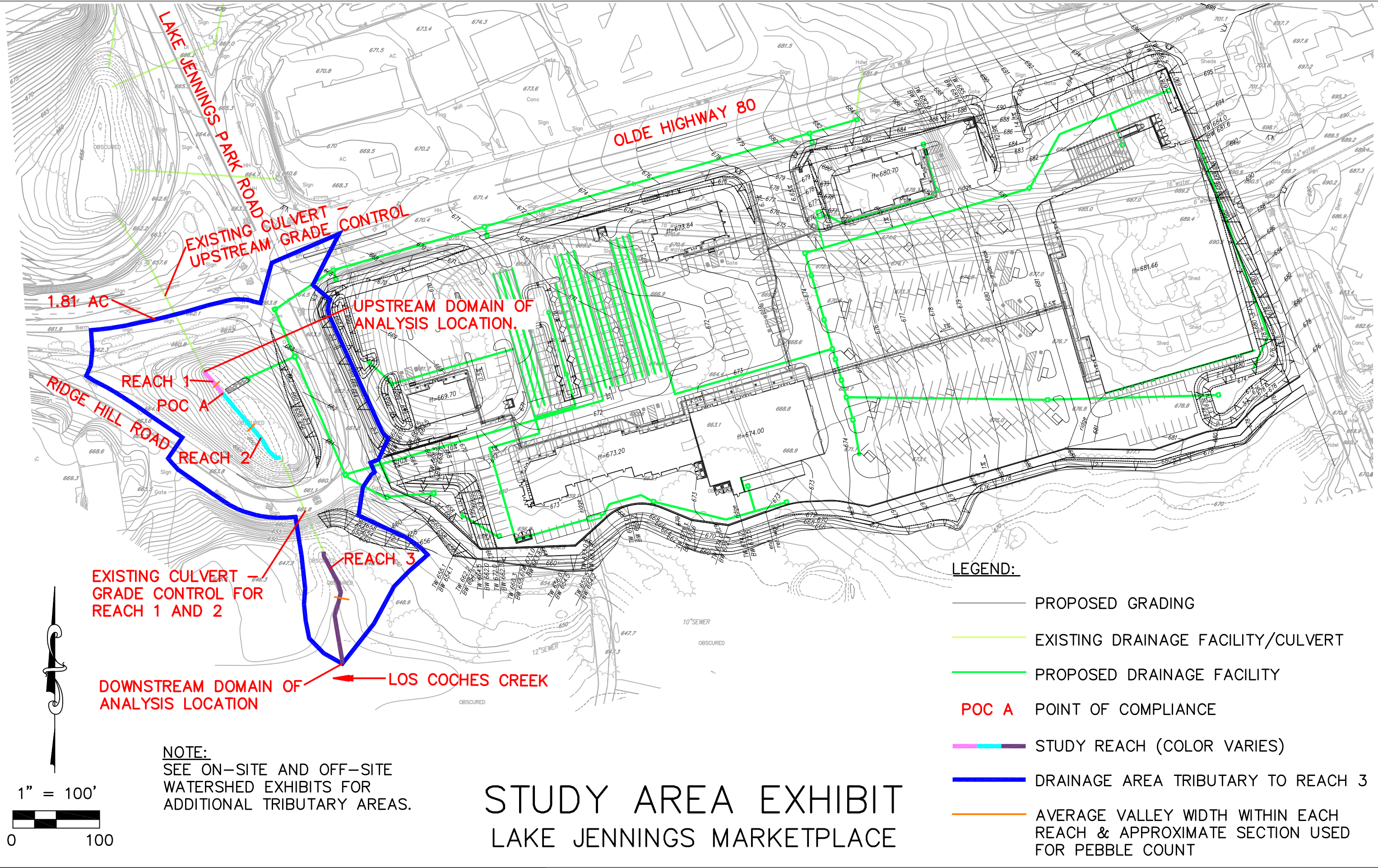




APPENDIX A

SCCWRP INITIAL DESKTOP ANALYSIS

FORM 1: INITIAL DESKTOP ANALYSIS

Complete all shaded sections.

