

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Walnut Cove

6-10a

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER Duke Power Company			2. RIVER Dan		3. STATE North Carolina		
	4. SEC. TWP. RANGE		5. NEAREST TOWN Walnut Cove			6. COUNTY Stokes		
	7. STREAM BED ELEV. 616			8. TOP OF DAM ELEV. Not known		9. SPILLWAY CREST ELEV. 638.6		
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	Not applicable	-					
	b. POWER	638.6	68	Not known	974	Not known		
	c. WATER SUPPLY	Not applicable	-	0	0	16. DATE NORMAL OPER. BEGAN		
	d. IRRIGATION	Not applicable	-	0	0			
	e. CONSERVATION	Not applicable	-	0	0			
	f. INACTIVE	Not known	Not known	Not known	Not known	1924		
WATERSHED	17. LENGTH OF RESERVOIR 3.54 MILES			AV. WIDTH OF RESERVOIR .0298 MILES				
	18. TOTAL DRAINAGE AREA 397 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 49.6 (26 yrs) INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 397 SQ. MI.		23. MEAN ANNUAL RUNOFF 19.4 (26 yrs) INCHES					
	20. LENGTH 42 MILES		AV. WIDTH 9.5 MILES		24. MEAN ANNUAL RUNOFF 112,000 (26 yrs) AC.-FT.			
	21. MAX. ELEV. 3300		MIN. ELEV. 616		25. CLIMATIC CLASSIFICATION humid			
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.
	Apr 15, 1932	9 1/2	9 1/2	Range Detail 1/2	10	68	974 2/3 209 2/3	2.45 0.53
	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	
	Apr 15, 1932	46.8	357,000	567,000	3,210,000	357,000	3,210,000	
	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.-YR.	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YR.	
	Apr 15, 1932	765 (918) 3/4	85.0 (102)	.214 (.257)	765 (918) 3/4	85.0 (102)	.214 (.257)	
	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. TO DATE	a. PERIOD	b. TO DATE
Apr 15, 1932	43 * 1/2	200 (241) 3/4	200 (241)	8.73	78.5	164 3/4 (197)	164 (197)	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION													
	22.6-	25-15	15-10	10-5	5 Cr.	Cr. 5	5-7.4	(above crest)						
	20 PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION													
Apr 15, 1932	1	4	17	29	33	11	5							
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													
Apr 15, 1932	21	15	15	12	10	8	8	5	4	2				
45. RANGE IN RESERVOIR OPERATION														
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.							
Information not available.														
46. ELEVATION-AREA-CAPACITY DATA														
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY						
625 m.s.l.	-	1												
630 m.s.l.	-	12												
635	-	77												
638.6	-	209												
47. REMARKS AND REFERENCES <i>depletion</i>														
1/ Assume storage <del>depletion</del> occurred in 9 years, see H.D. 65, 75th Congree, 1st Session ("308" report).														
2/ All Reservoir Volumes Computed by average end areas.														
3/ Above crest deposits included.														
48. AGENCY SUPPLYING DATA Department of the Army, Corps of Engineers, Norfolk District														
49. DATE Revised 15 Feb 1962														