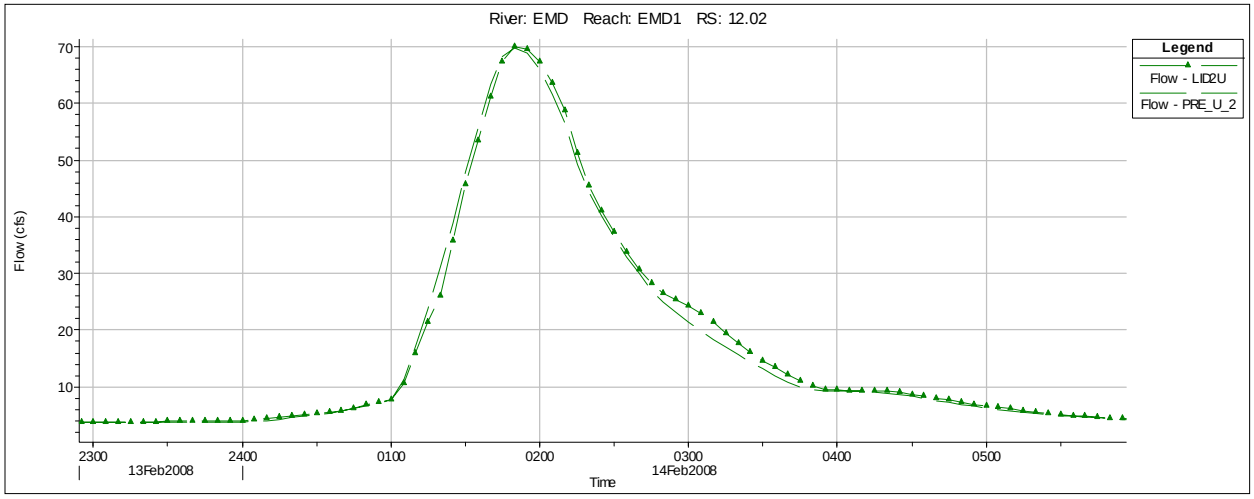
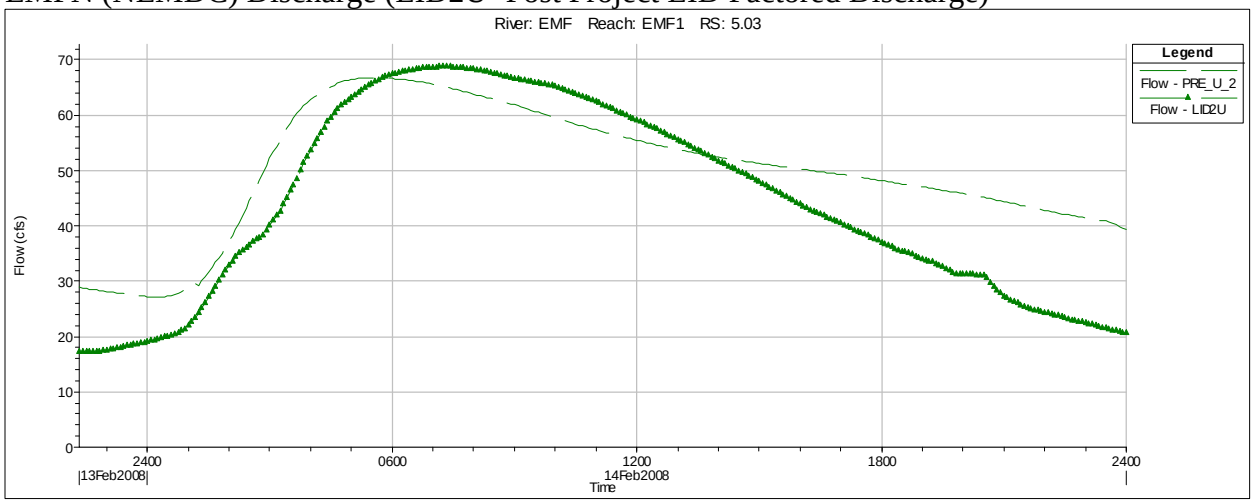
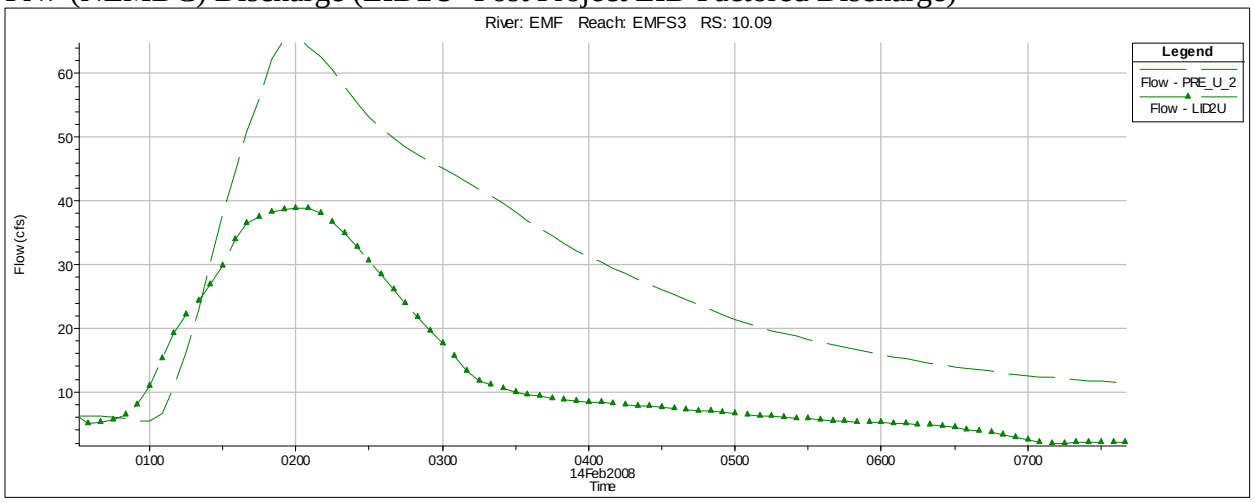


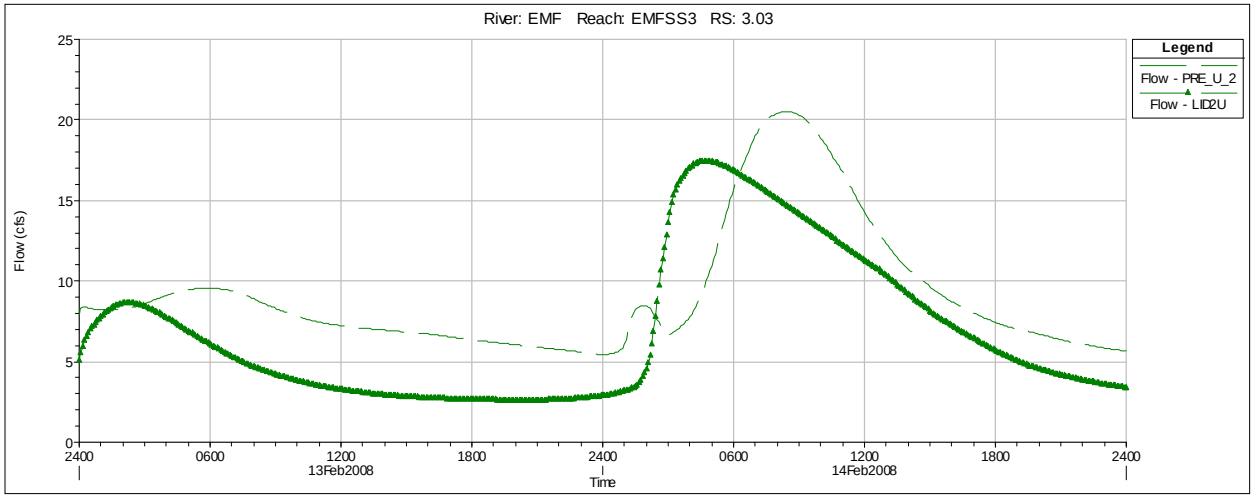
EMFN (NEMDC) Discharge (LID2U=Post Project LID Factored Discharge)



FN7 (NEMDC) Discharge (LID2U=Post Project LID Factored Discharge)



EMFS (NEMDC) Discharge (LID2U=Post Project LID Factored Discharge)

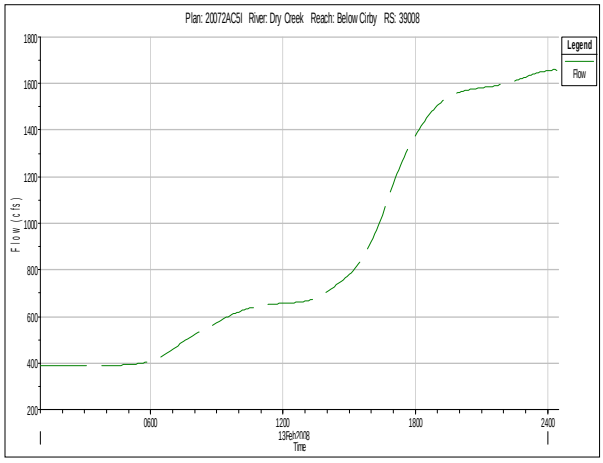


For Dry Creek the data is obtained from the HEC-RAS and peak flows are summarized in the table below:

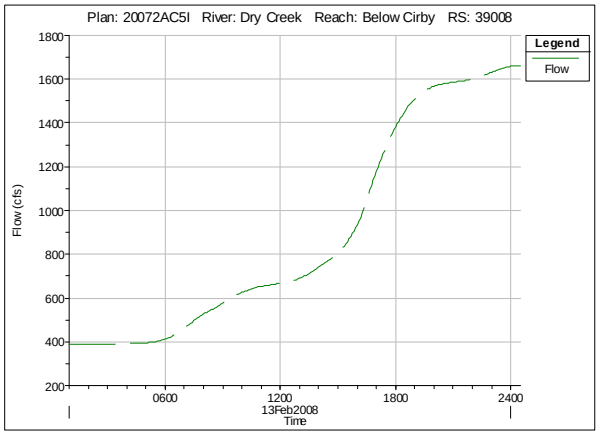
Description:	Pre-Project 2-yr 24-hr peak flow	Post-project (LID Factored) 2-yr 24-hour Peak Flow
Doyle Tributary at discharge to Dry Creek	30	30
DC75A Shed	1	1
DC75C Shed	4	4
DC76A Shed	7	7
Inflow to Gibson Ranch	16	16
Gibson Outflow to Dry Creek	20	20

DRY CREEK Downstream of the project contributions:

PRE-PROJECT



POST PROJECT (LID)



V. Volumetric Impacts at Curry Creek:

The county has requested that Volumetric Impacts at Curry Creek be evaluated per the "Cross Canal – Sutter County" criteria for the 8-day 100-year event.

A. Hydrologic Storm Parameters

To estimate the volume increases in runoff from future developments within the project areas tributary to Auburn Ravine, a HEC-1 rainfall-runoff computer model using an 8-day storm duration was used. The precipitation data was originally developed from gages after the mid February 1986 storm events (worst 8-days) as measured at the Roseville Filtration Plant. The precipitation values were then adjusted so the sum of the values for the 8-day period would equal the 100-year precipitation amounts specified in the Placer County Stormwater Management Manual (SWMM). The results are approximate 100-year precipitation data for the 200-foot elevation (per the manual). The total amount of precipitation amount for the 8-day period is 10.48 inches.

