Future Conditions – Alternative Infrastructure Improvements

East Linda Specific Plan Development

This drainage study is aimed largely at supporting the development indicated in the East Linda Specific Plan. The Yuba County Planning Department land use map for East Linda is shown in Figure 6. The Plan covers 1760 acres total. Of this, 1328 acres are for planned or existing residential, 114 acres are for commercial/industrial, 176 acres for parks, open space, schools, and 142 acres for roads and other uses. Much of the southern part of the East Linda Specific Plan Area has already been developed per the plan in Figure 6. This southern portion includes the Edgewater, Orchard and Montrose developments. The drainage from those developments has been possible to accommodate due to the large amount of drainage infrastructure such as the Olivehurst Interceptor and the Orchard Pond constructed since the 1992 SYDMP.

Also shown in Figure 6, but technically not part of the East Linda Specific Plan, is the development of shed XIA(S) just south of Erle Rd. The Yuba County 2030 General Plan (Ref. 29) has designated the area as Commercial Mixed Use. The other areas south of Erle Rd. to the east are designated “Planning Reserve” in the General Plan, but have been treated as undeveloped for this study.

In order to adequately drain the East Linda Specific Plan Area and the additional General Plan area XIA(S) once they are developed, significant additional infrastructure will be needed. The following sections of this study detail the expected changes such development will cause to the runoff hydrology and then move to investigate infrastructure alternatives which might be considered.

Future Conditions Hydrology

The shed map for the study area under existing conditions was shown previously in Figure 2. All modifications due to potential development within the East Linda Specific Plan are contained within the boundary of the East Linda Specific Plan. To study scenarios under future development conditions, that area has been re-subdivided into new subsheds in a manner consistent with future land use and expected future drainage routes. Figure 7 displays the reconfigured subsheds. The potential commercial development of shed XIA(S) did not require any re-subdivision. To identify the areas within the East Linda Specific Plan Area, the prefix “SP” was given to all those subsheds. Continuing the notation from Figure 2, subsheds outside the Specific Plan Area containing the “A” designation drain to Linda Drain (Horseman’s Ditch) and subsheds outside the Specific Plan Area containing the “B” designation drain to Olivehurst Drain (Clark Slough). Because of the re-subdivision of the sheds within the Specific Plan Area, Figure 7 under future conditions has eight more sheds than Figure 2.

As with the existing conditions, the future runoff was modeled using HEC-1. The earlier sections discussing the general principles used for Storm Frequency, Degree of Protection, Infiltration Rate Characteristics, Runoff Potential, Curve Numbers, SCS Lag Time, and Agricultural Ponding in reference to existing conditions all apply equally to the future condition hydrologic models. However, since the future land use influences the runoff, the values of some hydrologic parameters for the subsheds have been recalculated for the future conditions and displayed in Table 5.

Most of the "SP" subsheds shown in Table 5 have runoff parameters that need no elaboration. The parameters directly follow from the land use indicated in the East Linda Specific Plan and in Table 5. The area XIA(S), which is designated mixed commercial use in the 2030 General Plan likewise uses runoff parameters in Table 5 that do not call for any special explanation. However, there are a number of subsheds in the central and northern areas of the East Linda Specific Plan which have been given runoff parameters based on some special assumptions. This discussion applies to sheds SP1, SP2, SP5, SP6, SP9, SP13 and SP14. These areas have partial existing development with much of it being "Ranchette" parcels. Long term development in these areas will very likely be in the form of infill rather complete redevelopment to new subdivisions. Ranchettes were assumed to remain and if owners develop a portion of their parcels, they will likely retain a few acres around their existing houses. In the case of SP2 (just as an example), the low density housing along the east side of Dantoni Rd. and on the north side of Hammonton-Smartsville Rd. was considered to stay, with just the back half of those properties going to new LDR/MDR. The Linda County Water Agency parcel was also assumed to remain undeveloped. Considering the relative areas, with approximately 60% infill, a weighted average impervious was estimated at 20% for the future for SP2. The curve number was also weighted consistently.

Similar amounts of infill were considered for SP1, SP5, and SP9. SP5 and SP9 were assigned larger weighted parameters because much of the infill in those areas is expected to be MDR/HDR and Commercial. The subsheds SP6, SP13 and SP14 have lower weighted parameters because they currently have more complete coverage as Ranchettes of smaller sizes. Infill in those subsheds was assumed to be approximately 30%. Most of these infill sheds drain to the same improvements to be discussed in Alternatives A, B and C. If a particular shed ever develops beyond the assumptions used in this study, the infrastructure based on this analysis will likely still perform properly provided some of the other nearby subsheds have received somewhat lower-than-planned infill, thus balancing things out.

Figure 8 is a screen shot of the future conditions HEC-1 visual model, useful for checking the names, connections, and routing. Agricultural ponding within the Specific Plan is not considered to occur for the future developed conditions. However, agricultural ponding outside the Specific Plan is considered to continue much as it is under current conditions.

