

April 16, 2009

Mr. Paul Brunner
Executive Director
Three Rivers Levee Improvement Authority
1114 Yuba Street, Suite 218
Marysville, CA 95901

Dear Mr. Brunner:

The attached documents illustrate the process used to estimate the Average Flood Depth values contained in Table 9 of the Engineer's Report. As we have previously discussed, SCI used flood depth and elevation from several sources including the *Lower Feather River Floodplain Mapping Study*, Tables VI-50 and VI-51 (Exterior-Interior Relationship tables) from the *Inundation Reduction Analysis*, and a draft illustration titled, "*Lands Impacted by AR Zone*" dated 10-24-06 prepared by MBK Engineers. Depths and elevations from these sources were placed on a grid superimposed on a USGS topographic map in our GIS software. The GIS software was then used to calculate an average depth for each zone in the proposed assessment district.

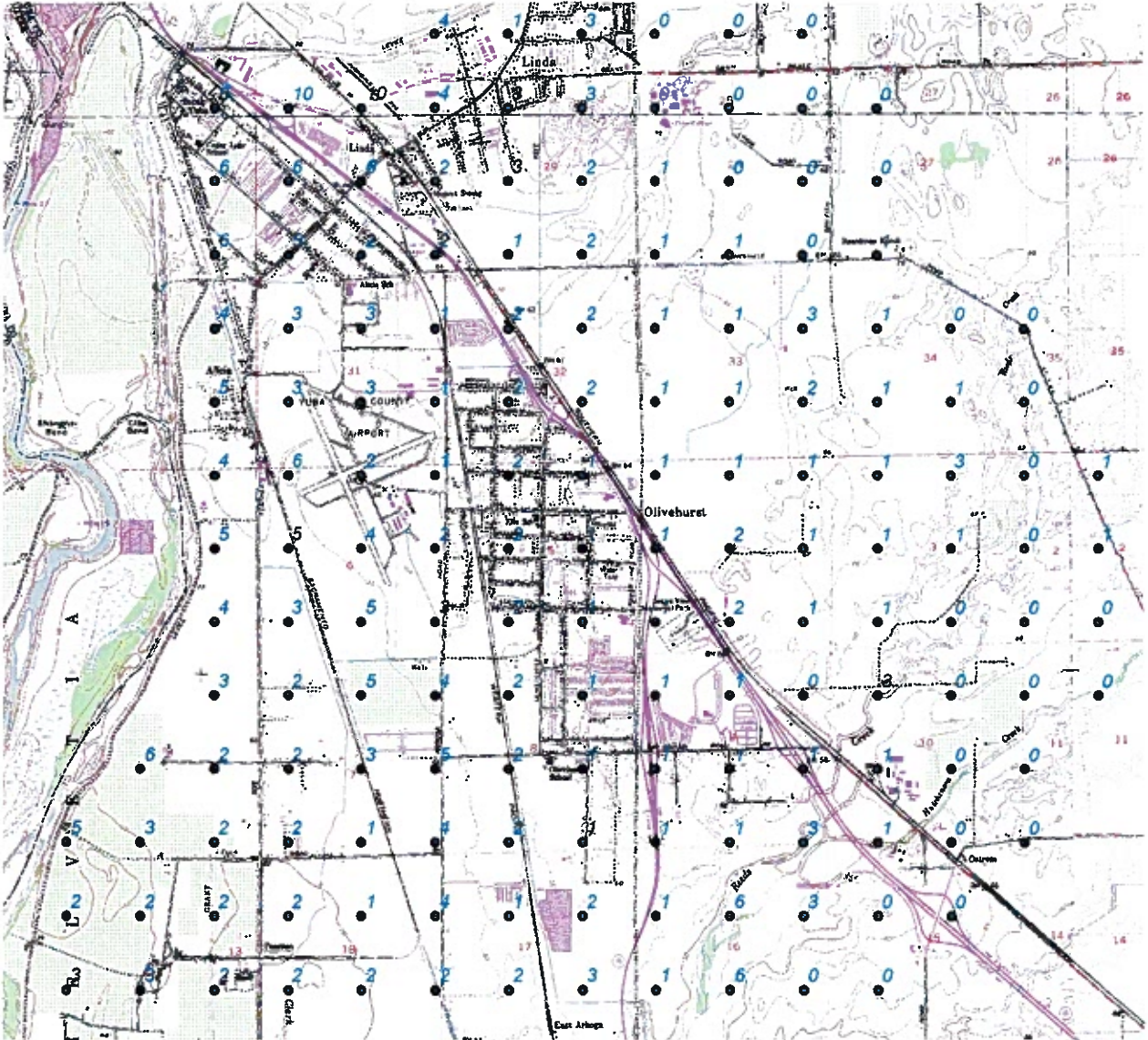
A screenshot from the GIS software and the source documents are attached to this letter.

