

Arroyo Seco Water Quality

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Presentation Outline

Water Issues

The Arroyo Seco

Geography, Process, and Data

Concept Map

Is the Arroyo Seco healthy?

Global Water Issues

Clean Water

Developing Countries

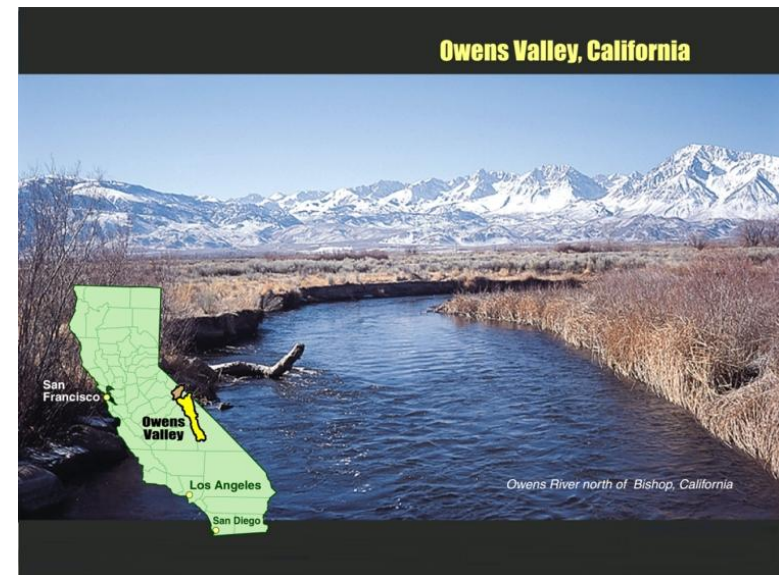
Availability

California Water Issues

- Laws of nature
- Where does our water come from?
- How do we use our water?
- The current problem



Where Does Southern California Get Water ?



The Arroyo Seco

LA River

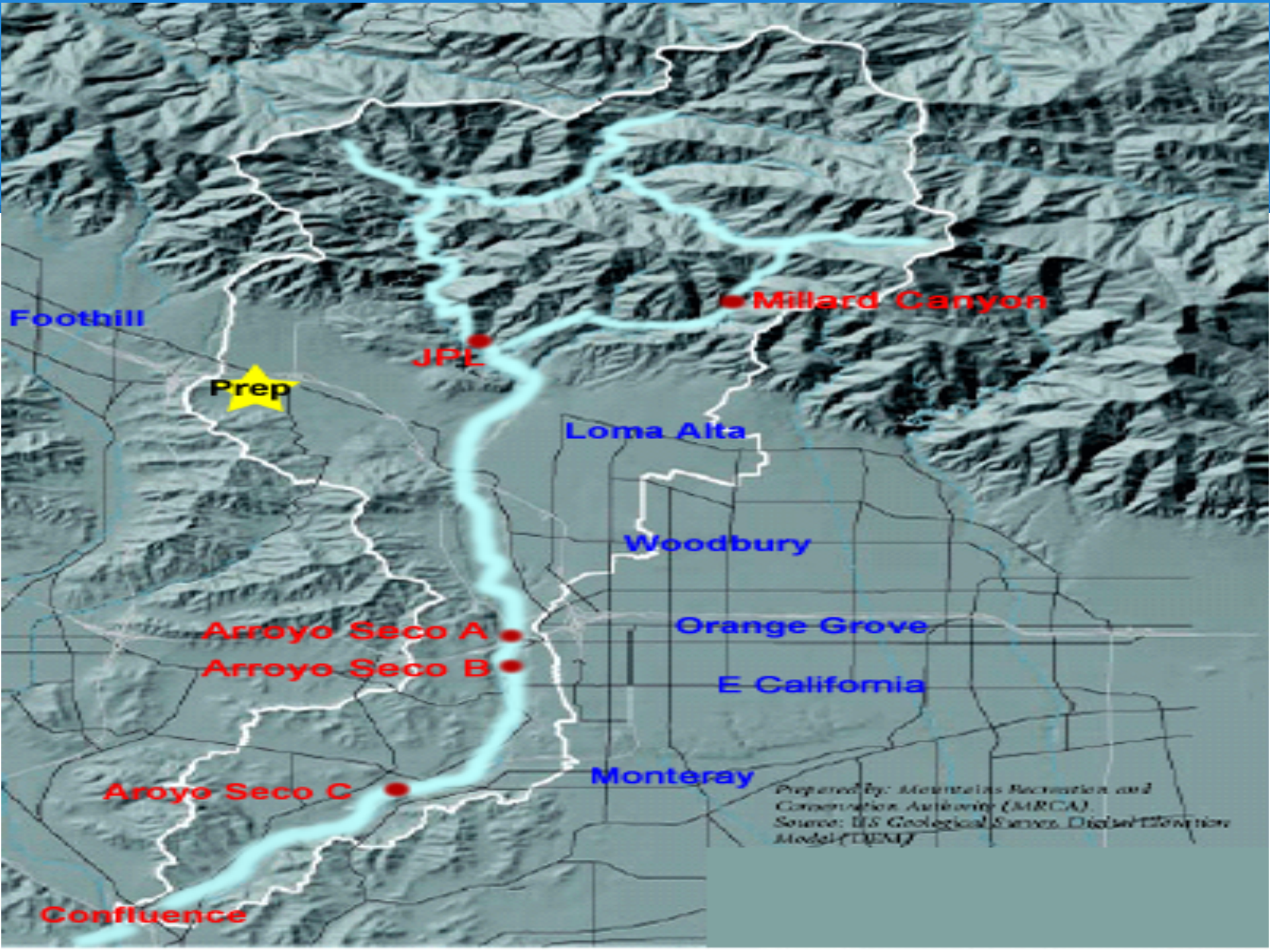
Beginnings

Function

The Question

Is the Arroyo Seco a healthy river?





