4									
930	0.16	0.12	946	17.16	126.22									
932	1.62	1.65	948	19.85	163.20									
934	3.47	6.62	950	21.94	204.97									
936	5.31	15.34	952	24.36	251.25									
938	7.37	27.96	954	27.60	303.17									
939.5	9.00	40.5	956	31.44	362.17									
940	9.84	45.11	956.5	32.61	378.18									
942	12.42	67.32												
47. REMARKS AND REFERENCES														
48. AGENCY MAKING SURVEY														
49. AGENCY SUPPLYING DATA Soil Conservation Service														
50. DATE 1981														