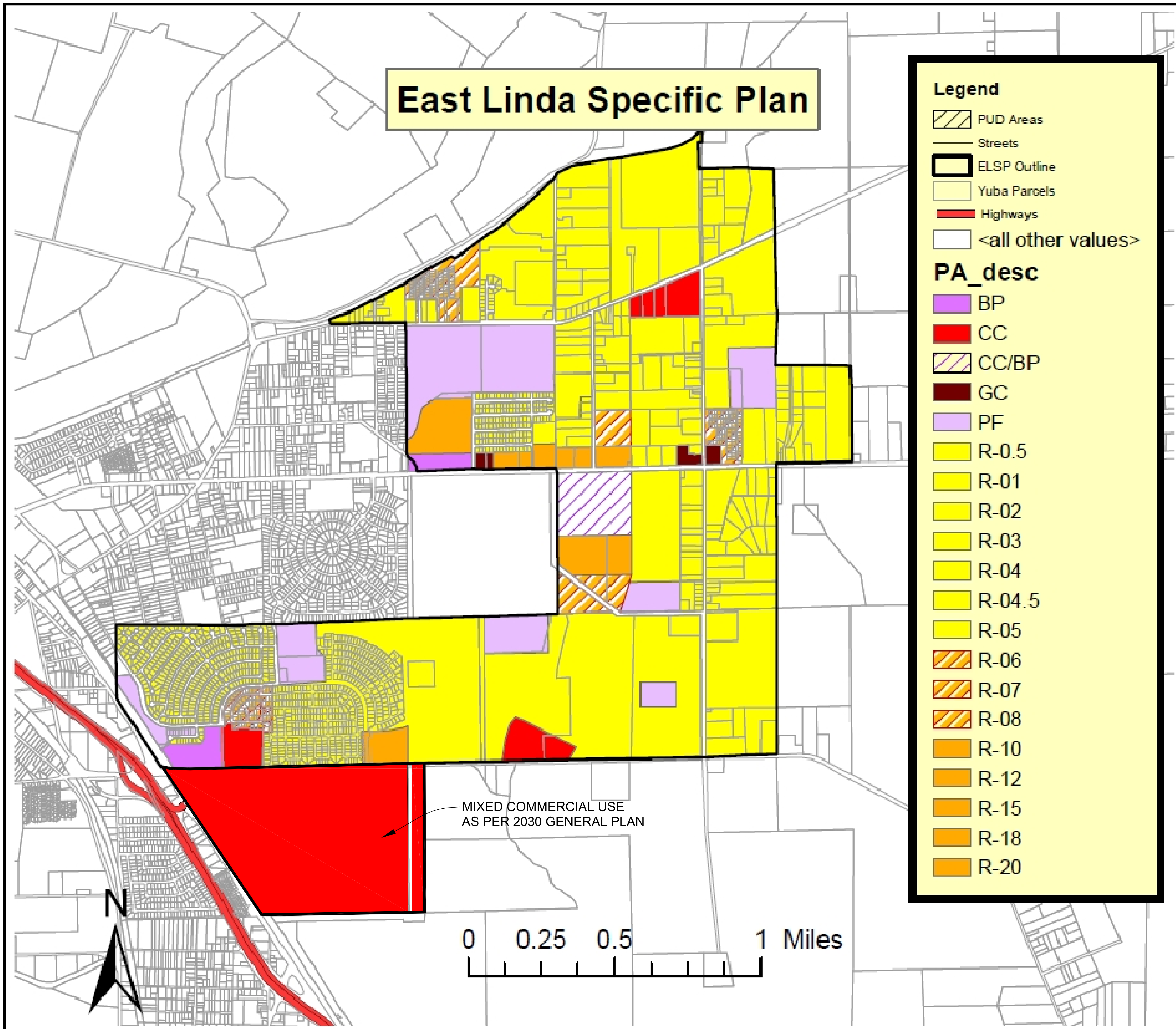
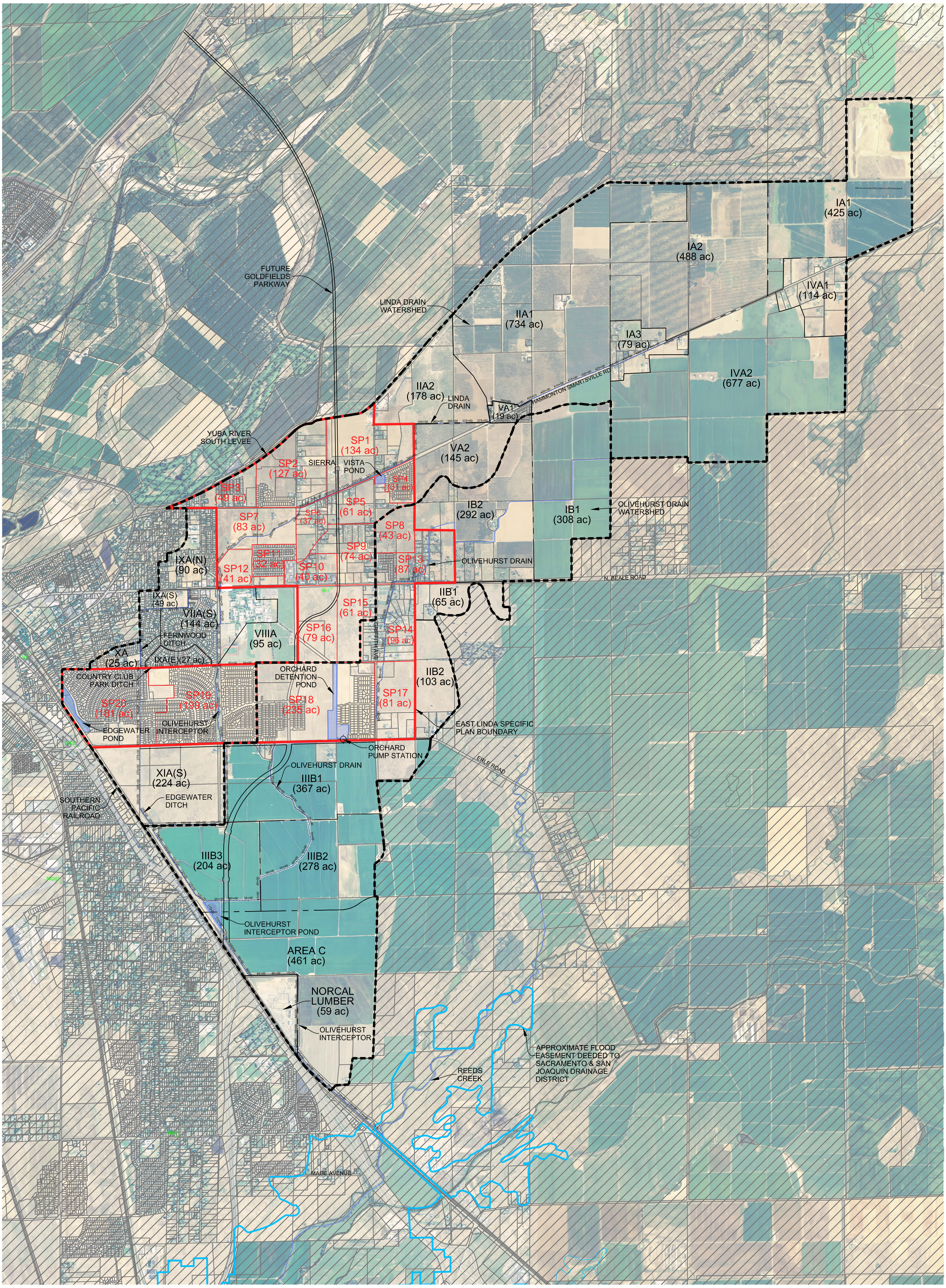