The storm which makes up the basis event produces precipitation distributed as shown in the following table:

TABLE VA1 - 1986 8-Day Rainfall Totals

Adjusted to 100-year 8-day Event Totals

Day	1	2	3	4	5	6	7	8
Incremental Rainfall (in.)	1.07	.25	.49	1.21	1.27	2.10	3.99	.10
Cumulative Rainfall (in.)	1.07	1.32	1.81	3.02	4.29	6.39	10.38	10.48

An 8-day duration storm was chosen for this analysis because the accumulated runoff volume over long duration storms have impacted low lying residents in Sutter County. A 10-minute time step was used in the HEC-1 calculations to be consistent with previous analysis reviewed by Sutter County Public Works.

For the Placer Vineyards project which varies in elevation from less than 200 feet to more than 900 feet it was necessary to adjust the precipitation rates for each shed based on the elevation of the centroid. The following Table lists the values specified for a 100-year 5-day and 10-day event by the Placer County SWMM . The interpolated values for the 8-day event were utilized for this analysis.

TABLE VA2 - Adjusted Rainfall Depths for Elevation

Elevation (Feet)	5-day SWMM Precipitation Values (inches)	10-day SWMM Precipitation Values (inches)	Interpolated 8-day Precipitation Values (inches)
100	8.42	11.01	9.97
200	9.02	11.91	10.75
300	9.61	12.81	11.53
400	10.21	13.71	12.31
500	10.8	14.61	13.09
1000	13.78	19.11	16.98
1200	14.98	20.91	18.54
2000	19.74	28.1	24.76
3000	25.7	37.1	32.54
4000	29.65	43.8	38.14
5000	33	49.6	42.96

B Retention Storage Quantities:

The summary of the analysis is presented in the following table.

TABLE VB1 - VOLUMETRIC IMPACTS SUMMARY TABLE

		Soil Group				NON-LID	Impact Rate (AF/acre)			
LU Code	Land Use	A	B	C	D	% Imperv	A	B	C	D
bp	Bus.prof.	0.48	0.25	0.16	0.09	80	0.535	0.477	0.39	0.352
bp/pc	Bus.prof/Pub.Com	0.48	0.25	0.16	0.09	80	0.535	0.477	0.39	0.352
c	Cemetery	0.48	0.25	0.16	0.09	30	0.163	0.146	0.094	0.117
cem	Cemetery	0.48	0.25	0.16	0.09	30	0.163	0.146	0.094	0.117
cmu	Comm.Multiuse	0.48	0.25	0.16	0.09	75	0.498	0.444	0.36	0.329
com	Commercial	0.48	0.25	0.16	0.09	80	0.535	0.477	0.39	0.352
es	Elementary School	0.48	0.25	0.16	0.09	50	0.312	0.279	0.212	0.212
f	Fire	0.48	0.25	0.16	0.09	70	0.46	0.411	0.33	0.305
h	Hospital	0.48	0.25	0.16	0.09	70	0.46	0.411	0.33	0.305
hdr	Hi Dens.Res.	0.48	0.25	0.16	0.09	65	0.423	0.378	0.301	0.282
hs	High School	0.48	0.25	0.16	0.09	50	0.312	0.279	0.212	0.212
l	Landscape	0.48	0.25	0.16	0.12	5	-0.004	-0.002	-0.04	-0.048
ldr	Low Dens.Res	0.48	0.25	0.16	0.09	40	0.238	0.213	0.153	0.165
mdr	Med. Dens.Res.	0.48	0.25	0.16	0.09	50	0.312	0.279	0.212	0.212
ms	Mid School	0.48	0.25	0.16	0.09	50	0.312	0.279	0.212	0.212
o	Office	0.48	0.25	0.16	0.09	80	0.535	0.477	0.39	0.352
os	Open Space	0.41	0.22	0.12	0.09	2	0	0	0	0
p	Park	0.50	0.25	0.16	0.09	2	0	0	0	0
pp	Muni.Faci.	0.48	0.25	0.16	0.09	65	0.423	0.378	0.301	0.282
pub	Public	0.48	0.25	0.16	0.09	65	0.423	0.378	0.301	0.282
rec	Recreation	0.50	0.25	0.16	0.09	5	-0.004	-0.002	-0.04	-0.048
rel	Religion	0.48	0.25	0.16	0.09	50	0.312	0.279	0.212	0.212
road	Road	0.48	0.22	0.12	0.07	90	0.609	0.545	0.455	0.405
ss	Public	0.48	0.22	0.12	0.07	90	0.609	0.545	0.455	0.405
water	Public	0.48	0.25	0.16	0.09	65	0.423	0.378	0.301	0.282
t	Transport	0.48	0.22	0.12	0.07	90	0.609	0.545	0.455	0.405

TABLE VB2 - VOLUMETRIC IMPACTS COMPUTATIONS

(Land Use area in acres)

CURRY CREEK VOLUMETRIC IMPACTS (AF)

		PROPOSED LAND USE TOTALS				Impact Amount (AF)			
LU Code	Land Use	Soil A	Soil B	Soil C	Soil D	Soil A	Soil B	Soil C	Soil D
bp	Bus.prof.	0.00	0.00	0.00	0.00	0	0	0	0.00
bp/pc	Bus.prof/Pub.Com	0.00	0.00	0.00	0.00	0	0	0	0.00
c	Cemetery	0.00	0.00	0.00	0.00	0	0	0	0.00
cem	Cemetery	0.00	0.00	0.00	0.00	0	0	0	0.00
cmu	Comm.Multiuse	0.00	0.00	0.00	0.00	0	0	0	0.00
com	Commercial	0.00	0.00	0.00	17.11	0	0	0	6.02
es	Elementary School	0.00	0.00	0.00	0.00	0	0	0	0.00
f	Fire	0.00	0.00	0.00	0.00	0	0	0	0.00
h	Hospital	0.00	0.00	0.00	0.00	0	0	0	0.00
hdr	Hi Dens.Res.	0.00	0.00	0.00	0.00	0	0	0	0.00
hs	High School	0.00	0.00	0.00	0.00	0	0	0	0.00
l	Landscape	0.00	0.00	0.00	0.00	0	0	0	0.00
ldr	Low Dens.Res	0.00	0.00	0.00	73.17	0	0	0	12.07
mdr	Med. Dens.Res.	0.00	0.00	0.00	15.94	0	0	0	3.38
ms	Mid School	0.00	0.00	0.00	0.00	0	0	0	0.00
o	Office	0.00	0.00	0.00	0.00	0	0	0	0.00
os	Open Space	0.00	0.00	0.00	36.61	0	0	0	0.00
p	Park	0.00	0.00	0.00	5.84	0	0	0	0.00
pp	Muni.Faci.	0.00	0.00	0.00	0.00	0	0	0	0.00
pub	Public	0.00	0.00	0.00	0.00	0	0	0	0.00
rec	Recreation	0.00	0.00	0.00	0.00	0	0	0	0.00
rel	Religion	0.00	0.00	0.00	0.00	0	0	0	0.00
road	Road	0.00	0.00	0.00	36.33	0	0	0	14.71
ss	Public	0.00	0.00	0.00	0.00	0	0	0	0.00
water	Public	0.00	0.00	0.00	0.00	0	0	0	0.00
t	Transport	0.00	0.00	0.00	0.00	0	0	0	0.00
				TOTAL AREA (AC)=	185.00			TOTAL IMPACT (AF) =	36.19

C Proposed Mitigation

The Summary of mitigation which would be required at the Natomas Cross Canal watershed are as follows (exceeds the needed 36.19 AF):

TABLE VB3 – PROPOSED RETENTION LOCATIONS

Watershed Location for Volumetric Mitigation:	Required 8-day 100-year event volume:	Proposed Retention Locations:
Curry Creek -Y	14.8 AF	1.158 Inline Weir Control for upstream impoundment
Curry Creek –N	9.7 AF	Gate at 1.115 Culvert for control of upstream impoundment
Curry Creek -J	12.0 AF	Gate at 1.025 for control of upstream impoundment

Note AF is Acre Feet of storage

The project would propose to mitigate these volumes onsite within the proposed detention facilities and channels. At this location, an inline detention weir structure is proposed. A slide gate structure would be added to the weir structure such that the required impoundment volume could be retained within the project as needed. The weir structure would be designed such that retention could occur, while maintaining capacity to pass peak flows.

Alternatively it may be possible to mitigate these impact volumes at an offsite facility such as Reason Farms (City of Roseville) or Scillaci Farms (Placer County) if those projects create volumes in advance of this project. Other Volumetric Mitigation project for mitigation of the Sutter County Sump flooding issue may be available, that we are not aware of at the time of the writing of this document.

Each phase of the development will be required, at a minimum, to mitigate the volumetric impacts of that phase at the time of development. Mitigation beyond a phase's individual impacts may be required by the County in order to construct, or complete construction, of Permanent Drainage Facilities per the requirements of the Development Agreement.

The final requirements for how the facilities would be required to operate would have to be agreed upon by the managing agencies. Current management strategies for the operation of the Natomas Cross Canal Volumetric Mitigation Facilities, involves monitoring the Verona Gage at the Sacramento River, and forcing storage in these facilities only when the Verona Gage exceeds elevation 37.0. The Verona Gage can be monitored via the internet at the following link:
http://www.cnrfc.noaa.gov/graphicalRVF.php?id=VONC1

APPENDICES

APPENDIX A
HEC-1 Pre-Project
PDP Input

APPENDIX B
HEC-1 Post-Project
PDP Input

APPENDIX C
HEC-RAS Pre-Project
SUMMARY TABLE

DRY CREEK – BELOW CIRBY

CURRY CREEK - NEMDC

APPENDIX D
HEC-RAS Post-Project
SUMMARY TABLE

DRY CREEK – BELOW CIRBY – POST_PROJECT

CURRY CREEK – NEMDC – POST-PROJECT

APPENDIX E
Detailed Pre-project Watershed Parameters

Detailed Watershed parameters are provided in the spreadsheets included on disk

APPENDIX F
Detailed Post-project Watershed Parameters

Detailed Watershed parameters are provided in the spreadsheets included on disk

APPENDIX G
Detailed Pre-project Computed Peak Flows

The Peak flow Summary Tables are not appropriate for the Hydraulic Routing methodologies employed in the Novmeber 2013 Amendment.

