

EXECUTIVE SUMMARY

The Florin Vineyard Gap Community Plan (FVGCP) is a sparsely populated area encompassing roughly 3,876 acres located in the eastern portion of Sacramento County. The County's Board of Supervisors initiated the planning process for the area in 1999 and in December of 2003 approved conceptual land use designations for purposes of preparation of an environmental impact report. To be reviewed concurrent with the overall community plan are 34 distinct development applications that have been filed with the County.

The FVGCP is roughly bound by Elder Creek Road on the north, Bradshaw Road and the North Vineyard Station Specific Plan (NVSSP) area on the east, the Churchill Downs subdivision south of Gerber Road on the south and the Union Pacific railroad corridor and Elk Grove-Florin Road on the west. The area is tributary to the overall Morrison Creek stream group with 140 acres draining north into Morrison Creek proper, 774 acres draining to Florin Creek, 1,923 acres draining to the Elder Creek/Gerber Creek system, 800 acres to Unionhouse Creek, and the remaining 90 acres draining into Strawberry Creek located south of the plan area.

This plan analyzes the following conditions:-

- Pre-project based on 2004 land use conditions.;
- FVGCP, North Vineyard Station Specific Plan (NVSSP), and Vineyard Springs Comprehensive Plan (VSCP) post-project conditions with Laguna spill;
- FVGCP, NVSSP, and VSCP post-project conditions without Laguna spill;
- FVGCP stand alone conditions.

The post-project condition with Laguna spill assumes that FVGCP, NVSSP and VSCP are built before Laguna spill is shut off. The post-project condition without Laguna spill assumes that FVGCP, NVSSP and VSCP are built after Laguna spill is shut off. The FVGCP stand alone condition assumes that only FVGCP develops while NVSSP and VSCP remain undeveloped.

Elder and Gerber Creeks are proposed to be improved as part of development within NVSSP; Unionhouse Creek exists in its ultimate configuration and tributary drainage from the FVGCP to Morrison Creek and Strawberry Creek is so insignificant that it will not warrant future channel improvements.

Overall increases in runoff volumes will be mitigated through the implementation of detention basins. Potential water quality impacts will be mitigated through the implementation of water quality impacts features including dry detention basins. In areas where detention basins cannot be implemented, grassy swales and underground treatment structures may be constructed. Oversize exhibit DF-1 shows the drainage facilities that need to be developed with particular project areas.

The improvements needed to accomplish the development concept analyzed in this report are as follows:

- Excavate Elder and Gerber Creeks
- Provide flood control and water quality detention basins along Unionhouse, Florin Elder and Gerber Creeks (Table ES-1)
- Construct storm drain pipes for the project area

Table ES-1 Detention Basins Required for FVGCP			
DET-BASIN	WATER QUALITY VOLUME (AC-FT)	FLOOD CONTROL VOLUME (AC-FT)	DETENTION BASIN AND BUFFER AREA FOOTPRINT (ACRES)
UNIONHOUSE CREEK			
UHDET2	5.6	32.6	5.6
WQSCK	2.5	N/A	1.4
UHDET1	N/A	30.5	8.3
WQUH1AN	5.8	N/A	2.4
ELDER CREEK WQ ONLY BASIN			
WQMH10	4.8	N/A	2.1
ELDER CREEK WITH LAGUNA SPILL			
E28	23.4	70.2	15.2
E31	6.0	73.0	12.8
ELDER CREEK WITHOUT LAGUNA SPILL			
E28	23.4	70.2	15.2
E31	6.0	73.0	12.8
GERBER CREEK WITHOUT LAGUNA SPILL			
G43	12.4	14.5	6.9
FLORIN CREEK			
WQDETSC2	8.6	5.7	3.6
SC2R71	N/A	6.0	1.9
DETF4C	24.9	17.7	10.9
SWATTD	N/A	34.9	6.4
MH6DET	N/A	25.5	4.6
INTERIM			
FBNE	3.2	12.6	3.7
VR	N/A	1.4	1.1
VRWQ	1.1	N/A	

Table ES-2 is a summary table identifying 100-year pre-project and post-development peak flows and water surface elevations at the downstream community plan boundary.

Table ES-2: Comparison of Flows and Stages for FVGCP Post-development Conditions				
Condition	Florin Creek Reach 2 Node 22352	Project Boundary at Elder Creek Node Sta 4.795	City/County Boundary at Sta. 1.921	Unionhouse Creek Node Sta 15407
Post-project with Laguna Spill 100-year Flows (cfs)				
Existing	419	1897	1946	636
Post-development	352	1807	1843	560
Increase in stage	-67	-90	-103	-76
Post-project with Laguna Spill 100-year Water Surface Elevations (feet)				
Existing	35.61	38.80	20.19	36.48
Post-development	35.21	38.71	19.97	35.59
Increase	-0.40	-0.09	-0.22	-.89
Post-project without Laguna Spill 100-year Flows (cfs)				
Existing	419	1897	1946	636
Post-development	352	1437	1740	560
Increase in stage	-67	-460	-206	-76
Post-project without Laguna Spill 100-year Water Surface Elevations (feet)				
Existing	35.61	38.80	20.19	36.48
Post-development	35.21	37.89	19.76	35.59
Increase	-0.40	-0.91	-0.43	-.89
Condition	Elder Creek Tributary at Vintage Ranch	Elder Creek Tributary at Bradshaw		
	1.11	0.62		
Interim Conditions 100-year Flows (cfs)				
Existing	141	232		
Post-development	127	155		
Increase in stage	-14	-77		
Interim Conditions 100-year Water Surface Elevations (feet)				
Existing	66.79	61.86		
Post-development	66.72	61.15		
Increase in stage	-0.07	-0.71		

With the implementation of the various channel improvements, detention and water quality facilities identified in the report, the FVGCP can build out at the designated land use densities without negatively impacting existing downstream hydraulic conditions or storm water quality with or without the North Vineyard Station Specific Plan Drainage Master Plan improvements.

Stand-alone Condition

The stand-alone condition is an analysis to determine what drainage facilities would be required for FVGCP to develop assuming NVSSP and VSCP do not develop. The stand-alone condition analysis indicates that the detention basin storage volumes provided for the FVGCP site are sufficient to reduce post-project flows and stages down to existing levels immediately downstream of the project at River Mile 4.795 and at the City/County boundary at River Mile 1.921 as shown the table below (Table ES-2). Constructing the proposed detention basins at the same time the areas draining to them will allow the development of the FVGCP site without relying on any other projects (see oversize exhibit DF-1). Under Stand-alone conditions, the FVGCP can build out at the designated land use densities without negatively impacting existing downstream hydraulic conditions or storm water quality.

Table ES-3: Comparison of Flows and Stages for FVGCP Stand-alone Conditions				
Condition	Florin Creek Reach 2 Node	Project Boundary at Elder Creek Node	City/County Boundary at Elder Creek Node	Unionhouse Creek Node Sta 15407
	22352	Sta 4.795	Sta 1.921	
100-year Flows (cfs)				
Existing	419	1897	1946	636
Stand-alone	352	1852	1930	560
Increase in stage	-67	-45	-16	-76
100-year Water Surface Elevations (feet)				
Existing	35.61	38.80	20.19	36.48
Stand-alone	35.21	38.79	20.21	35.59
Increase	-0.4	-0.01	0.02	-0.89