Foothill

Prep

JPL

Millard Canyon

Loma Alta

Woodbury

Arroyo Seco A

Orange Grove

Arroyo Seco B

E California

Arroyo Seco C

Monterey

Confluence

Prepared by: Mountains Recreation and Conservation Authority (MRCA).
Source: US Geological Survey, Digital Elevation Model (DEM)

Indicators

Conductivity

Temperature

e

pH

D.O.

Nitrate

Bacteria

E.Coli



Undeveloped Site Data

	<u>REGULATORY</u>	<u>STANDARDS</u>	<u>UNDEVE</u>	<u>LOPED</u>
	<u>National MCL</u>	<u>State/Local MCL</u>	<u>Millard</u>	<u>JPL</u>
Discharge (cfs)	N/A	Arroyo Seco/ LA River Confluence: 23	0.4	1.8
Conductivity: (mg/L)	Maximum 1000	570	239	242
Temperature: (C)	NA	NA	11	11.6
pH:	6.5-8.5	7.6-8.6	7.8	7.3
D.O.: (mg/L)	Must be >5mg/l to support life	N/A	7.2	9.2
Nitrate: (mg/L)	45	10	3.2	1.6
Bacteria: (cfu/100 mL)	220 cfu per 100 mL of water	N/A	700	1500
E.Coli: (cfu/100 mL)	N/A	N/A	None	None

Developed Site Data

	REGULATORY	STANDARDS		DEVELOPED	
	National MCL	State/Local MCL	Arroyo Seco A	Arroyo Seco B	Arroyo Seco C
Discharge (cfs)	N/A	Arroyo Seco/ LA River Confluence: 23	0.5	1.2	4.9
Conductivity: (mg/L)	Maximum 1000	570	146.8	685	458
Temperature: (C)	NA	NA	15.5	13.5	13.8
pH:	6.5-8.5	7.6-8.6	8.2	8.52	8.4
D.O.: (mg/L)	Must be >5mg/l to support life	N/A	4.9	6.5	7.5
Nitrate: (mg/L)	45	10	9.2	5.8	5.8
Bacteria: (cfu/100 mL)	220 cfu per 100 mL of water	N/A	2800	1300	1700
E.Coli: (cfu/100 mL)	N/A	N/A	200	500	6100

Sources/Human Use

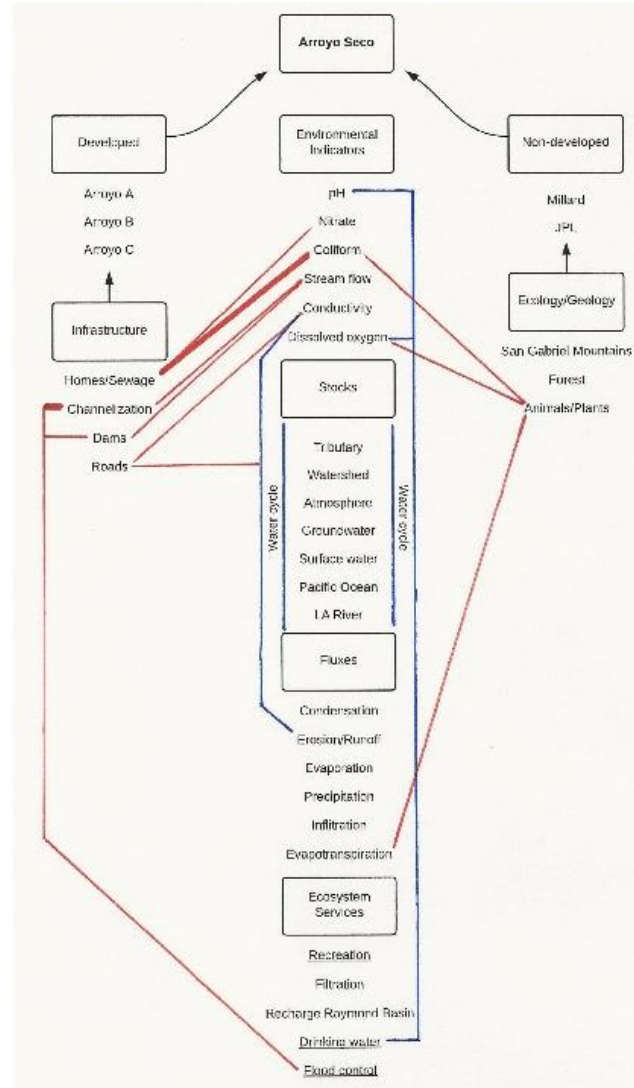
Direct Sources

Outfalls from factories or treatment plants

Indirect Sources

Rain water is run through the water solution and picks up pollutants along the way. An example of this particular to the arroyo would be freeway runoff.

Concept Map



Conclusion

Is the Arroyo Seco healthy?