APPENDIX H
Detailed Post-project Computed Peak Flows

MITIGATED

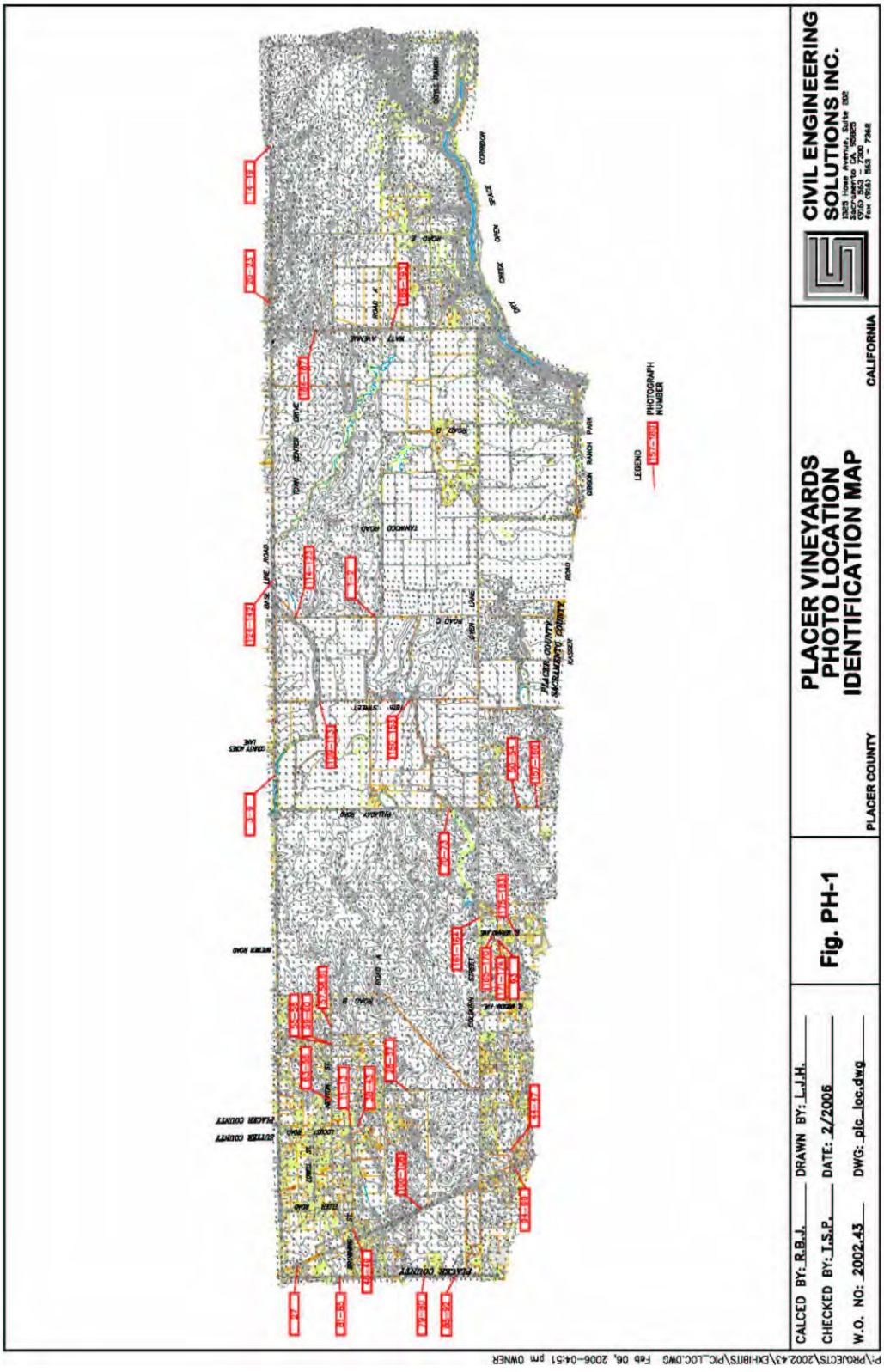
The Peak flow Summary Tables are not appropriate for the Hydraulic Routing methodologies employed in the Novmeber 2013 Amendment.

UNMITIGATED OFFSITE
The Peak flow Summary Tables are not appropriate for the Hydraulic Routing methodologies employed in the Novmeber 2013 Amendment.

APPENDIX I

Storm Drainage Calculations
100-year,
Followed by 10-year

APPENDIX J
Project Photos


LEGEND
PHOTOGRAPH NUMBER
PLACER COUNTY
SACRAMENTO COUNTY
SUTTER COUNTY
CIVIL ENGINEERING SOLUTIONS INC.
PLACER VINEYARDS
PHOTO LOCATION
IDENTIFICATION MAP
PLACER COUNTY
CALIFORNIA
Fig. PH-1
CALCED BY: R.B.J.
DRAWN BY: L.J.H.
CHECKED BY: T.S.P.
DATE: 2/2006
W.O. NO: 2002.43
DWG: plc_loc.dwg
P:\PROJECTS\2002.43\EXHIBITS\PLC_LOC.DWG Feb 06, 2006-04:51 pm OWNER

PLACER VINEYARDS PHOTO DESCRIPTION

PHOTO NO.	PHOTO DESCRIPTION
1	5.49NonFunctionCrushed.jpg
2	5.49NonFunctionCrushedA.jpg
3	BaselineRoadNorthEndA32X48ArchCMP..jpg
4	BaselineRoadNorthEndB32X48ArchCMP.jpg
5	BaselineRoadNorthEndC32X48ArchCMP..jpg
6	BaselineRoadNorthEndD32X48ArchCMP..jpg
7	BaselineRoadSouthEndA32X48ArchCMP.jpg
8	BaselineRoadSouthEndB32X48ArchCMP.jpg
9	BaselineRoadSouthEndC32X48ArchCMP.jpg
10	Between2.18&5.49NonFunctionCrushedB.jpg
11	BrowningandLocustPrivate12CMP.jpg
12	BrowningandLocustPrivateA12CMP.jpg
13	BrowningandLocustPrivateB12CMP.jpg
14	CurryCreekEastEndBaselineRoadNorthSide72X102ArchCMP.jpg
15	CurryCreekEastEndBaselineRoadNorthSideA72X102ArchCMP.jpg
16	CurryCreekEastEndBaselineRoadNorthSideArch72X102CMP.jpg
17	CurryCreekEastEndBaselineRoadSouthSide72X102ArchCMP.jpg
18	CurryCreekEastEndBaselineRoadSouthSideA72X102ArchCMP.jpg
19	CurryCreekEastEndBaselineRoadSouthSideB72X102ArchCMP.jpg
20	CurryCreekWestEndBaselineRoadNorthSide42X60ArchCMP.jpg
21	CurryCreekWestEndBaselineRoadNorthSideA42X60ArchCMP.jpg
22	CurryCreekWestEndBaselineRoadSouthSide42X60ArchCMP.jpg
23	CurryCreekWestEndBaselineRoadSouthSideA42X60ArchCMP.jpg
24	EastEnd72InchCP.jpg
25	EastEndA72InchCP.jpg
26	EastEndB72InchCP.jpg
27	IfYouHopetoLiveDoNotTrespassThereRRtoPleasantGroveRd.jpg
28	LocustRoadNorthofLasGracias1EastEnd18X30(24Flattened)CMP.jpg
29	LocustRoadNorthofLasGracias2EastEnd18X30(24Flattened)CMP.jpg
30	LocustRoadNorthofLasGracias2WestEnd18X30(24Flattened)CMP.jpg
31	LocustRoadNorthofLasGracias3EastEnd18X30(24Flattened)CMP.jpg
32	LocustRoadNorthofLasGracias3WestEnd18X30(24Flattened)CMP.jpg
33	LocustRoadNorthofLasGracias4EastEnd18X30(24Flattened)CMP.jpg
34	LocustRoadNorthofLasGracias5EastEnd18X30(24Flattened)CMP.jpg
35	LocustRoadNorthofLasGraciasWestEnd118X30(24Flattened)CMP.jpg
36	LocustRoadNorthofLasGraciasX!WestEnd18X30(24Flattened)CMP.jpg
37	LocustRoadNorthofLasGraciasXWestEnd18X30(24Flattened)CMP.jpg
38	LocustRoadSoofBrowning32(36Flattened)CMP.jpg
39	LocustRoadSoofBrowningEastEnd32(36Flattened)CMP.jpg
40	LocustRoadSoofBrowningEastEndA32(36Flattened)CMP.jpg
41	LocustRoadSoofBrowningWestEnd32(36Flattened)CMP.jpg
42	LocustRoadSoofBrowningWestEndA32(36Flattened)CMP.jpg
43	LocustRoadSoofBrowningWestEndB32(36Flattened)CMP.jpg
44	LosGarciasAWestEnd12CMP.jpg
45	LosGarciasEastEnd(L)12CMP.jpg
46	LosGarciasEastEndA(L)12CMP.jpg
47	LosGarciasWestEnd12CMP.jpg
48	Madrone&BrowningEastEnd24CMP.jpg
49	Madrone&BrowningWestEnd24CMP.jpg
50	MiddlePalladayRoadEastEnd32CMPA.jpg
51	MiddlePalladayRoadEastEnd32CMPB.jpg
52	MiddlePalladayRoadEastEnd32CMPC.jpg
53	MiddlePalladayRoadWestEnd32CMP.jpg

2/6/20068:34 PMP:\Projects\2005.16\pictures\PictureList.xls

PLACER VINEYARDS PHOTO DESCRIPTION

PHOTO NO.	PHOTO DESCRIPTION
54	MiddlePalladayRoadWestEnd32CMPA.jpg
55	NewtonEastofPeacockASouthEnd24CMP.jpg
56	NewtonEastofPeacockNorthEndA24CMP.jpg
57	NewtonEastofPeacockNorthEndATwo12CMP.jpg
58	NewtonEastofPeacockNorthEndTwo12CMP.jpg
59	NewtonEastofPeacockSouthEnd.jpg
60	NewtonEastofPeacockSouthEndA24CMP.jpg
61	NewtonEastofPeacockSouthEndATwo12CMP.jpg
62	NewtonEastofPeacockSouthEndB24CMP.jpg
63	NewtonFarWestNorthEndFlatten21X36CMP.jpg
64	NewtonFarWestNorthEndFlattenA21X36CMP.jpg
65	NewtonFarWestSouthEndFlatten21X36CMP.jpg
66	NewtonFarWestSouthEndFlattenA21X36CMP.jpg
67	NewtonWestofPeacockNorthEnd24CMP.jpg
68	NewtonWestofPeacockNorthEndA24CMP.jpg
69	NewtonWestofPeacockNorthEndB24CMP.jpg
70	NorthPalladayRoadEastEnd32CMP.jpg
71	NorthPalladayRoadEastEnd32CMPA.jpg
72	NorthPalladayRoadWestEnd32CMP.jpg
73	NorthPalladayRoadWestEnd32CMPA.jpg
74	NorthWestEnd.jpg
75	Palladay12InchCMPRoadDitchEastEnd.jpg
76	Palladay12InchCMPRoadDitchEastEndA.jpg
77	Palladay12InchCMPRoadDitchWestEnd.jpg
78	Palladay12InchCMPRoadDitchWestEndA.jpg
79	PleasantGroveRdMiddleEastEndCMP.jpg
80	PleasantGroveRdMiddleWestEndCMP.jpg
81	PleasantGroveRdNorthEastEnd30CMP.jpg
82	PleasantGroveRdNorthEastEndA30CMP.jpg
83	PleasantGroveRdNorthWestEnd30CMP.jpg
84	PleasantGroveRdNorthWestEndA30CMP.jpg
85	PleasantGroveRdNorthWestEndB30CMP.jpg
86	PleasantGroveRdSouthEastEndFlatten32X36CMP.jpg
87	PleasantGroveRdSouthEastEndFlattenA32X36CMP.jpg
88	PleasantGroveRdSouthEastEndFlattenC32X36CMP.jpg
89	PleasantGroveRdSouthWestEndFlatten32X36CMP.jpg
90	PleasantGroveRdSouthWestEndFlattenA32X36CMP.jpg
91	PleasantGroveRdSouthWestEndFlattenB32X36CMP.jpg
92	PleasantGroveRdSouthWestEndFlattenC32X36CMP.jpg
93	Private36CMP40CIP.jpg
94	RRNorthSectionEastEndANoPipe.jpg
95	RRNorthSectionEastEndNoPipe.jpg
96	RRNorthSectionWestAEndNoPipe.jpg
97	RRNorthSectionWestBEndNoPipe.jpg
98	RRNorthSectionWestCEndNoPipe.jpg
99	RRNorthSectionWestEndNoPipe.jpg
100	RRSouthSectionEastEndANoPipe.jpg
101	RRSouthSectionEastEndBNoPipe.jpg
102	RRSouthSectionEastEndCNoPipeA.jpg
103	RRSouthSectionNoPipeA.jpg
104	RRSouthSectionWestEnd1NoPipe.jpg
105	RRSouthSectionWestEnd2NoPipe.jpg
106	RRSouthSectionWestEndANoPipe.jpg