FIGURE 6
SOUTH YUBA DRAINAGE
MASTER PLAN
FUTURE LAND USE
EAST LINDA SPECIFIC PLAN
YUBA COUNTY, CALIFORNIA



LEGEND

- PUMP STATION
- LATERAL
- DETENTION POND
- DRAINAGE BASIN BOUNDARY
- EAST LINDA SPECIFIC PLAN BOUNDARY

0 375 750 1500 3000

MHM

FIGURE 7
SOUTH YUBA DRAINAGE MASTER PLAN
DEVELOPED CONDITIONS SUBSHED MAP
YUBA COUNTY, CALIFORNIA

Table 5 – Future Conditions Runoff Parameters

East Linda Specific Plan - Developed Runoff Parameters
Future Developed Conditions

Shed	Area acres	Area sq. mi.	Drainage Description	Main Soil Groups	SCS CN	% Impervious	Computed SCS Lag Hours	Computed Peak Runoff, cfs 10yr, 24hr	10yr, 24hr
SP1	134.0	0.2094	Mixed Rural/Med. Den. Residential	77% D; 12% B; 11% A	81.1	20	1.000	47	79
SP2	127.0	0.1984	Mixed Rural/Med. Den. Residential	95% D; 5% B	85.3	20	0.830	58	93
SP3	49.0	0.0766	Mixed Med. Density Residential	D	87.0	35	0.500	33	51
SP4	30.7	0.0480	MDR Sierra Vista and Pond	D	87.0	35	0.296	26	40
SP5	61.0	0.0953	Mixed LDR/HDR/Commercial	95% D; 5% B	87.5	30	0.650	36	55
SP6	37.0	0.0578	Rural Residential -Some Infill	81% D; 19% B	79.77	15	0.834	13	23
SP7	83.0	0.1297	Future School/Park	90% D; 10% B	84.6	20	0.700	40	65
SP8	43.0	0.0672	Future School/Med. Den. Residential	57% B; 43% D	78.0	35	0.350	27	44
SP9	74.0	0.1156	Rural Residential - Med. Res. Infill	78% D; 22% B	81.5	30	0.600	38	61
SP10	40.0	0.0625	Mostly High Density Housing	67% D; 33% B	89.7	55	0.275	39	57
SP11	32.0	0.0500	College View Residential	73% B; 27% D	85.0	40	0.250	27	42
SP12	41.0	0.0641	Future Comm./High Den. Housing	80% D; 20% B	92.2	70	0.200	49	71
SP13	87.0	0.1359	Rural Residential - Some Infill	50% D; 50% B	79.5	15	1.058	27	46
SP14	96.0	0.1500	Rural Residential - Some Infill	60% D; 40% B	78.6	15	1.464	23	41
SP15	61.0	0.0953	Future Med. Density	86% D; 14% B	85.3	35	0.500	40	61
SP16	79.0	0.1234	Future Comm./High Den. Housing	D	93.0	70	0.200	95	137
SP17	81.0	0.1266	Future Med. Density	60% D; 40% B	83.2	35	0.500	50	78
SP18	235.5	0.3680	MDR Montrose/Orchard	D	87.0	38	0.312	201	306
SP19	199.0	0.3109	E. Edgewater Residential	63% D; 37% B	83.6	40	0.500	127	198
SP20	181.0	0.2828	W. Edgewater Residential/Pond	83% D; 17% B	85.0	35	0.500	116	181

Table 5 – Continued

Olivehurst Drain – Runoff Parameters

Shed	Area acres	Area sq. mi.	Drainage Description	Main Soil Groups	SCS CN	% Impervious	Computed SCS Lag Hours	Computed Peak Runoff, cfs 10yr, 24hr	100yr, 24hr
IB1	308.0	0.4813	Rice	75% D; 25% B	78.5	1	8.528	22	41
IB2	292.0	0.4563	Orchard/Grassland	60% D; 40% B	70.6	2	2.437	27	59
IIB1	65.0	0.1016	Rural - Low Ponding	75% B; 25% D	72.8	2	0.556	16	33
IIB2	103.0	0.1609	Rural - Low Ponding	B	69.0	1	1.044	13	30
IIIB1	366.9	0.5733	Rice	90% D; 10% B	80.0	1	5.419	39	70
IIIB2	277.7	0.4339	Rice	85% D; 15% B	79.5	1	3.156	39	72
IIIB3	204.2	0.3191	Rice	D	81.0	1	5.066	24	42
Area C	461.0	0.7203	Rice	83% D; 17% B	79.3	1	3.500	60	112
NorCal	59.0	0.0922	NorCal Lumber	87% D; 13% B	87.8	10	0.200	54	86

