

RESERVOIR SEDIMENT  
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

NICHOLS DEBRIS BASIN

SCS-34 Rev. 6-66

NAME OF RESERVOIR

70-50b

DATA SHEET NO.

DAM	1. OWNER <b>LACFCD</b>			2. STREAM <b>Nichols Canyon</b>			3. STATE <b>California</b>				
	4. SEC. <b>TWP. 1 S RANGE 14 W</b>			5. NEAREST P. O. <b>Hollywood</b>			6. COUNTY <b>Los Angeles</b>				
	7. Stream Bed Elev. <b>480.5</b>			8. TOP OF DAM ELEVATION <b>495.0</b>			9. SPILLWAY CREST ELEV. <b>485.0</b>				
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					Nov. 1937					
	b. MULTIPLE USE										
	c. POWER										
	d. WATER SUPPLY										
	e. IRRIGATION										
	f. CONSERVATION										
g. INACTIVE						16. DATE NORMAL OPER. BEGAN					
WATERSHED	17. LENGTH OF RESERVOIR <b>.07</b> MILES			AV. WIDTH OF RESERVOIR <b>.02</b> MILES							
	18. TOTAL DRAINAGE AREA <b>.94</b> SQ. MI.			22. MEAN ANNUAL PRECIPITATION <b>18.0</b> INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA <b>.94</b> SQ. MI.			23. MEAN ANNUAL RUNOFF INCHES							
	20. LENGTH <b>1.69</b> MILES		AV. WIDTH <b>.56</b> MILES		24. MEAN ANNUAL RUNOFF AC.-FT.						
	21. MAX. ELEV. <b>1513</b>		MIN. ELEV. <b>480.5</b>		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/I. RATIO, AC.-FT. PER AC.-FT.			
	Sept. 1942	5	5					1/			
	" 1943	1	6								
	" 1944	1	7								
	" 1945	1	8								
	" 1946	1	9								
	" 1947	1	10								
	" 1948	1	11								
	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					
	Sept. 1942	23.9		No record of inflow							
	" 1943	23.0									
" 1944	21.9										
" 1945	15.6										
" 1946	14.6										
" 1947	18.7										
" 1948	8.3										
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					
Sept. 1942	14.94	2.99	3.18	14.9	2.99	3.18					
" 1943	1.86	1.86	1.98	16.8	2.80	2.98					
" 1944	.45	.45	.48	17.3	2.47	2.63					
" 1945	.19	.19	.20	17.4	2.18	2.32					
" 1946	.14	.14	.15	17.6	1.96	2.09					
" 1947	3.50	3.50	3.72	21.1	2.11	2.24					
" 1948	.27	.27	.29	21.4	1.95	2.07					
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		



RESERVOIR SEDIMENT  
DATA SUMMARY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

NICHOLS DEBRIS BASIN

NAME OF RESERVOIR

70-50c

DATA SHEET NO.

DAM	1. OWNER <b>LACFCD</b>			2. STREAM <b>Nichols Canyon</b>			3. STATE <b>California</b>							
	4. SEC. <b>Land TWP. Grant</b> RANGE			5. NEAREST P. O. <b>Hollywood</b>			6. COUNTY <b>Los Angeles</b>							
	7. LAT <b>34° 06' 30"</b> "LONG <b>118° 21' 40"</b>			8. TOP OF DAM ELEVATION <b>495</b>			9. SPILLWAY CREST ELEV. <b>485</b>							
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										16. DATE NORMAL OPER. BEGAN			
	e. IRRIGATION										Nov 37			
	f. CONSERVATION													
	g. INACTIVE													
WATERSHED	17. LENGTH OF RESERVOIR <b>0.07</b> MILES				AV. WIDTH OF RESERVOIR <b>0.02</b> MILES									
	18. TOTAL DRAINAGE AREA <b>0.94</b> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <b>18.0</b> INCHES									
	19. NET SEDIMENT CONTRIBUTING AREA <b>.94</b> SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES									
	20. LENGTH <b>1.69</b> MILES		AV. WIDTH <b>.56</b> MILES		24. MEAN ANNUAL RUNOFF AC.-FT.									
	21. MAX. ELEV. <b>1513</b>		MIN. ELEV. <b>480.5</b>		25. ANNUAL TEMP. MEAN <b>62.2°</b> RANGE <b>48.8°-75.6°</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/I. RATIO, AC.-FT. PER AC.-FT.	
	Sep 49		1	12										
	Sep 50		1	13										
	Apr 52		1.6	14.6										
	Feb 56		3.8	18.4										
	Sep 59		3.6	22.0										
	Sep 60		1.0	23.0										
	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	
	Sep 49		10.20		No record of inflow									
	Sep 50		13.20											
	Apr 52		39.80											
	Feb 56		14.20											
	Sep 59		15.20											
	Sep 60		10.00											
26. DATE OF SURVEY		37. 3/ 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							
Sep 49		.36	.36	.38	21.7	1.81	1.93							
Sep 50		.75	.75	.80	22.5	1.73	1.84							
Apr 52		8.75	5.46	5.82	31.2	2.14	2.27							
Feb 56		1.67	.44	.47	32.9	1.79	1.90							
Sep 59		4.73	1.31	1.39	37.6	1.71	1.82							
Sep 60		3.10	3.10	3.29	40.7	1.76	1.87							
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					