2/6/20068:34 PMP:\Projects\2005_16\pictures\PictureList.xls

PLACER VINEYARDS PHOTO DESCRIPTION

PHOTO NO.	PHOTO DESCRIPTION
107	RRSouthSectionWestEndCNoPipe.jpg
108	RRSouthSectionWestEndNoPipe.jpg
109	Sec2.10EastEnd48Dia&48X60ArchCMP.jpg
110	Sec2.10EastEndA48Dia&48X60ArchCMP.jpg
111	Sec2.10WestEnd48Dia&48X60ArchCMP.jpg
112	Sec2.10WestEnd48InchDiaCMP.jpg
113	Sec2.10WestEndA48Dia&48X60ArchCMP.jpg
114	Sec2.18EastEndB36DiaCP.jpg
115	Sec2.18EastEndC36DiaCP.jpg
116	Sec2.18WestEnd36DiaCP.jpg
117	Sec2.18WestEndA36DiaCP.jpg
118	Sec2.19EastEnd12DiaPVC.jpg
119	Sec2.19EastEndA12DiaPVC.jpg
120	Sec2.19EastEndB12DiaPVC.jpg
121	Sec2.19EastEndC12DiaPVC.jpg
122	Sec2.19WestEnd12DiaPVC.jpg
123	Sec2.19WestEndA12DiaPVC.jpg
124	Sec2.21SouthSideBaselineRd48X70ArchCMP.jpg
125	Sec2.21SouthSideBaselineRdA48X70ArchCMP.jpg
126	Sec2.21SouthSideBaselineRdB48X70ArchCMP.jpg
127	Sec2.21SouthSideBaselineRdC48X70ArchCMP.jpg
128	Sec2.21SouthSideBaselineRdD48X70ArchCMP.jpg
129	Sec2.21SouthSideBaselineRdE48X70ArchCMP.jpg
130	Sec2.22NorthSideBaselineRd48X70ArchCMP.jpg
131	Sec2.22NorthSideBaselineRdA48X70ArchCMP.jpg
132	Sec2.22NorthSideBaselineRdB48X70ArchCMP.jpg
133	Sec2.3NorthSideBaselineRdDual32X48ArchCMPLeft.jpg
134	Sec2.3NorthSideBaselineRdDual32X48ArchCMPRight.jpg
135	Sec2.3SouthSideBaselineRdDual32X48ArchCMP.jpg
136	Sec2.3SouthSideBaselineRdDualA32X48ArchCMP.jpg
137	Sec2.3SouthSideBaselineRdDualB32X48ArchCMP.jpg
138	Sec2.3SouthSideBaselineRdDualC32X48ArchCMP.jpg
139	Sec2.3SouthSideBaselineRdDualD32X48ArchCMP.jpg
140	Sec2.3SouthSideBaselineRdDualE32X48ArchCMP.jpg
141	Sec2.3SouthSideBaselineRdDualF32X48ArchCMP.jpg
142	Sec2.3SouthSideBaselineRdDualG32X48ArchCMP.jpg
143	Sec3.6EastEnd18InchDiamCMP.jpg
144	Sec3.6Middle18&30InchDiamCMP.jpg
145	Sec3.6Middle18&30InchDiamCMPA.jpg
146	Sec3.6Middle18&30InchDiamCMPB.jpg
147	Sec3.6WestEnd18InchDiamCMPA.jpg
148	Sec3.6WestEnd30InchDiamCMP.jpg
149	Sec3.6WestEnd30InchDiamCMPA.jpg
150	Sec5.35EastEnd36InchDiaCMP.jpg
151	Sec5.35EastEndA36InchDiaCMP.jpg
152	Sec5.35EastEndB36InchDiaCMP.jpg
153	Sec5.35WestEnd36InchDiaCMP.jpg
154	Sec7.7CMP30InchDia.jpg
155	Sec7.7EastEnd36InchDiaCIP.jpg
156	Sec7.7WestEnd36InchDiaCIP.jpg
157	SouthPalladayRoadEastEnd12CMP.jpg
158	SouthPalladayRoadEastEndA12CMP.jpg
159	SouthPalladayRoadEastEndB12CMP.jpg

2/6/20068:34 PMP:\Projects\2005.16\pictures\PictureList.xls

PLACER VINEYARDS PHOTO DESCRIPTION

PHOTO NO.	PHOTO DESCRIPTION
160	SouthPalladayRoadWestEnd12CMP.jpg
161	VeranoRd5X5BoxCulvertPrivateRoad.jpg
162	VeranoRd5X5BoxCulvertPrivateRoadA.jpg
163	VeranoRd5X5BoxCulvertPrivateRoadB.jpg
164	VeranoRd5X5BoxCulvertPrivateRoadC.jpg
165	VeranoRdNorth1EastEnd18CMP&30CMP40CIP.jpg
166	VeranoRdNorth1WestEnd18CMP&30CMP40CIP.jpg
167	VeranoRdNorth2WestEnd18CMP&30CMP40CIP.jpg
168	VeranoRdNorthEastEnd18CMP&30CMP40CIP.jpg
169	VeranoRdNorthEastEndA18CMP&30CMP40CIP.jpg
170	VeranoRdNorthWestEnd18CMP&30CMP40CIP.jpg
171	VeranoRdPrivate36CMP40CIP.jpg
172	VeranoRdPrivateA36CMP40CIP.jpg
173	VeranoRdPrivateB36CMP40CIP.jpg
174	VeranoRdPrivateC36CMP40CIP.jpg
175	VeranoRdSouthEastEnd18CMP&30CMP40CIP.jpg
176	VeranoRdSouthEastEndA18CMP&30CMP40CIP.jpg
177	VeranoRdSouthEastEndB18CMP&30CMP40CIP.jpg
178	VeranoRdSouthEastEndC18CMP&30CMP40CIP.jpg
179	VeranoRdSouthWestEnd(3)36CMP&18CMP&30CMP40CIP.jpg
180	VeranoRdSouthWestEnd18CMP&30CMP40CIP.jpg
181	VeranoRdSouthWestEndA18CMP&30CMP40CIP.jpg
182	VeranoSouthOppositeWestEnd(3)36CMP.jpg
183	VeranoSouthOppositeWestEndA(3)36CMP.jpg
184	WattRoadNorth24CMP.jpg
185	WattRoadNorthA24CMP.jpg
186	WattRoadNorthEastEnd24CMP.jpg
187	WattRoadNorthEastEndA24CMP.jpg
188	WattRoadSouthEastEndD24CMP.jpg
189	WattRoadSouthEastEndE24CMP.jpg
190	WattRoadSouthEastEndF24CMP.jpg
191	WattRoadSouthEastEndG24CMP.jpg
192	WattRoadSouthEastEndH24CMP.jpg
193	WattRoadSouthEastEndI24CMP.jpg
194	WestEnd72InchCP.jpg
195	WestEndA72InchCP.jpg

2/6/20068:34 PMP:\Projects\2005.16\pictures\PictureList.xls

Placer Vineyards - EX

1

5.49NonFunctionCrushed.jpg

2

5.49NonFunctionCrushedA.jpg

3

ıeRoadNorthEndA32X48ArchC

4

ıeRoadNorthEndB32X48ArchC

5

ıeRoadNorthEndC32X48ArchC

6

ıeRoadNorthEndD32X48ArchC

PV-photos-all Page 1

Placer Vineyards - EX

7

ıeRoadSouthEndA32X48Arch(

8

ıeRoadSouthEndB32X48Arch(

9

ıeRoadSouthEndC32X48Arch(

10

ɜn2.18&5.49NonFunctionCrusl

11

ıwningandLocustPrivate12CMF

12

ıwningandLocustPrivateA12CM

PV-photos-all

Page 2

Placer Vineyards - EX

13

wningandLocustPrivateB12CM

14

EndBaselineRoadNorthSide72

15

ndBaselineRoadNorthSideA72

16

EndBaselineRoadNorthSideArc

17

EndBaselineRoadSouthSide72

18

ndBaselineRoadSouthSideA72

PV-photos-all Page 3

Placer Vineyards - EX

19

ndBaselineRoadSouthSideB7

20

tEndBaselineRoadNorthSide4

21

EndBaselineRoadNorthSideA4

22

EndBaselineRoadSouthSide4

23

EndBaselineRoadSouthSideA4

24

EastEnd72InchCP.jpg

PV-photos-all Page 4

Placer Vineyards - EX

25

EastEndA72InchCP.jpg

26

EastEndB72InchCP.jpg

27

DoNotTrespassThereRRtoPle

28

fLasGracias1EastEnd18X30(2

29

fLasGracias2EastEnd18X30(2

30

fLasGracias2WestEnd18X30(2

PV-photos-all Page 5

Placer Vineyards - EX

31

fLasGracias3EastEnd18X30(2

32

fLasGracias3WestEnd18X30(2

33

fLasGracias4EastEnd18X30(2

34

fLasGracias5EastEnd18X30(2

35

fLasGraciasWestEnd118X30(2

36

LasGraciasX!WestEnd18X30(

PV-photos-all Page 6

Placer Vineyards - EX

37

fLasGraciasXWestEnd18X30(2

38

adSoofBrowning32(36Flattene

39

oofBrowningEastEnd32(36Flat

40

ofBrowningEastEndA32(36Fla

41

oofBrowningWestEnd32(36Flat

42

ofBrowningWestEndA32(36Fla

PV-photos-all Page 7

Placer Vineyards - EX

43

ofBrowningWestEndB32(36Fla

44

.osGarciasAWestEnd12CMP.jp

45

osGarciasEastEnd(L)12CMP.jp

46

osGarciasEastEndA(L)12CMP.

47

LosGarciasWestEnd12CMP.jp

48

Irone&BrowningEastEnd24CM

PV-photos-all Page 8

Placer Vineyards - EX

49

rone&BrowningWestEnd24CM

50

lePalladayRoadEastEnd32CMI

51

lePalladayRoadEastEnd32CMI

52

lePalladayRoadEastEnd32CMI

53

lePalladayRoadWestEnd32CM

54

ePalladayRoadWestEnd32CM

PV-photos-all Page 9

Placer Vineyards - EX

55

ıEastofPeacockASouthEnd24(

56

ınEastofPeacockNorthEndA24(

57

:astofPeacockNorthEndATwo1

58

EastofPeacockNorthEndTwo1:

59

ewtonEastofPeacockSouthEnd.

60

ıEastofPeacockSouthEndA24(

PV-photos-all Page 10

Placer Vineyards - EX

61

:astofPeacockSouthEndATwo1

62

ıEastofPeacockSouthEndB24(

63

FarWestNorthEndFlatten21X3(

64

'arWestNorthEndFlattenA21X3

65

FarWestSouthEndFlatten21X3(

66

arWestSouthEndFlattenA21X3

PV-photos-all Page 11

Placer Vineyards - EX

67

nWestofPeacockNorthEnd24C

68

ıWestofPeacockNorthEndA24(

69

ıWestofPeacockNorthEndB24(

70

thPalladayRoadEastEnd32CMI

71

ıPalladayRoadEastEnd32CMF

72

hPalladayRoadWestEnd32CM

PV-photos-all Page 12

Placer Vineyards - EX

73

ıPalladayRoadWestEnd32CMI

74

NorthWestEnd.jpg

75

lay12InchCMPRoadDitchEastE

76

ay12InchCMPRoadDitchEastE

77

ay12InchCMPRoadDitchWestI

78

ay12InchCMPRoadDitchWestE

PV-photos-all Page 13

Placer Vineyards - EX

79

santGroveRdMiddleEastEndCM

80

antGroveRdMiddleWestEndCI

81

antGroveRdNorthEastEnd30C

82

ntGroveRdNorthEastEndA30C

83

antGroveRdNorthWestEnd30C

84

ntGroveRdNorthWestEndA30C

PV-photos-all Page 14

Placer Vineyards - EX

85

ntGroveRdNorthWestEndB30(

86

oveRdSouthEastEndFlatten32

87

oveRdSouthEastEndFlattenA3:

88

oveRdSouthEastEndFlattenC3:

89

oveRdSouthWestEndFlatten32

90

veRdSouthWestEndFlattenA3:

PV-photos-all Page 15

Placer Vineyards - EX

91

ıveRdSouthWestEndFlattenB3:

92

ıveRdSouthWestEndFlattenC3.

