

RESERVOIR SEDIMENT  
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Loch Lomond (Newell Creek Dam)

NAME OF RESERVOIR

71-45

DATA SHEET NO.

DAM	1. OWNER <u>City of Santa Cruz</u>			2. STREAM <u>Newell Creek</u>			3. STATE <u>California</u>					
	4. SEC. <u>34</u> TWP. <u>9S</u> RANGE <u>2W</u>			5. NEAREST P.O. <u>Zayante</u>			6. COUNTY <u>Santa Cruz</u>					
	7. LAT. ° ' " LONG. ° ' "			8. TOP OF DAM ELEVATION			9. SPILLWAY CREST ELEV. <u>577.5</u>					
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										1960	
	b. MULTIPLE USE											
	c. POWER										16. DATE NORMAL OPER. BEGAN	
	d. WATER SUPPLY		<u>577.5</u>		<u>180</u>		<u>8600</u>		<u>8600</u>			
	e. IRRIGATION										1960	
	f. CONSERVATION											
	g. INACTIVE											
17. LENGTH OF RESERVOIR <u>2.5</u> MILES				AV. WIDTH OF RESERVOIR <u>0.1</u> MILES								
18. TOTAL DRAINAGE AREA <u>5.1</u> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <u>40</u> INCHES								
19. NET SEDIMENT CONTRIBUTING AREA <u>4.8</u> SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES								
20. LENGTH MILES		AV. WIDTH MILES		24. MEAN ANNUAL RUNOFF AC.-F.T.								
21. MAX. ELEV.		MIN. ELEV.		25. ANNUAL TEMP: MEAN RANGE								
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.				
<u>1960</u>		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>180</u>	<u>8600</u>					
<u>9/71</u>		<u>10</u>	<u>10</u>	<u>Range(D)</u>	<u>31(R)</u>	<u>180</u>	<u>8554</u>					
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				
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					
<u>9/71</u>		<u>46</u>	<u>4.6</u>	<u>.96</u>	<u>46</u>	<u>4.6</u>	<u>.96</u>					
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				
<u>9/71</u>		<u>56.5</u>	<u>1180</u>	<u>1180</u>	<u>.05</u>	<u>.53</u>	<u>-</u>	<u>-</u>				

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													
9/71							0	61	39					
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														
Data taken from report: Erosion Processes, Fluvial Sediment Transport and Reservoir Sedimentation in a part of Newell and Zayante Creek Basins, Santa Cruz County, California, by William M. Brown III, USGS Open File Report, August 3, 1973.														
48. AGENCY MAKING SURVEY														
49. AGENCY SUPPLYING DATA														
U.S. Geological Survey Water Resources Division Menlo Park, California														
50. DATE 12-10-76														