Sincerely,



Thomas Brightbill, P.E.
Engineer

Flood Depth Estimation

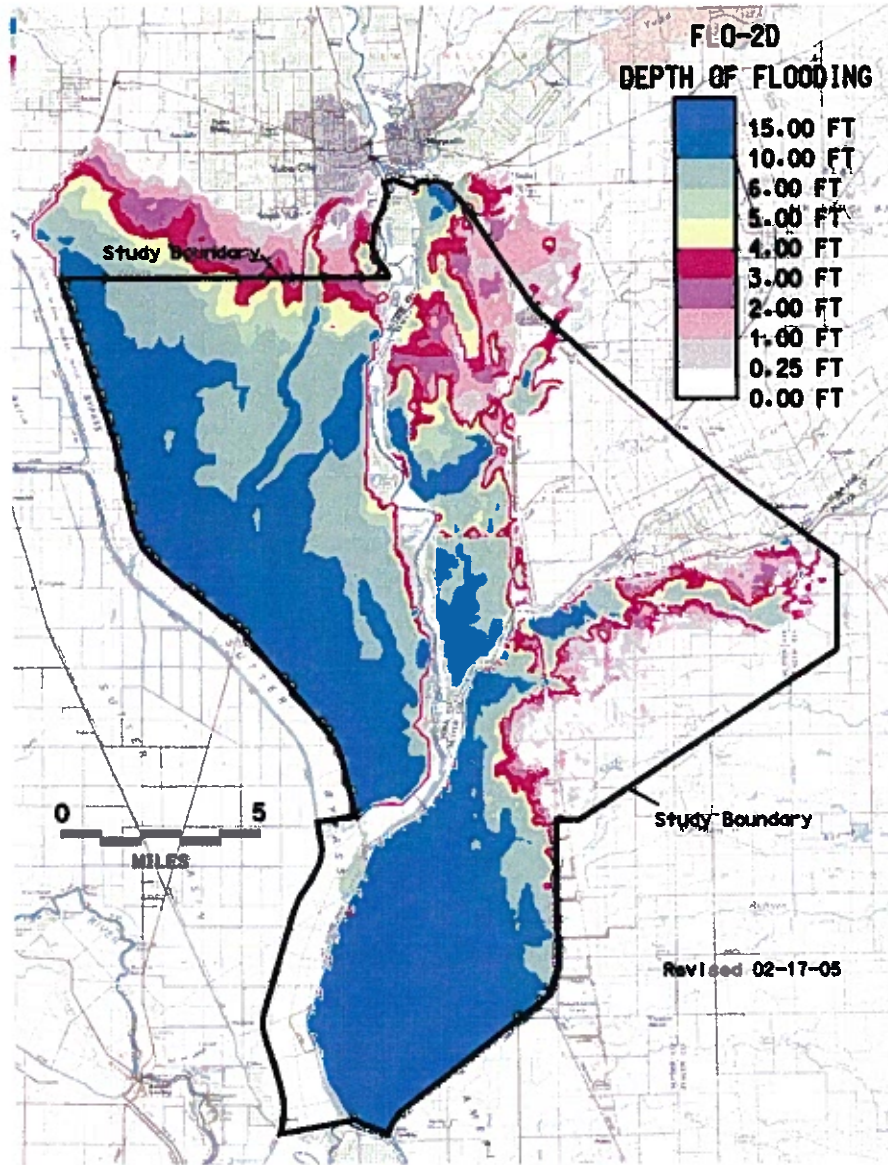


Screenshot from GIS software

Flood depth and flood elevation sources include:

- Figure D-4, Lower Feather River Floodplain Mapping Study
- Tables VI-50 and VI-51, Inundation Reduction Analysis
- Lands Impacted by AR Zone

Figure D-4 – FLO-2D Floodplain Depths



**TABLE VI-50
EXTERIOR-INTERIOR RELATIONSHIPS FOR INDEX POINT YR-1, YUBA RIVER RM 1.55L**

Exterior elevation (ft) (1)	Elevation in hydraulic storage area (interior)							
	RD-4 (ft) (2)	RD-5 (ft) (3)	RD-6 (ft) (4)	RD-7 (ft) (5)	RD-9 (ft) (6)	RD-11 (ft) (7)	RD-12 (ft) (8)	RD-13 (ft) (9)
71.42	—	50.87	50.57	50.57	37.00	35.00	25.00	—
71.92	—	54.69	54.68	54.68	37.00	35.00	25.00	—
72.47	—	57.97	57.94	57.94	37.15	35.00	25.00	—
74.58	59.69	59.69	59.66	59.66	38.32	37.19	31.90	—
75.22	60.88	60.88	60.85	60.85	38.70	37.98	35.72	—
79.05	62.06	62.06	61.99	62.01	42.46	41.69	41.44	40.47
82.88	62.76	62.76	62.64	62.66	47.58	47.34	47.34	47.34