93

Private36CMP40CIP.jpg

94

:NorthSectionEastEndANoPipe

95

RNorthSectionEastEndNoPipe.

96

NorthSectionWestAEndNoPipe

PV-photos-all Page 16

Placer Vineyards - EX

97

NorthSectionWestBEndNoPipe

98

NorthSectionWestCEndNoPipe

99

RNorthSectionWestEndNoPipe

100

SouthSectionEastEndANoPipe

101

SouthSectionEastEndBNoPipe

102

SouthSectionEastEndCNoPipe

PV-photos-all Page 17

Placer Vineyards - EX

103

RRSouthSectionNoPipeA.jpg

104

SouthSectionWestEnd1NoPipe

105

SouthSectionWestEnd2NoPipe

106

SouthSectionWestEndANoPipe

107

SouthSectionWestEndCNoPipe

108

RSouthSectionWestEndNoPipe

PV-photos-all Page 18

Placer Vineyards - EX

109

10EastEnd48Dia&48X60ArchC

110

0EastEndA48Dia&48X60Arch(

111

10WestEnd48Dia&48X60ArchC

112

c2.10WestEnd48InchDiaCMP.

113

0WestEndA48Dia&48X60Arch

114

Sec2.18EastEndB36DiaCP.jpg

PV-photos-all Page 19

Placer Vineyards - EX

115

Sec2.18EastEndC36DiaCP.jpg

116

Sec2.18WestEnd36DiaCP.jpg

117

Sec2.18WestEndA36DiaCP.jp

118

Sec2.19EastEnd12DiaPVC.jpg

119

Sec2.19EastEndA12DiaPVC.jp

120

Sec2.19EastEndB12DiaPVC.jp

PV-photos-all Page 20

Placer Vineyards - EX

121

Sec2.19EastEndC12DiaPVC.jp

122

Sec2.19WestEnd12DiaPVC.jp

123

Sec2.19WestEndA12DiaPVC.jp

124

SouthSideBaselineRd48X70Arc

125

outhSideBaselineRdA48X70Ar

126

outhSideBaselineRdB48X70Ar

Placer Vineyards - EX

127

outhSideBaselineRdC48X70Ar

128

outhSideBaselineRdD48X70Ar

129

outhSideBaselineRdE48X70Ar

130

NorthSideBaselineRd48X70Arc

131

orthSideBaselineRdA48X70Ar

132

lorthSideBaselineRdB48X70Ar

PV-photos-all Page 22

Placer Vineyards - EX

133

SideBaselineRdDual32X48Arc

134

SideBaselineRdDual32X48Arc

135

thSideBaselineRdDual32X48A

136

hSideBaselineRdDualA32X48

137

hSideBaselineRdDualB32X48

138

hSideBaselineRdDualC32X48

PV-photos-all Page 23

Placer Vineyards - EX

139

:hSideBaselineRdDualD32X48,

140

:hSideBaselineRdDualE32X48,

141

:hSideBaselineRdDualF32X48,

142

hSideBaselineRdDualG32X48,

143

:c3.6EastEnd18InchDiamCMP.

144

:3.6Middle18&30InchDiamCMF

PV-photos-all Page 24

Placer Vineyards - EX

145

3.6Middle18&30InchDiamCMP

146

3.6Middle18&30InchDiamCMP

147

:3.6WestEnd18InchDiamCMP/

148

c3.6WestEnd30InchDiamCMP

149

:3.6WestEnd30InchDiamCMP/

150

ec5.35EastEnd36InchDiaCMP.

PV-photos-all Page 25

Placer Vineyards - EX

151

c5.35EastEndA36InchDiaCMP

152

c5.35EastEndB36InchDiaCMP

153

:c5.35WestEnd36InchDiaCMP.

154

Sec7.7CMP30InchDia.jpg

155

Sec7.7EastEnd36InchDiaCIP.jp

156

ec7.7WestEnd36InchDiaCIP.jp

PV-photos-all Page 26

Placer Vineyards - EX

157

thPalladayRoadEastEnd12CM

158

hPalladayRoadEastEndA12CM

159

hPalladayRoadEastEndB12CM

160

thPalladayRoadWestEnd12CM

161

noRd5X5BoxCulvertPrivateRo

162

ioRd5X5BoxCulvertPrivateRoa

PV-photos-all Page 27

Placer Vineyards - EX

163

ıoRd5X5BoxCulvertPrivateRoa

164

ıoRd5X5BoxCulvertPrivateRoa

165

North1EastEnd18CMP&30CM

166

North1WestEnd18CMP&30CM

167

North2WestEnd18CMP&30CM

168

ıNorthEastEnd18CMP&30CMF

PV-photos-all Page 28

Placer Vineyards - EX

169

NorthEastEndA18CMP&30CM

170

lNorthWestEnd18CMP&30CMl

171

eranoRdPrivate36CMP40CIP.j

172

ranoRdPrivateA36CMP40CIP.

173

ranoRdPrivateB36CMP40CIP.

174

ranoRdPrivateC36CMP40CIP.

PV-photos-all Page 29

Placer Vineyards - EX

175

ISouthEastEnd18CMP&30CMI

176

SouthEastEndA18CMP&30CM

177

SouthEastEndB18CMP&30CM

178

SouthEastEndC18CMP&30CM

179

IWestEnd(3)36CMP&18CMP&

180

ISouthWestEnd18CMP&30CM

PV-photos-all Page 30

Placer Vineyards - EX

181

SouthWestEndA18CMP&30CM

182

SouthOppositeWestEnd(3)36(

183

SouthOppositeWestEndA(3)36

184

WattRoadNorth24CMP.jpg

185

WattRoadNorthA24CMP.jpg

186

'attRoadNorthEastEnd24CMP.j

PV-photos-all Page 31

Placer Vineyards - EX

187

ttRoadNorthEastEndA24CMP

188

ttRoadSouthEastEndD24CMP

189

ttRoadSouthEastEndE24CMP

190

ttRoadSouthEastEndF24CMP

191

ttRoadSouthEastEndG24CMP

192

ttRoadSouthEastEndH24CMP

PV-photos-all Page 32

Placer Vineyards - EX

193

attRoadSouthEastEndI24CMP.

194

WestEnd72InchCP.jpg

195

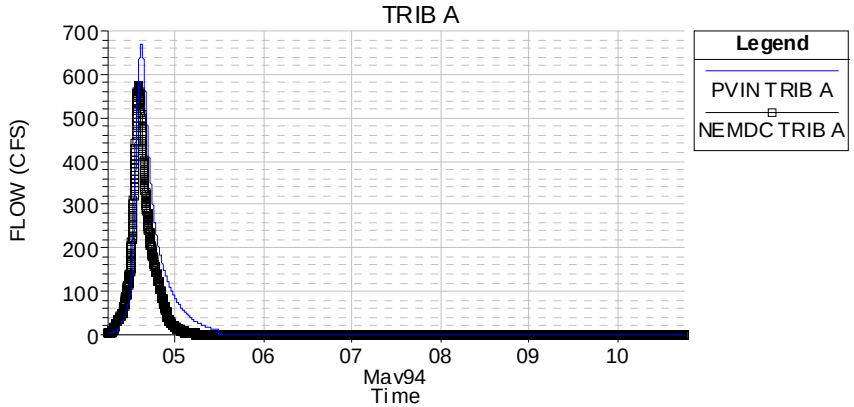
WestEndA72InchCP.jpg

PV-photos-all Page 33

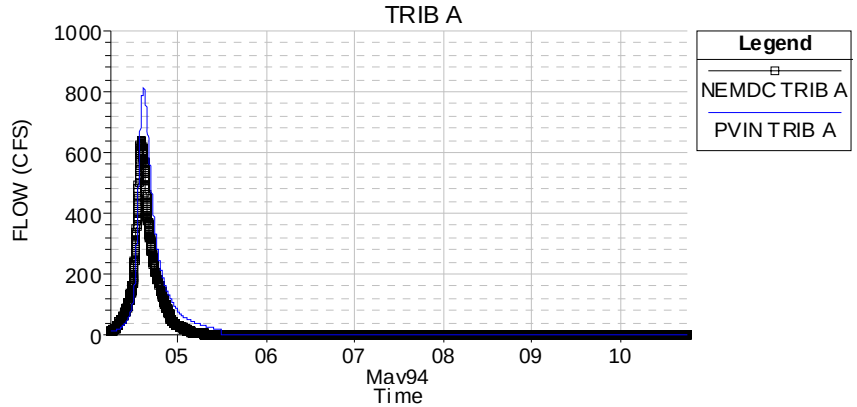
APPENDIX K
Steelhead Creek Hydrograph Comparisons

Input Comparisons – NEMDC Analysis to Placer Vineyards Hydrology for PRE-PROJECT ANALYSIS

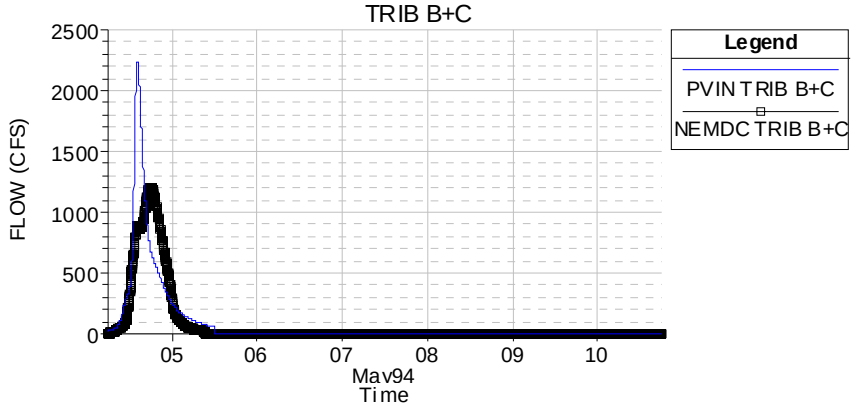
100-YR Comparison of Shed A Hydrograph



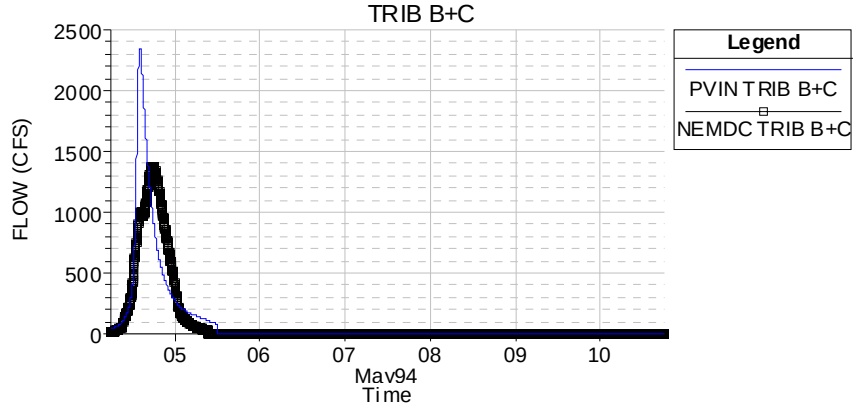
200-YR Comparison of Shed A Hydrograph



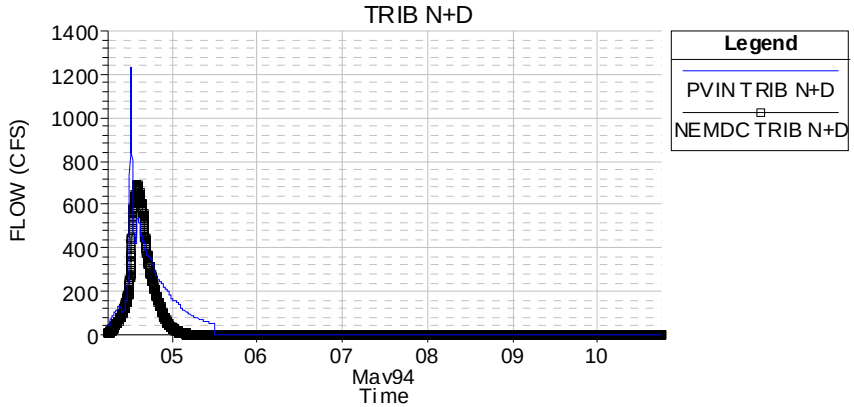
100-YR Comparison of Shed B+C Hydrograph