Linda Drain - Runoff Parameters

Shed	Area acres	Area sq. mi.	Drainage Description	Main Soil Groups	SCS CN	% Impervious	Computed SCS Lag Hours	Computed Peak Runoff, cfs 10yr, 24hr	100yr, 24hr
IA1	425.0	0.6641	Rice	62% D; 38% B	77.2	2	4.586	43	81
IA2	488.2	0.7628	Orchards - Ponding	85% B; 15% D	76.2	2	3.636	53	102
IA3	79.3	0.1239	Rural Residential/School	60% D; 30% B; 10% C	76.4	5	1.295	16	31
IIA1	734.0	1.1469	Orchards/Ag.	72% B; 15% A; 13% D	56.8	1	7.474	12	34
IIA2	178.0	0.2781	Mixed Orchards/Farm	44% A; 30% B; 26% D	52.0	1	5.955	2	7
IVA1	113.9	0.1780	Rural Residential	D	82.0	5	1.038	36	62
IVA2	677.3	1.0583	Rice	D	81.0	1	4.170	88	158
VA1	19.1	0.0298	Trailer/Residential	B	68.0	20	0.663	5	9
VA2	145.1	0.2267	Open, Orchards - Ponding	85% D; 15% B	75.9	2	1.076	30	60
VIIA(S)	144.0	0.2250	Residential/College	71% D; 29% B	84.5	35	0.740	74	115
VIIIA	95.0	0.1484	Pasture/College	80% D; 20% B	81.8	15	0.700	40	68
IXA(N)	90.0	0.1406	Mixed Residential/School	80% D; 18% B; 2% A	84.3	30	0.430	59	92
IXA(S)	49.0	0.0766	Mixed Residential	67% D; 33% B	83.0	30	0.230	39	63
IXA(E)	27.0	0.0422	Med. Density Residential	60% D; 40% B	80.8	25	0.230	19	32
XA	25.0	0.0391	Mixed Residential	67% D; 33% B	81.4	30	0.330	17	28
XIA(S)	224.0	0.3500	Future Mixed Commercial	70% D; 30% B	94	70	0.280	236	337