**TABLE VI-51
EXTERIOR-INTERIOR RELATIONSHIPS FOR INDEX POINT YR-2, YUBA RIVER RM 1.14L**

Exterior elevation (ft) (1)	Elevation in hydraulic storage area (interior)							
	RD-4 (ft) (2)	RD-5 (ft) (3)	RD-6 (ft) (4)	RD-7 (ft) (5)	RD-9 (ft) (6)	RD-11 (ft) (7)	RD-12 (ft) (8)	RD-13 (ft) (9)
57.40	58.00	58.00	58.00	58.00	30.00	30.00	30.00	20.00
68.00	58.52	58.52	58.57	58.53	38.07	36.49	30.35	25.00
71.66	61.46	61.46	61.50	61.46	40.61	40.56	40.52	36.05
73.20	62.16	62.16	62.20	62.16	43.62	43.21	43.21	43.21
73.69	62.33	62.33	62.37	62.33	44.99	44.98	44.98	44.98
77.26	62.77	62.77	62.82	62.77	48.44	47.79	47.78	47.78
81.86	63.34	63.34	63.40	63.33	55.29	55.28	55.28	55.28

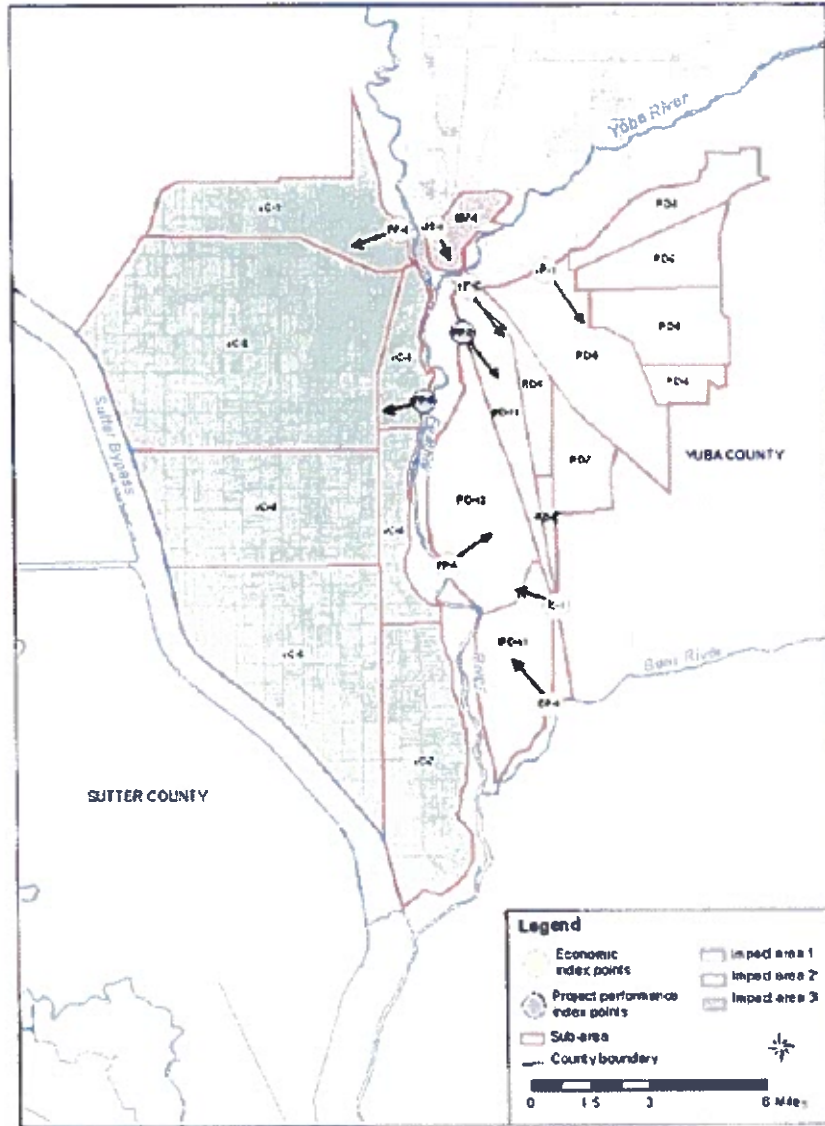





FIGURE VI.2 INDEX POINTS AND ANALYSIS SUB-AREAS



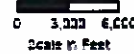
DRAFT

Flood Depth

-  0 to 3 feet
-  3 to 5 feet
-  more than 5 feet



Lands Impacted by AR Zone



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