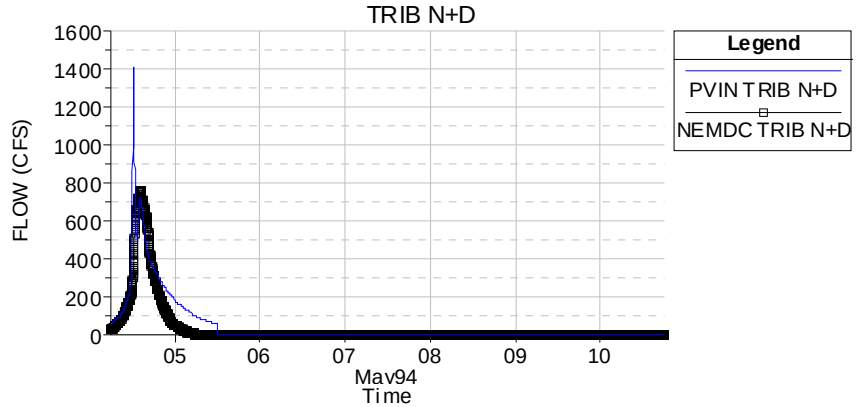
200-YR Comparison of Shed B+C Hydrograph



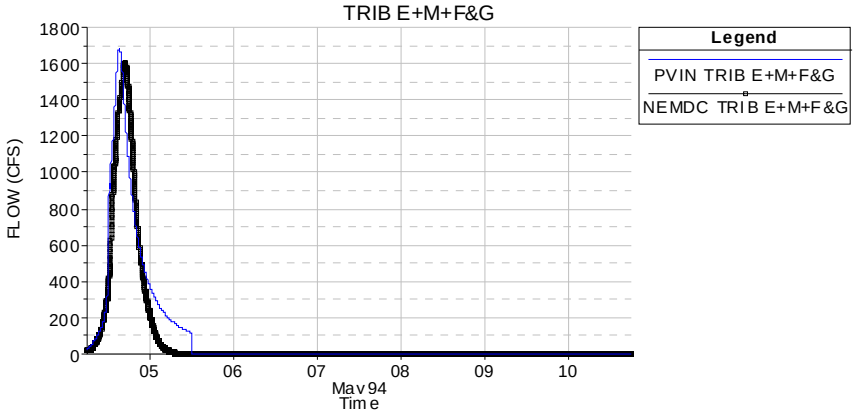
100-YR Comparison of Shed N+D Hydrograph



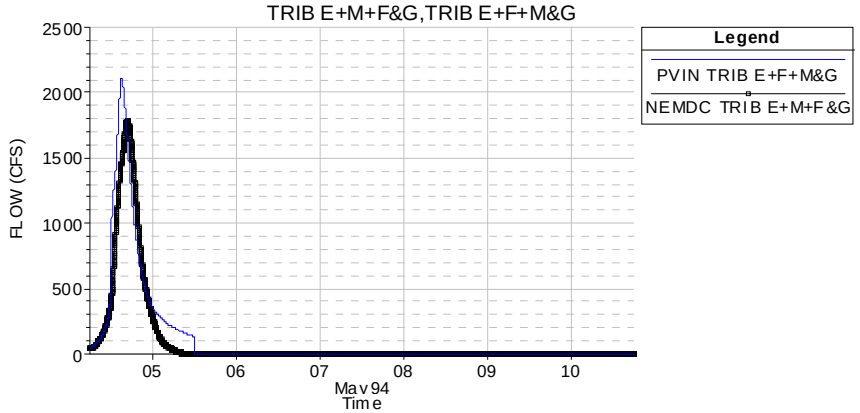
200-YR Comparison of Shed N+D Hydrograph



100-YR Comparison of Shed E+M+F&G Hydrograph

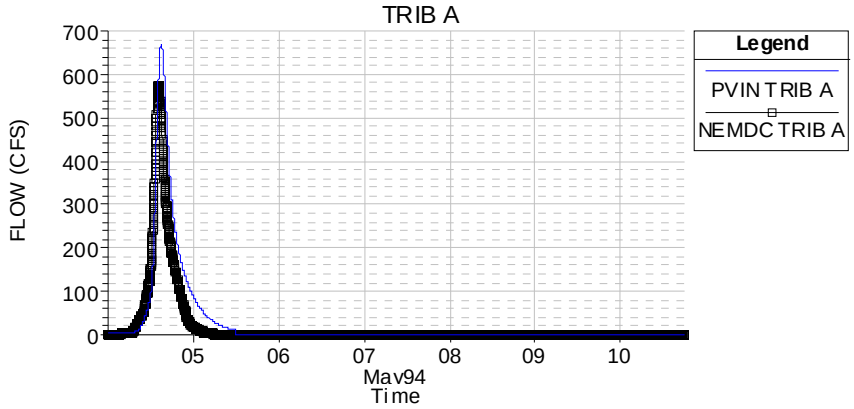


200-YR Comparison of Shed E+M+F&G Hydrograph

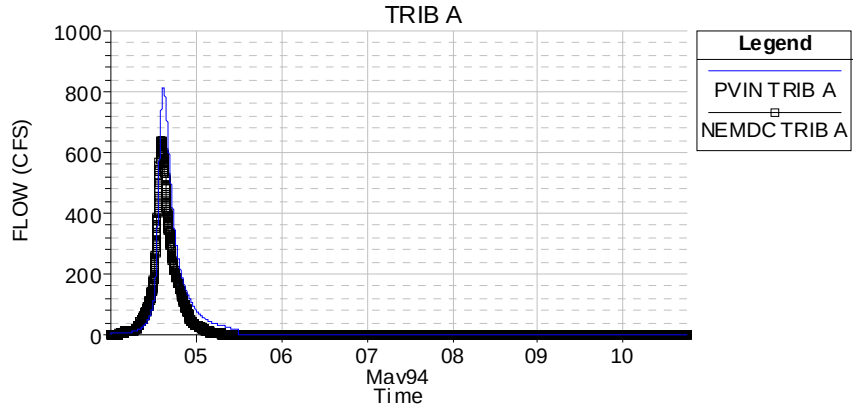


Input Comparisons – NEMDC Analysis to Placer Vineyards Hydrology for POST-PROJECT MITIGATED ANALYSIS

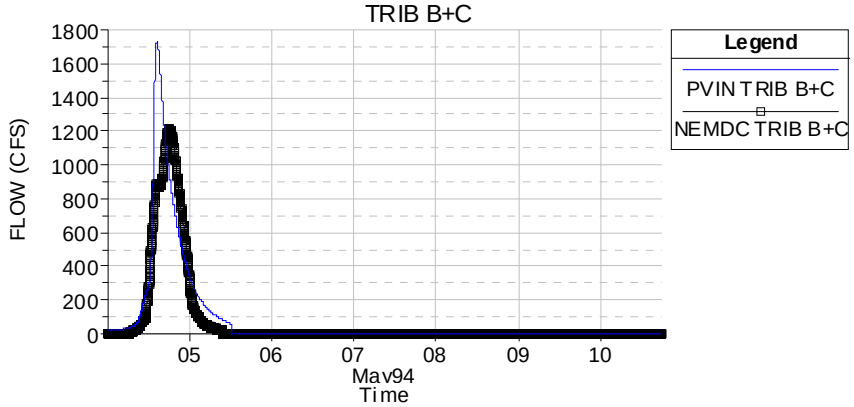
100-YR Comparison of Shed A Hydrograph



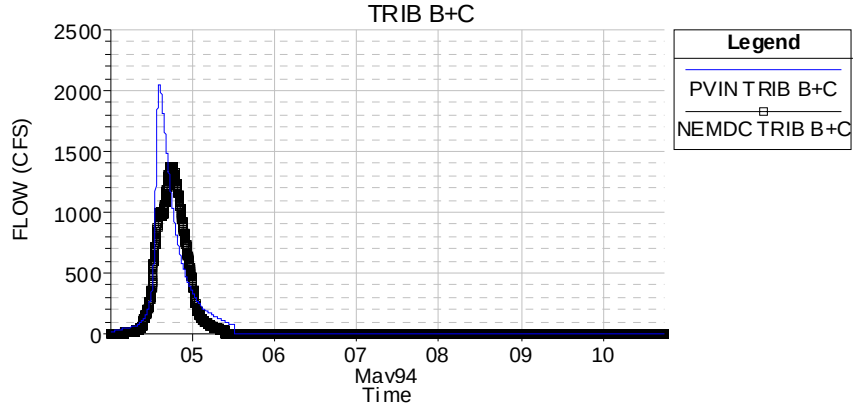
200-YR Comparison of Shed A Hydrograph



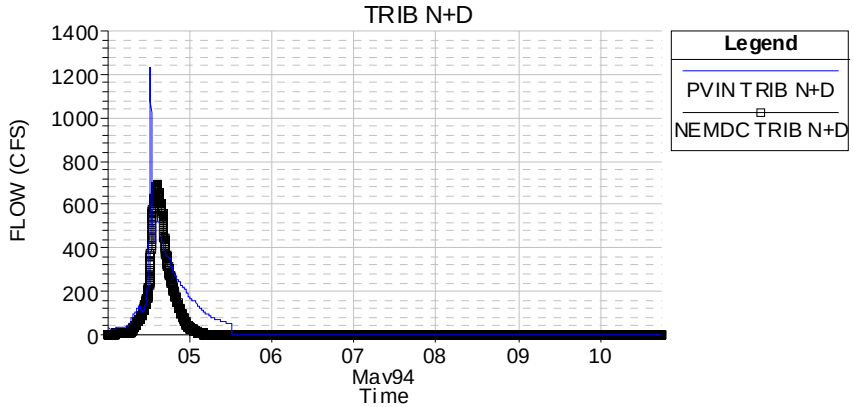
100-YR Comparison of Shed B+C Hydrograph