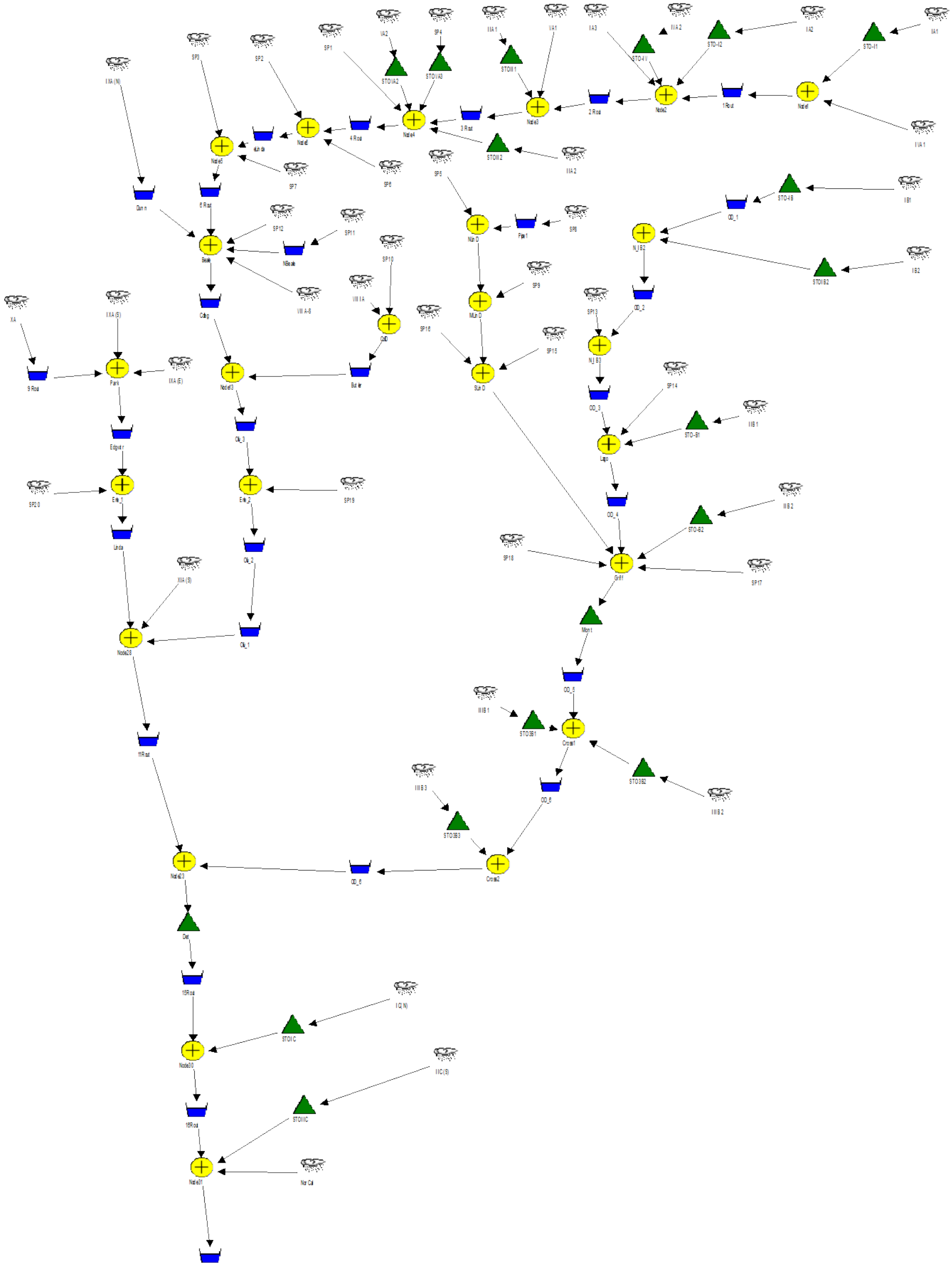


Figure 8 – Future Conditions HEC-1 Model Screen

Future Conditions Runoff Hydrographs – Peak Flows

The primary purpose of the runoff hydrographs from the HEC-1 models was to produce the input at numerous locations of the HEC-RAS model of each watershed. The infusion of the runoff hydrographs has been implemented through HEC DSS (Data Storage System). Some of the inputs are from specific subsheds and others are routed hydrographs as various subsheds collect and route to main channels. This is discussed further in the report in the future conditions hydraulic model sections. The peak runoff for the 10-year and 100-year storms from each shed as predicted by HEC-1 is also shown in Table 5 for future developed conditions. The results of the HEC-1 computer model for future conditions are provided in the Appendix C of this report.

Future Tailwater Considerations

The effect of the Bear River Setback Levee has been discussed in several sections of this report already. The project completed in 2008 has lowered the peak water surface elevations in the WPIC and this in turn implies lower levels at Reeds Creek which is the tailwater location for all existing and future conditions models in this study. Analysis by MBK Engineers (Ref. 4) done in 2010 indicates that the 100-year peak water surface at the north end of the WPIC should be reduced by about 1.1 feet due to the setback project. Because the hydraulic analysis has not been completed from the WPIC upstream on Reeds Creek it is not known how much the values at Reeds Creek should be lowered. Even though the expectation might be that the 100-year value of 60.0 would likely be reduced by around one foot, without the analysis this study continues to conservatively use the 1981 FIS values, even in the study of future conditions.

The models used in this study have been shown to be sensitive to tailwater elevation. The effect is, of course, most dramatic in the south end of the SYDMP study area. The tailwater effect almost two miles upstream at the Olivehurst Interceptor Pond is still significant. However, by the time one moves upstream to Erle Road the effect becomes small. Since the development within the East Linda Specific Plan is all north of Erle Road, the tailwater effect from Reeds Creek has no real bearing on the findings in this study as they pertain to the East Linda Specific Plan Area. This tailwater issue could be important for the commercial development of area XIA(S), so the results of this study for that area should be viewed as conservative. When studies are done in the future for further development south of Erle Road it will be imperative to complete the analysis necessary to establish the new tailwater levels at Reeds Creek.

Future Alternative A

Description of Alternative A

Early in this report two goals were mentioned for future drainage: to identify alternative drainage projects which, when completed, will provide adequate storm drainage for existing as well as future development within the East Linda Specific Plan; and to identify alternative drainage projects which, when completed, will minimize the County maintenance and operating costs associated with pump stations, ditches and distributed small detention facilities. This first alternative makes an effort toward those goals. Figure 9 gives an overview of the improvements considered to be part of Alternative A.

The following infrastructure components make up Alternative A:

- Drain most of the central East Linda Specific Plan Area underground to Orchard Pond via a trunk line running along Goldfields Parkway. It will start at the Orchard Pond at Linda Avenue and continue north under N. Beale Road up to Tiptoe Lane. This trunk line will receive runoff directly from developed subsheds SP8, SP9, SP15, and SP16. Preliminary design suggests that the line will be 5000 feet long and 8 feet in diameter.

- Gravity drain Orchard pond to the Olivehurst Interceptor. This is envisioned as twin 5-foot pipes running along the south side of Erle Road. The distance is 3600 feet. Flap gates would be required at the Interceptor end. The added runoff delivered to Orchard Pond cannot be handled by the current pumps discharging to Olivehurst Drain.

- Interception of Olivehurst Drain near Griffith and Linda Avenue. The 60-inch pipe is now in Linda Avenue from the east side of Griffith to the north end of the Orchard Pond. That 60-inch pipe will be extended across private property east from Griffith Avenue for about 270 feet. At the east end, a concrete box structure will be constructed to intercept Olivehurst Drain and drop it into the 60-inch pipe.

- Conversion of the controllers for Orchard Pump Station to eliminate the use of the 3rd elevation and use the 3rd pump as a backup and/or as a rotation pump with the other two. Maximum pump usage will become two on at any time. This is one step towards reducing pumping costs. It will be made feasible by the gravity drains discussed above.

