

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Crab Orchard Lake

NAME OF RESERVOIR

16 - 17

DATA SHEET NO.

B19

DAM	1. OWNER U.S.D.I. F. and W.L. Ser.			2. RIVER Crab Orchard Cr.			3. STATE Illinois				
	4. SEC. 19 TWP. T 9 S RANGE R I E			5. NEAREST TOWN Carbondale			6. COUNTY Williamson				
	7. STREAM BED ELEV. 370			8. TOP OF DAM ELEV. 415			9. SPILLWAY CREST ELEV. 405				
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					May 1940					
	b. POWER										
	c. WATER SUPPLY	405	6,965	67,320	67,320	16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION					May 1940					
	e. CONSERVATION										
	f. INACTIVE										
WATERSHED	17. LENGTH OF RESERVOIR 9 MILES			AV. WIDTH OF RESERVOIR 1.2 MILES							
	18. TOTAL DRAINAGE AREA 171 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 42 INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 160 SQ. MI.			23. MEAN ANNUAL RUNOFF 12.09 INCHES							
	20. LENGTH 30 MILES			AV. WIDTH 6.1 MILES			24. MEAN ANNUAL RUNOFF AC- FT.				
	21. MAX. ELEV. 840			MIN. ELEV. 370			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 <sub>w</sub> RATIO AC- FT. PER SQ. MI.			
	May 1940	-	-	-	-	6,965	67,320	394			
	July 1951	11.2	11.2	Detailed Range	53	6,965	63,894	374			
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AQ- FT.					
			a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE				
	July 1951	42	-	-	-	-	-				
	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	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.- YEAR				
	July 1951	3,426	306	1.91	3,426	306	1.91				
	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				
July 1951	47.5	1,976	1,976	0.45	5.09	-	-				

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, 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

Bulletin No. 42 Water and Land Resources of the  
Crab Orchard Lake Basin

Ill. Water Survey Div.  
Urbana, Ill.

48. AGENCY SUPPLYING DATA \_\_\_\_\_ 49. DATE \_\_\_\_\_