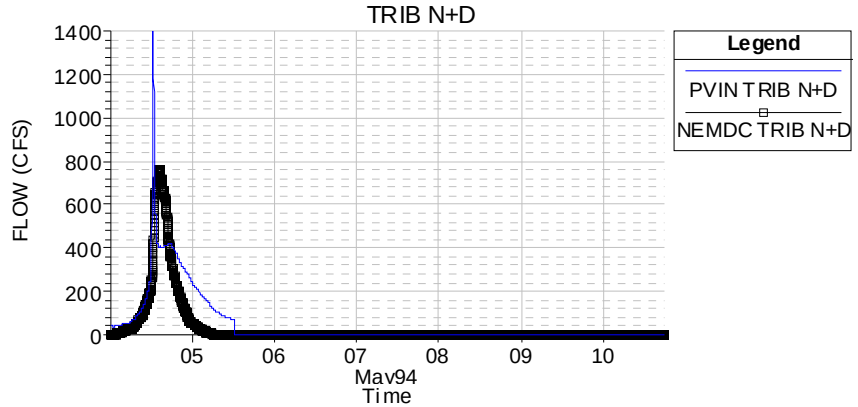
200-YR Comparison of Shed B+C Hydrograph



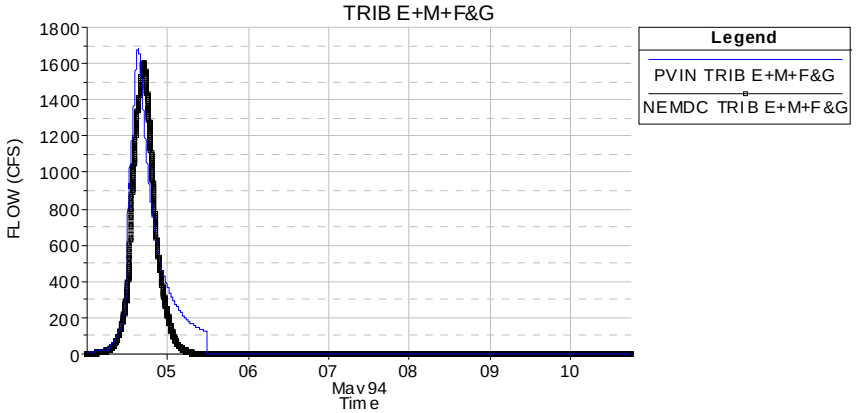
100-YR Comparison of Shed N+D Hydrograph



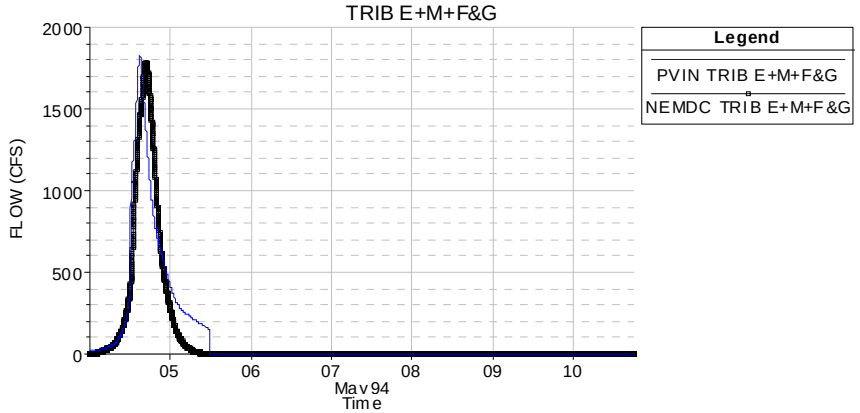
200-YR Comparison of Shed N+D Hydrograph



100-YR Comparison of Shed E+M+F&G Hydrograph

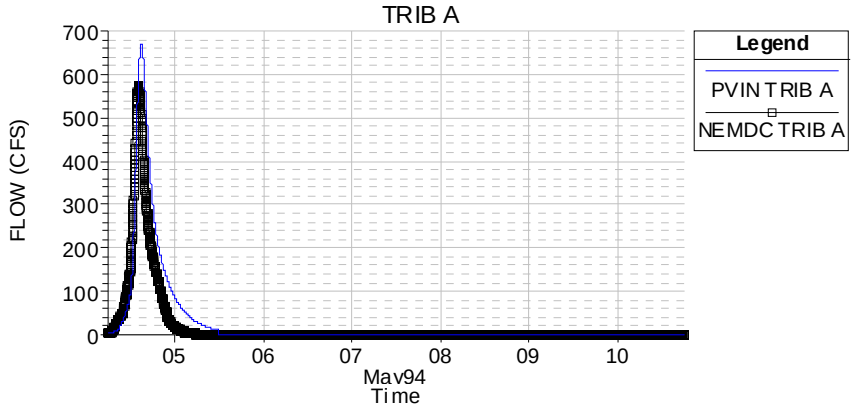


200-YR Comparison of Shed E+M+F&G Hydrograph

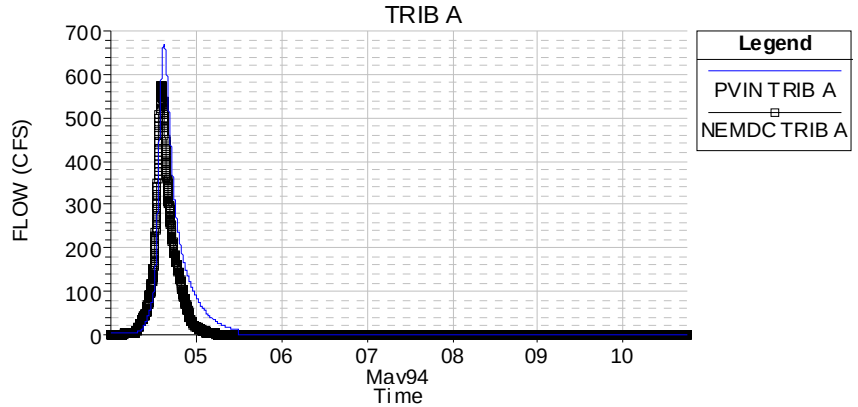


Comparison of pre-project to Placer Vineyards Post-project – Inflow Hydrographs of NEMDC Model Affected by Placer Vineyards Project

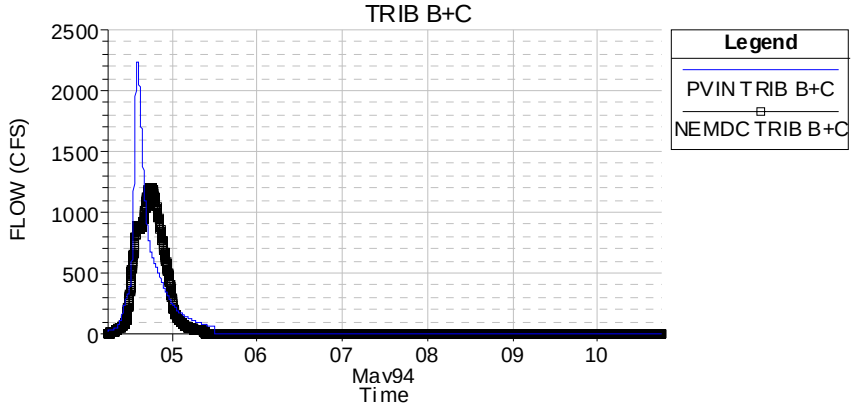
100-YR Pre-project of Shed A Hydrograph



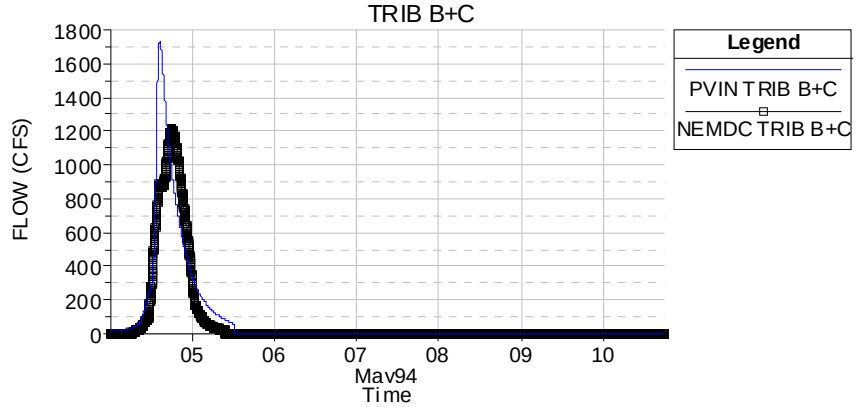
100-YR Post-Project Mitigated of Shed A Hydrograph



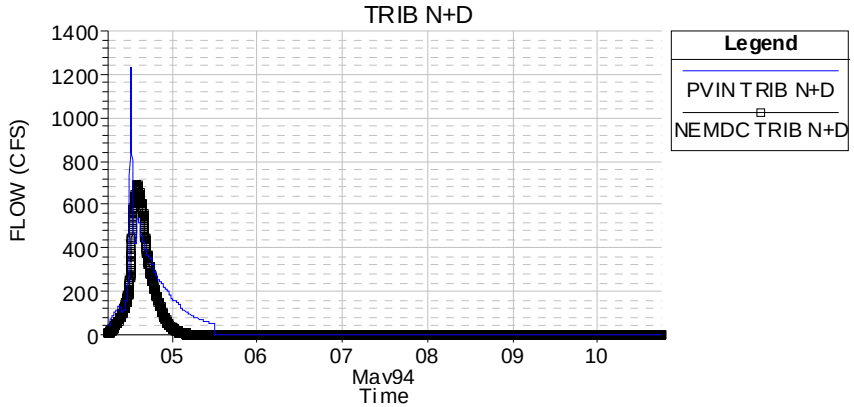
100-YR Pre-project of Shed B+C Hydrograph



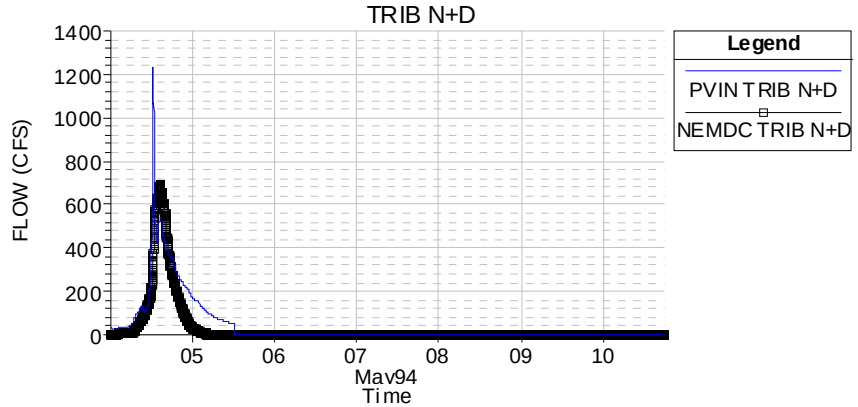
100-YR Post-Project Mitigated of Shed B+C Hydrograph



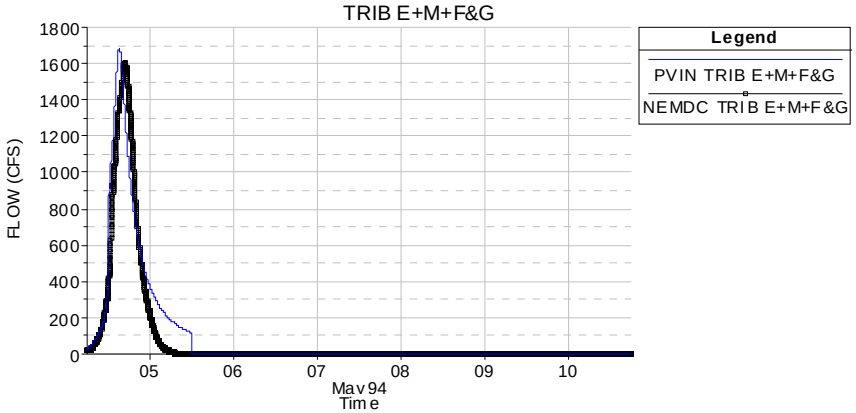
100-YR Pre-project of Shed N+D Hydrograph