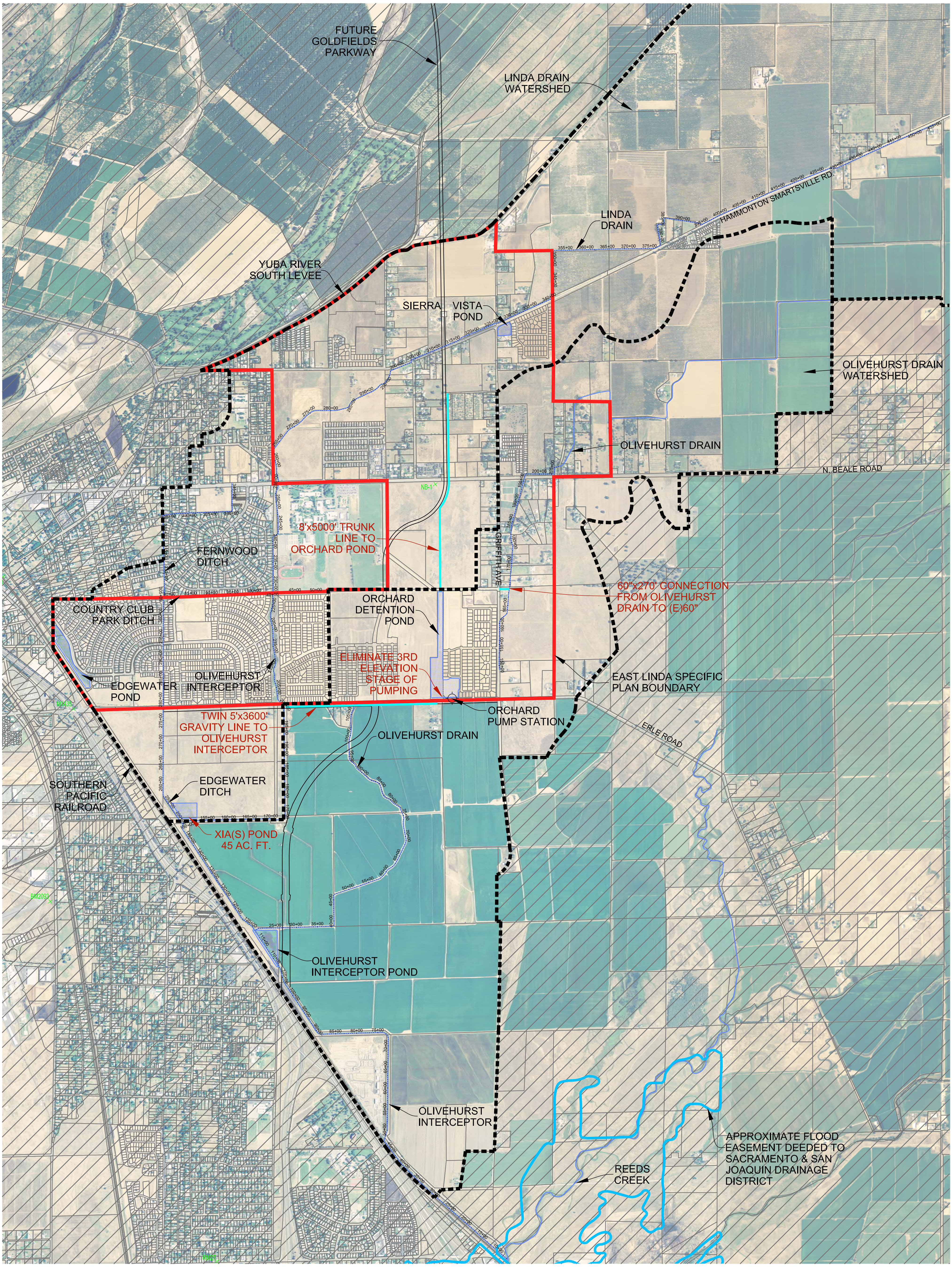
- Additional storage to mitigate developed peak flows from subshed XIA(S). This is currently envisioned as a 45 acre-foot pond at the south boundary of XIA(S), but could be integrated with the future expansion of the Olivehurst Interceptor Pond or other regional facility that may be needed for the future development of properties south of Erle Rd. The pond would be connected to the Olivehurst Interceptor with double 36-inch culverts equipped with flap gates on the interceptor side.

Hydraulic Model for Alternative A

The features discussed above have been added to the unsteady HEC-RAS model to represent Alternative A. The future condition HEC-1 hydrographs have been introduced at appropriate locations via DSS. Generally under this alternative, more of the East Linda Specific Plan Area drains to Orchard Pond via the new trunk line and less drains to Linda Drain. Meanwhile, the interception of Olivehurst Drain at Linda Avenue greatly reduces flows south of there adjacent to Griffith Avenue. The future Eastside subdivision just east of the Montrose subdivision has much higher peak runoff than the land currently produces, but it is assumed to route underground to the Orchard Pond collector at the south end of Griffith. The Alternative A HEC-RAS model reflects that connection. The HEC-RAS model also contains the large gravity drain from Orchard Pond to the Olivehurst Interceptor. The pump specifications in the Alternative A HEC-RAS simulation reduce the number of pumps from the current three to two.

Under Alternative A, no storage would be added north of Erle Rd. Instead, the pond for XIA(S) has been added near the junction of Linda Drain (Edgewater Ditch) with the Olivehurst Interceptor at the south side of area XIA(S). The pond at that location is included in the HEC-RAS model for Alternative A along with a lateral structure representing the connection of the pond to the Olivehurst Interceptor via two 3-foot diameter culverts. Alternatives B and C discussed later in this report do not utilize a pond in that location, but instead incorporate additional storage north of Erle Rd.

The same modeling assumptions discussed earlier apply to this future conditions Alternative A hydraulic model.



LEGEND

- PUMP STATION
- LATERAL
- DETENTION POND
- DRAINAGE BASIN BOUNDARY
- EAST LINDA SPECIFIC PLAN BOUNDARY

0 250 500 1000 2000

MHM

FIGURE 9
ALTERNATIVE A
OVERVIEW OF
IMPROVEMENTS
YUBA COUNTY, CALIFORNIA

Predicted Peak Water Surface Elevations and Flows for Alternative A

Some of the 100-year and 10-year calculated water elevations and flow rates for future conditions under Alternative A are shown in Table 6. More complete results may be found in Appendix D including the profile data for stage versus location for different storm events.