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  
 1/ Item 25 - Temperatures taken at Pasadena, California.  
 2/ Item 32 - Capacity of debris basin varies. Debris excavated at various times.  
 3/ Item 37 - Sedimentation values computed by LACFCD are based on complete water year.

RESERVOIR SEDIMENT  
DATA SUMMARY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

Nichols Debris Basin

NAME OF RESERVOIR

70-50c

DATA SHEET NO.

DAM	1. OWNER <b>LACFD</b>		2. STREAM <b>Nichols Canyon</b>		3. STATE <b>California</b>			
	4. SEC. Land <b>TWP. Grant RANGE</b>		5. NEAREST P.O. <b>Hollywood</b>		6. COUNTY <b>Los Angeles</b>			
	7. LAT <b>34° 06' 30"</b> LONG. <b>118 21' 40"</b>		8. TOP OF DAM ELEVATION <b>495.0</b>		9. SPILLWAY CREST ELEV. <b>485.0</b>			
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					16. DATE NORMAL OPER. BEGAN  <b>Nov 37</b>		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY							
	e. IRRIGATION							
	f. CONSERVATION							
	g. INACTIVE							
17. LENGTH OF RESERVOIR <b>0.07</b> MILES	AV. WIDTH OF RESERVOIR <b>0.02</b> MILES							
18. TOTAL DRAINAGE AREA <b>0.94</b> SQ. MI.		22. MEAN ANNUAL PRECIPITATION <b>18.0</b> INCHES						
19. NET SEDIMENT CONTRIBUTING AREA <b>0.94</b> SQ. MI.		23. MEAN ANNUAL RUNOFF		INCHES				
20. LENGTH <b>1.69</b> MILES	AV. WIDTH <b>0.56</b> MILES		24. MEAN ANNUAL RUNOFF		AC.-FT.			
21. MAX. ELEV. <b>1513</b>		MIN. ELEV. <b>480.5</b>		25. ANNUAL TEMP. MEAN <b>62.2°</b> RANGE <b>48.8°-75.6°</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/I. RATIO, AC.-FT. PER AC.-FT.
	Sep 66	6.0	29.0					
	Sep 68	2.0	21.0					
	Sep 70	2.0	23.0					
	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	
	Sep 66	15.34	No record of inflow.					
	Sep 68	22.03						
	Sep 70	19.90						
	26. DATE OF SURVEY	37. <b>3/</b> 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		
Sep 66	6.00	1.00	1.06	46.7	1.61	1.71		
Sep 68	4.03	2.02	2.15	50.7	1.64	1.74		
Sep 70	5.21	2.60	2.77	55.9	2.43	2.59		
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	

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. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

1/Item 25 - Temperature taken at Pasadena, California.

2/Item 32 - Capacity of debris basin varies. Debris excavated at various times.

3/Item 37 - Sedimentation values computed by LACFCD are based on complete water year.

48. AGENCY MAKING SURVEY      LACFCD  
 49. AGENCY SUPPLYING DATA      C of E

50. DATE      11 February 1971