IF required at multiple locations, circle one of the following site types:

Applicant Site / Upstream Extent / Downstream Extent

Location:	Latitude: 32.8429	Longitude: -116.8792
	Description (river name, crossing streets, etc.): Lake Jennings Marketplace	

GIS Parameters: The International System of Units (SI) is used throughout the assessment as the field standard and for consistency with the broader scientific community. However, as the singular exception, US Customary units are used for contributing drainage area (A) and mean annual precipitation (P) to apply regional flow equations after the USGS. See SCCWRP Technical Report 607 for example measurements and "[Screening Tool Data Entry.xls](#)" for automated calculations.

Form 1 Table 1. Initial desktop analysis in GIS.

Symbol	Variable	Description and Source	Value
Watershed properties (English units)	A	Area (mi ²)	See attached Form 1 table on next page for calculated values for study reach.
	P	Mean annual precipitation (in)	
Site properties (SI units)	S_v	Valley slope (m/m)	
	W_v	Valley width (m)	

Form 1 Table 2. Simplified peak flow, screening index, and valley width index. Values for this table should be calculated in the sequence shown in this table, using values from Form 1 Table 1.

Symbol	Dependent Variable	Equation	Required Units	Value
Q_{10cfs}	10-yr peak flow (ft ³ /s)	$Q_{10cfs} = 18.2 * A^{0.87} * P^{0.77}$	A (mi ²) P (in)	See attached Form 1 table on next page for calculated values for study reach.
Q₁₀	10-yr peak flow (m ³ /s)	$Q_{10} = 0.0283 * Q_{10cfs}$	Q _{10cfs} (ft ³ /s)	
INDEX	10-yr screening index (m ^{1.5} /s ^{0.5})	$INDEX = S_v * Q_{10}^{0.5}$	S _v (m/m) Q ₁₀ (m ³ /s)	
W_{ref}	Reference width (m)	$W_{ref} = 6.99 * Q_{10}^{0.438}$	Q ₁₀ (m ³ /s)	
VWI	Valley width index (m/m)	$VWI = W_v / W_{ref}$	W _v (m) W _{ref} (m)	

(Sheet 1 of 1)

SCCWRP FORM 1 ANALYSES

Reach	Area A, sq. mi.	Mean Annual Precip. P, inches	Valley Slope Sv, m/m	Valley Width Wv, m	10-Year Flow Q10cfs, cfs	10-Year Flow Q10, cms
1	0.1958	15.58	0.0059	2.74	36	1.03
2	0.1958	15.58	0.0059	3.35	36	1.03
3	0.1986	15.58	0.0115	4.88	37	1.05

Reach	10-Year Screening Index INDEX	Reference Width Wref, m	Valley Width Index VWI, m/m
1	0.0060	7.09	0.39
2	0.0060	7.09	0.47
3	0.0117	7.13	0.68

US COOP Station Map



LAKESIDE RAIN GAGE

LAKE SIDE 2 E, CALIFORNIA (044710)

Period of Record Monthly Climate Summary

Period of Record : 5/ 1/1967 to 2/28/2013

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	Insuff icient Data												
Average Min. Temperature (F)	Insuff icient Data												
Average Total Precipitation (in.)	2.79	3.45	2.97	1.14	0.32	0.12	0.07	0.09	0.26	0.76	1.49	2.14	15.58
Average Total SnowFall (in.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0

Percent of possible observations for period of record.

Max. Temp.: 0% Min. Temp.: 0% Precipitation: 98.2% Snowfall: 98.2% Snow Depth: 98.2%

Check [Station Metadata](#) or [Metadata graphics](#) for more detail about data completeness.

Western Regional Climate Center, wrcc@dri.edu



COMPARISON OF RECEIVING CHANNEL VS. LOS COCHES CREEK

TOTAL ON-SITE WATERSHED AREA = 12.88 ACRES





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DESIGNER:	NH
DRAWN:	AMJ
DATE:	2-25-14
JOB NO.:	921-13-06

TOTAL OFF-SITE WATERSHED AREA = 112.40 ACRES



SCALE: 1"=400'

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JOB NO.: 921-13-05