Table 6
Future Alternative A HEC-RAS Indications of Peak WSELs and Flows at Various Locations in the South Yuba Drainage Master Plan Area.

Location	10-year Storm		100-year Storm	
	Computed Peak WSEL, (feet NGVD 29)	Peak Flow, cfs	Computed Peak WSEL, (feet NGVD 29)	Peak Flow, cfs
Olivehurst Interceptor at Reeds Creek, Sta 6+71	57.10	237	60.00	429
Olivehurst Interceptor below pond, Sta 108+60	59.84	237	61.84	430
Olivehurst Interceptor Pond	60.65	n/a	62.03	n/a
XIA(S) Pond	60.80	n/a	62.33	n/a
Edgewater Ditch at Erle Road, Sta 277+66	61.14	87	62.39	129
Edgewater Pond	61.32	n/a	62.52	n/a
Olivehurst Interceptor at Erle Road, Sta 200+00	62.10	313	63.22	428
Linda Drain at N. Beale Road, Sta 253+98	66.13	146	66.62	194
Linda Drain near Alberta Avenue, Sta 304+34	68.60	33	69.10	39
Linda Drain at upstream side of Griffith Avenue, Sta 326+48	69.44	25	69.83	34
Sierra Vista Pond	68.75	n/a	69.94	n/a
Linda Drain at east border of East Linda Specific Plan, Sta 340+95	70.20	22	71.02	33
Linda Drain at Brophy Road, Sta 455+27	78.31	33	79.53	58
Olivehurst Drain at junction with Interceptor, Sta 20+00	60.66	42	62.04	46

Olivehurst Drain south of Erle Road pond outfall, Sta 106+54	65.27	41	65.38	41
Orchard Pond	61.37	n/a	64.46	n/a
Olivehurst Drain south Griffith Road at pond inlet structure, Sta 149+25	64.54	50	65.27	75
Olivehurst Drain at Linda Avenue, Sta 169+33	67.21	2	67.63	3
Olivehurst Drain at N. Beale Road, Sta 195+43	69.83	25	70.02	36
Olivehurst Drain west of Wood Ln., Sta 206+02	70.52	5	70.89	10

Flood Maps for Alternative A

The future conditions 100-year water surface elevations have been used with the topographic information to produce a modified flood map for the study area representing the Alternative A infrastructure and the increased runoff associated with development in the East Linda Specific Plan and the General Plan area XIA(S). The map is shown in Figure 10. The changes to the map are primarily in the central part of East Linda where the Alternative A improvements and the residential developments are concentrated. Linda Drain eastward from Griffith Avenue is essentially unchanged from the current conditions map. The upper part of Olivehurst Drain in the vicinity of North Beale Road received no improvement from Alternative A. Since the higher peak runoff from the central portion of the East Linda Specific Plan Area is now directed to Orchard Pond, that facility is more fully utilized than under current conditions. The map shows the 100-year water surface boundaries in the entire region under study. Also shown in each of the flood maps in this study are the peak 100-year flows at critical locations in the study. The peak flows are shown with an oval containing the flow in cubic feet per second at that location.

The new pond at the south end of subshed XIA(S) is visible in Figure 10. While it was placed there as a tentative position for this study, it could be integrated with the future expansion of the Olivehurst Interceptor Pond or other regional facility nearby that may be needed for the future development of properties south of Erle Rd.

The main accomplishment of the Alternative A infrastructure is to successfully accommodate the increased peak runoff from development within the East Linda Specific plan. In addition, flooding simulations in some areas under this alternative show significant improvement over current conditions. In particular:

- The flooding in Upper Olivehurst Drain along the south end of Griffith Avenue below Linda Avenue is eliminated.
- The flooding on the south side of Yuba College from Butler Ditch is eliminated.

- Although south of the focus area of this study, the Olivehurst Drain below Erle Road conveys less flow under this alternative and shows a little lower water surface.

From a comparison of Table 4 with Table 6 it is evident that peak flows delivered southward from the SYDMP area to Reeds Creek are reduced slightly below current conditions for both the 10-year and 100-year storm.

