WATER FOR SANTA CRUZ COUNTY

Using Water Transfer Concept

March 6 and 7, 2017

A presentation of

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Purpose of this Presentation

- Tonight we follow the water transfer path into the future.

- We will focus on how our water supply changes in the next 5, 10 and 15 years.

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Santa Cruz Water Supply

2015 – 2035

Table 6-10. Water Supplies -- Projected (page 6-24)	2015	2020	2025	2030	2035
North Coast sources	471	637	642	671	671
San Lorenzo River	1458	1,882	1,842	1,829	1,834
Loch Lomond Reservoir	495	595	551	540	547
Live Oak/Beltz Wells	249	138	129	127	128
Totals	2673	3,252	3,164	3,167	3,180
		millions of gallons			
Stored in Aquifer	0	XX	XX	XX	XX

Santa Cruz Transfers Water to SqCWD

1.4 million gallons/day = 490 million gallons/year

How often? Loch Lomond spills 7 out of 10 years.

- By 2020, 3 years x 490 m gallons x .7 = 1,029 million gallons
- By 2025, 8 years x 490 m gallons x .7 = 2,744 million gallons
- By 2030, 13 years x 490 m gallons x .7 = 4,459 million gallons

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Loch Lomond Reservoir	495	595	551	540	547
Live Oak/Beltz Wells	249	138	129	127	128
Totals	2,673	3,252	3,164	3,167	3,180
		millions of gallons			
Stored in Aquifer	0	1,029	2,744	4,459	
Revised totals	2,673	4,281	5,908	7,626	

San Lorenzo River Annual Flows

Figure 1 – Water Year Classification System Based on San Lorenzo River Runoff (by year)

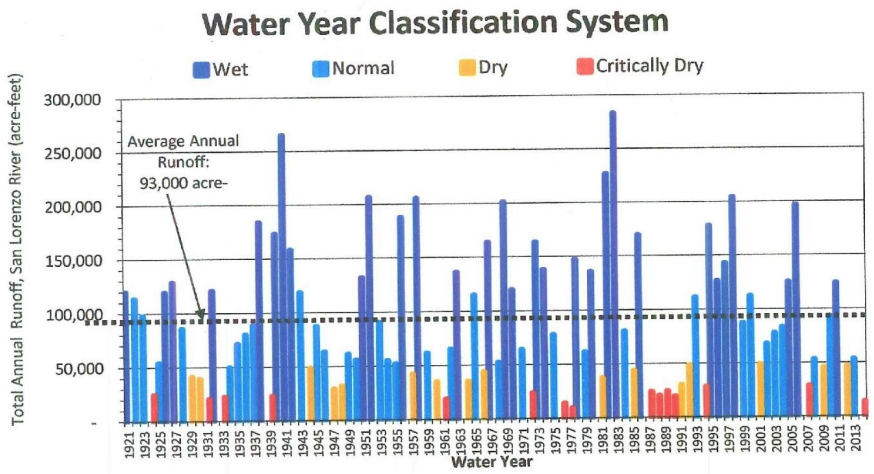
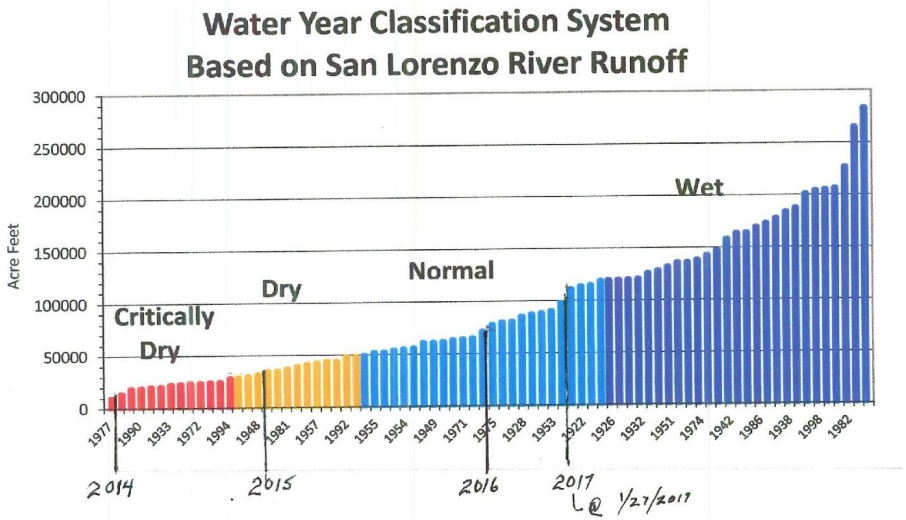


Figure 2 – Water Year Classification System Based on San Lorenzo River Runoff (by water year type)



10

Lochquifer can Double the Rate of Aquifer Recharge

- Santa Cruz uses Loch Lomond as drought protection.
- If we have water in the Aquifer, we can use Loch Lomond to recharge the aquifers faster.
- Santa Cruz could send 1 billion gallons per year to aquifer storage.
- This will require water permit changes and additional capital.

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How “In-Lieu” Works

Soquel Creek 2016 Water production.	
	mgallons
January	64.13
February	64.22
March	68.19
April	75.85
May	91.91
June	102.78
July	110.89
August	101.73
September	97.92
October	85.77
November	71.77
December	70.01
Totals	1,005.14

This water, presently pumped out of wells, stays in the groundwater. in the aquifer.

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Why is Water for Santa Cruz doing this?

- Capital Cost: $20 million compared to $300 million.
- Operating Cost: $1,000/million gallons vs. $9,000/million gallons.
- Recycled water requires 10x the energy.
- Time: 2022 water flow vs. now.

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Who is Water for Santa Cruz County?

Mission Statement: To keep alive in the public consciousness that the solution to the North Santa Cruz county water supply is the San Lorenzo River…. specifically harvesting the excess winter flows that are available in the river.

Goals:

- Santa Cruz and Soquel Creek Water District (SqCWD) are each trying to solve their water problem independently. We need regional solution.
- Regional reduces capital cost $313 million to $50 million.
- Hundreds of millions of gallons in winter stream water each year. Existing North Coast Water rights provide for 500+ million gallons for transfers.
- Begin water transfers now.
- Lochquifer is expandable to provide drought security for Santa Cruz County with water rights changes, increased pipe sizes, Ranney collector and regional agreements.

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Notes on Sources

Page 3. Santa Cruz Urban Management Plan, 2015 issue, revised every 5 years. This is table 10 located in Chapter 6.

Page 6. Water Supply Advisory Committee (WSAC) final report on recommendations. page 18 of 85

Page 8. Soquel Creek Water District website, Converted to million gallons per month from Acre feet per month. 1 acre foot = 325,000 gallons.

Page 10. Water For Santa Cruz Website

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