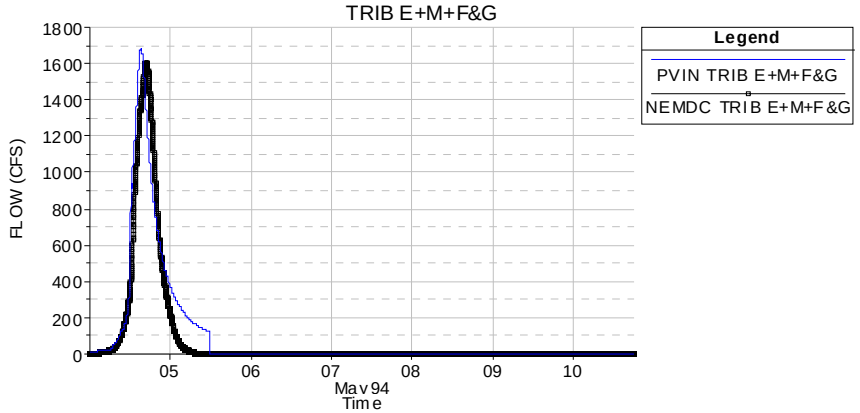
100-YR Post-Project Mitigated of Shed N+D Hydrograph



100-YR Pre-project of Shed E+M+F&G Hydrograph

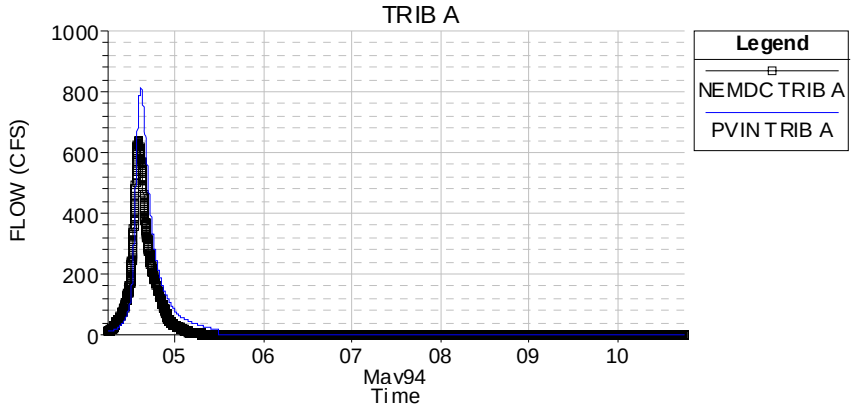


100-YR Post-Project Mitigated of Shed E+M+F&G Hydrograph

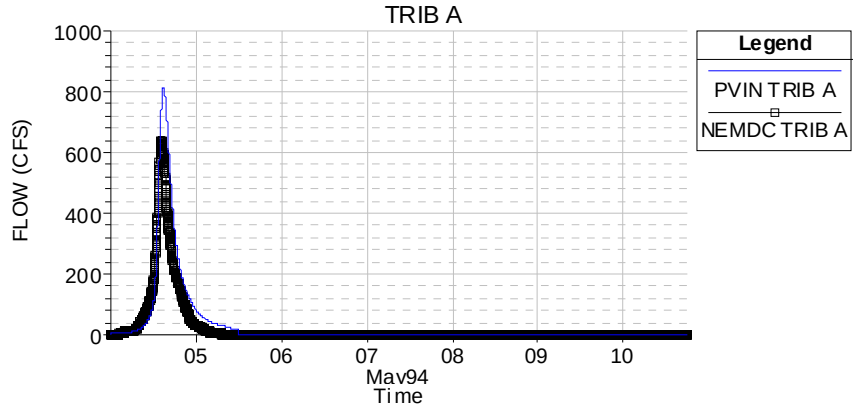


Comparison of pre-project to Placer Vineyards Post-project – Inflow Hydrographs of NEMDC Model Affected by Placer Vineyards Project

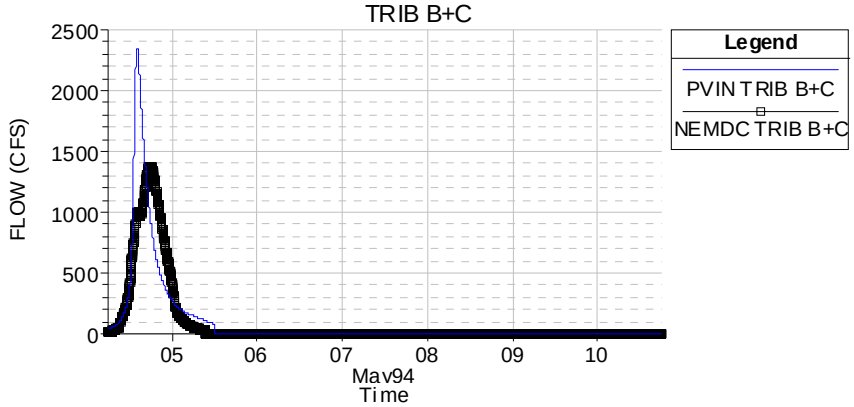
200-YR Pre-project of Shed A Hydrograph



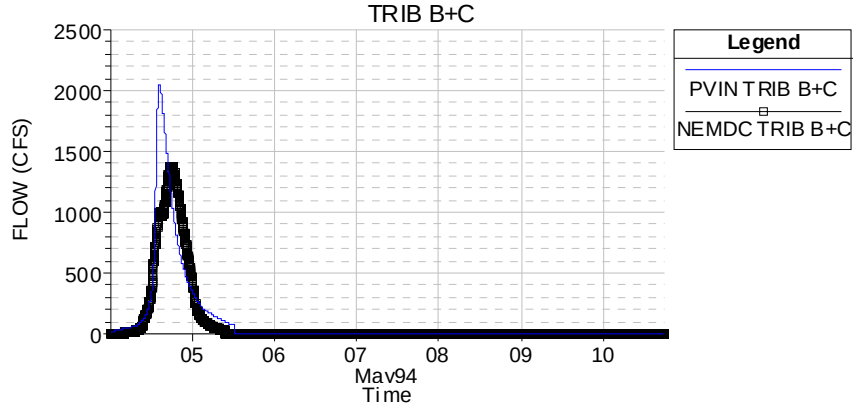
200-YR Post-Project Mitigated of Shed A Hydrograph



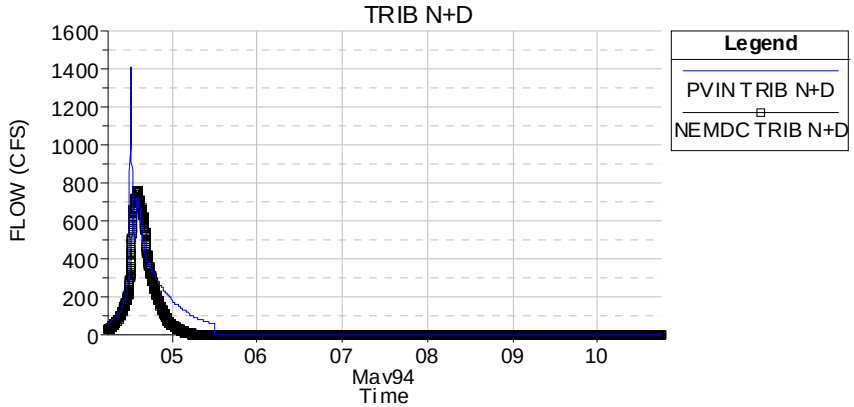
200-YR Pre-project of Shed B+C Hydrograph



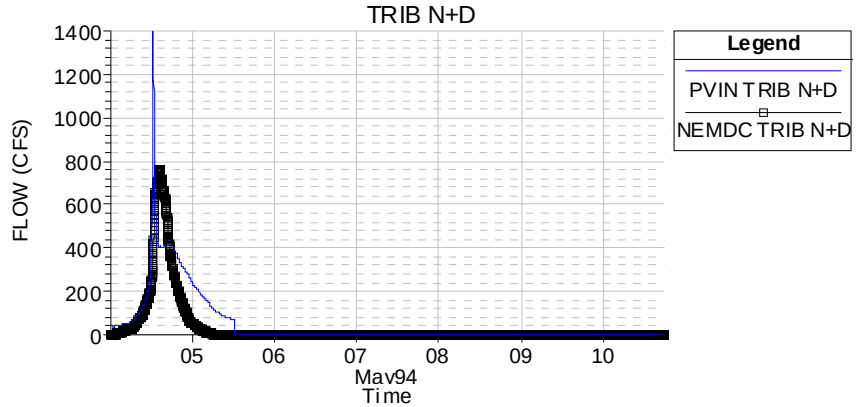
200-YR Post-Project Mitigated of Shed B+C Hydrograph



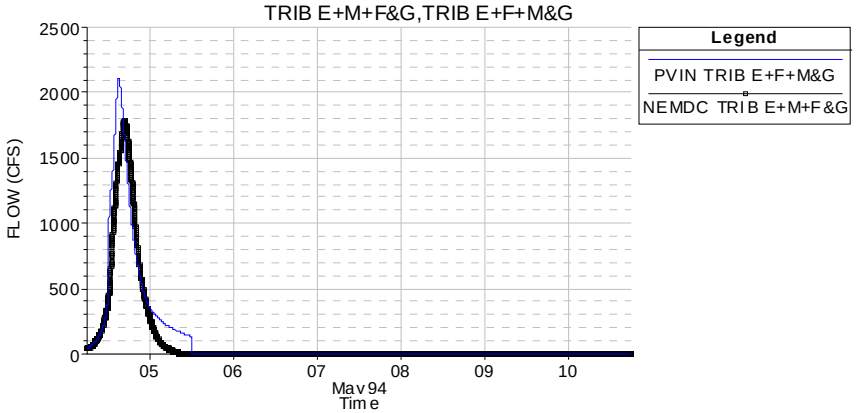
200-YR Pre-project of Shed N+D Hydrograph



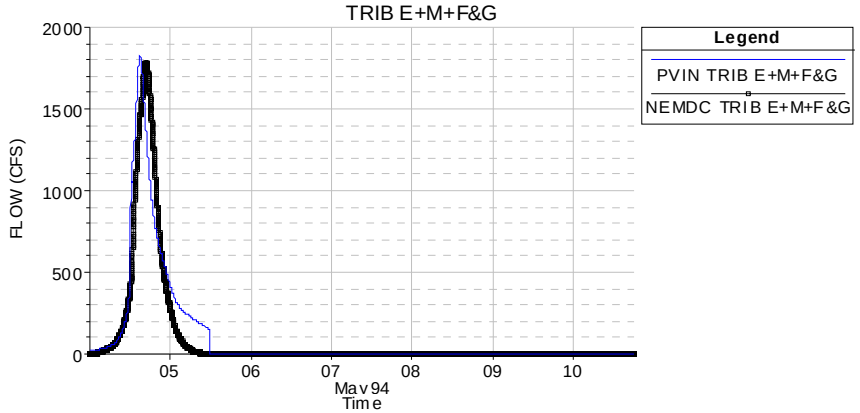
200-YR Post-Project Mitigated of Shed N+D Hydrograph



200-YR Pre-project of Shed E+M+F&G Hydrograph



200-YR Post-Project Mitigated of Shed E+M+F&G Hydrograph



APPENDIX L
Project Disk

APPENDIX M

Oversized Exhibits