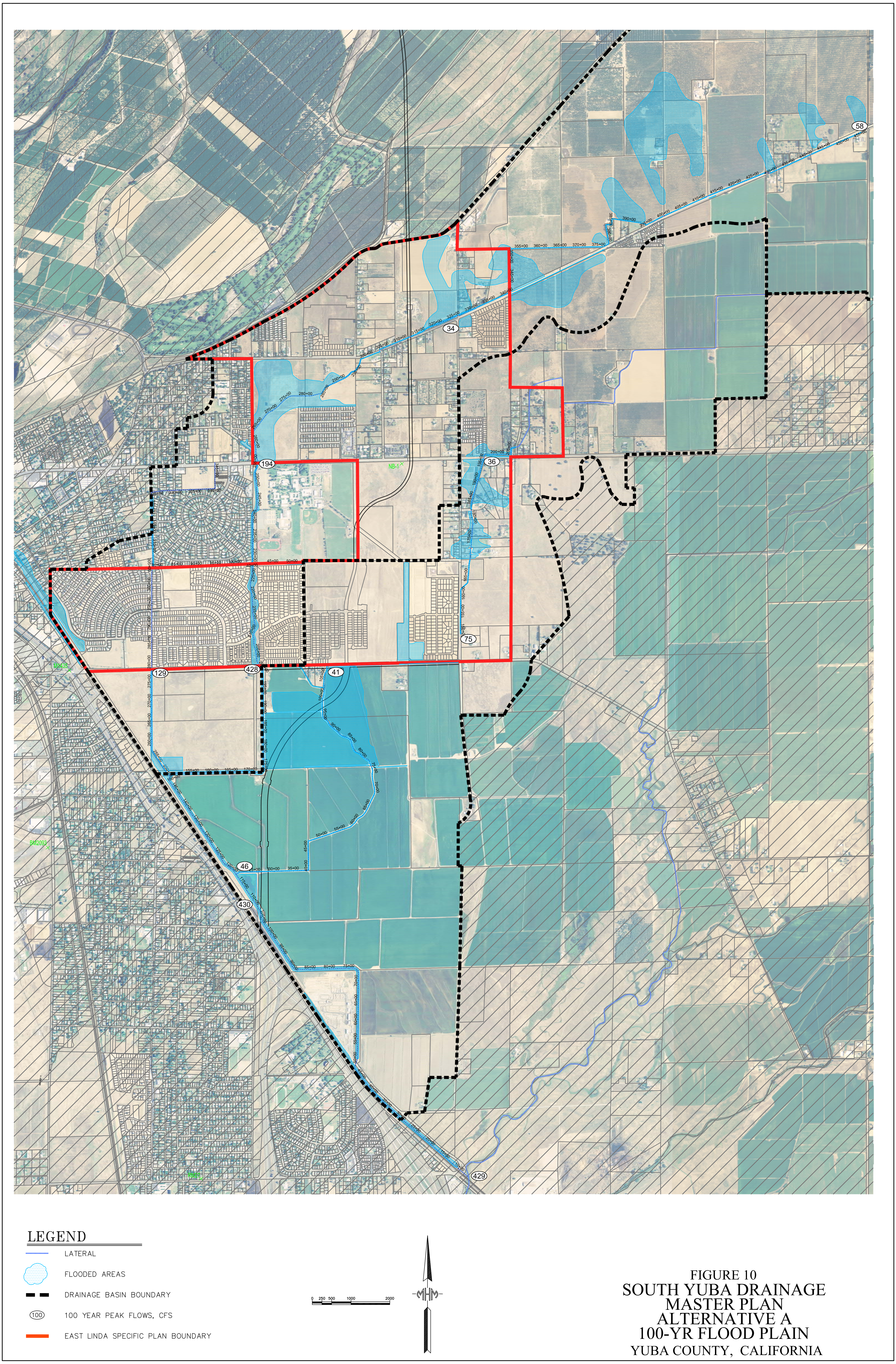


FIGURE 10
SOUTH YUBA DRAINAGE
MASTER PLAN
ALTERNATIVE A
100-YR FLOOD PLAIN
YUBA COUNTY, CALIFORNIA

Persistent Storm Drainage Problem Areas for Alternative A

Linda Drain Flooding North of Hammonton-Smartsville in the Vicinity of Griffith Avenue

The flooded area adjacent to Linda Drain indicated on the Figure 10 map is nearly the same as it was in Figure 5. Some slight diversion of runoff away from Linda Drain and toward Orchard Pond and some changes to the peak timing have resulted in a small improvement to water surface levels in this region. However, flooding issues remain under Alternative A. Any development project in this area would need to include grading or other methods designed to alleviate the problems.

Linda Drain Flooding North of Yuba College

This is the grassy area shown in Photograph 3, historically known as the Butler Property. Shallow flooding in the area has been indicated by all flood maps dating back at least to the 1981 FIS. The current existing condition map shown in Figure 5 continues to show a significant amount of inundation on the property. Unfortunately, the specific plan development sends higher flows to this section of Linda Drain and Alternative A does not address a remedy for this area. Thus Figure 10 shows continued flooding in this area. Any development project in this area would need to include grading or other methods designed to alleviate the problems.

Olivehurst Drain Flooding above Linda Avenue

According to the HEC-RAS simulation, the interception of Olivehurst Drain at Linda Avenue improves the situation from that point southward to Erle Road. The modeling assumes that the “Eastside” development will drain to the existing catch facility on the east side of Griffith just north of Erle Road. However, north of Linda Avenue to Wood Lane there is little relief. Conveyance in that area is limited by the poor capacity of the Olivehurst Drain ditch. The flooded areas indicated in Figure 10 adjacent to upper Olivehurst Drain are very similar to those under current conditions. Because of presumed Specific Plan development north of N. Beale Road, the peak flows in upper Olivehurst Drain are modeled to be slightly higher than current. The flooding impacts a number of residential/ranch properties. A later alternative will address this area.

Goal of Minimizing the County Costs with Pump Stations, Ditches and Distributed Small Detention Facilities

Under this Alternative A, the north part of the East Linda Specific Plan Area still drains to Linda Drain. Because of this, the existing Dantoni Pond and the Sierra Vista Pond are not eliminated. Likewise, the volume of Orchard Pond is not sufficient to eliminate the pumping at Orchard Pond. The added runoff collected from an expanded portion of the East Linda Specific Plan Area, even with the gravity drain to the Olivehurst Interceptor, still requires a significant amount of pumping. The pumping costs at Orchard Pond are reduced somewhat in moving from three main pumps to two main pumps. The revised HEC-1 and HEC-RAS models for the East Linda Specific Plan Area do not utilize most of the small distributed ponds in the area such as the Grove Avenue pond and the College View Estates pond. Unless there is a compelling local engineering reason for such ponds, they could be eliminated without impacting the results of this drainage master plan. Filling the county-maintained College View Estates Pond is considered to be part of Alternative A. Detention facilities that cannot be eliminated under Alternative A are: Sierra Vista Pond, Dantoni Pond, Edgewater Pond, Orchard Pond, Storage for XIA(S) and the Olivehurst Interceptor Pond. The reason that Dantoni Pond cannot be eliminated is that there is currently no facility nearby that the Dantoni Estates can drain to by gravity. The pond and pump are necessary to deliver stormwater to Linda Drain.