



# APPENDIX F: NATURAL RESOURCE + ENVIRONMENTAL HAZARD AREAS: MAPS AND DEVELOPMENT CONSTRAINTS

## RESOURCE AND CONSTRAINTS MAPS

The Resources and Constraints Maps are listed in Appendix F and reflect the policies of the General Plan and the Local Coastal Program (LCP) Land Use Plan, as well as policies of the State of California and the United States government, as applicable. Based on mapped features and/or technical data, map updates are performed continuously, and are based on approved technical data shown in the table below. The column titled “New Information Acceptable for Updating Maps” applies to broad amendments to the Resources and Constraints Maps that are generally initiated by the County to maintain accurate up-to-date information. The column titled “Parcel Specific Overriding Information” lists criteria under which an individual property may be evaluated. Individual reports prepared under these criteria do not change the overall maps but may “override” the policies relating to the specific resource or constraint.

Some resources and constraints are included on General Plan Figures, as indicated in the table below. Please refer to the Santa Cruz County GISWeb for the latest data and maps available.

Resource/Constraint	Matrix Map	Original Mapping Source	Map Used to Convert to GIS	New Information Acceptable for Updating Maps	Parcel Specific Overriding Information
<b>Biotic and Water Resources</b>					
Biotic Resources	✓	Growth Mgmt Report Biotic Resource Maps; CA Native Plant Society Maps; LCP LUP R&C maps	Source Maps, CA Dept of Fish & Game Natural Diversity Database Maps	Biotic Report prepared by a qualified biologist, changes in State/Federal lists	Biotic report prepared by a qualified biologist
Groundwater Recharge	✓	Growth Mgmt Env. Report Groundwater Recharge Maps based on soils/geology mapping	Source Maps	Report by certified engineering geologist or hydrogeologist	Report by certified engineering geologist or hydrogeologist
Least Disturbed Watersheds	✓	SLV Area GP, 1974; PROS Plan; LCP LUP R&C Maps	Source Maps	General Plan amendment	Topographic survey by licensed surveyor



## Appendix F: Natural Resource + Environmental Hazard Areas

Resource/Constraint	Matrix Map	Original Mapping Source	Map Used to Convert to GIS	New Information Acceptable for Updating Maps	Parcel Specific Overriding Information
Reservoir Protection		Master Plan for Water Development, 1968-2020; PROS Plan	Source Maps; Pajaro Valley Water Mgmt Agency Mgmt Plan, 1993	Water District/Agency Master Plans	Water District/Agency Master Plan
Riparian Woodland (Figure 5-4)	✓	Land Use/Land Cover Map, S.C. Co. Office of Watershed Mgmt. (based on 1976 satellite images) LCP LUP R&C Maps	Source Maps	Map of extent of riparian vegetation prepared by a qualified biologist	Map of extent of riparian vegetation prepared by a qualified biologist
Streams: Location (Figure 5-4)	✓	USGS Topographic Maps	Streams from topographic maps (in digital format), USGS FEMA flood study area and 701/RDA aerial photos where available	New aerial photogrammetry or revised USGS topographic maps	Report by qualified biologist
Streams: Classification (Figure 5-4)	✓	USGS Topographic Maps	Source Maps	Revised USGS topographic maps, biologist or qualified hydrologist	Report by qualified biologist
Timber Resources	✓	Timber Production Zone Maps; PROS Plan; LCP LUP R&C Maps	Source Maps	Rezoning of property by the Board of Supervisors to or from Timber Production Zone	Report by registered forester demonstrating that land is/is not capable of growing and average annual volume of 15 cu.ft. wood fiber/acre
Water Supply Watersheds (Figure 5-3)	✓	Master Plan for Water Development, 1968-2020; Growth Mgmt Environmental Report Water Supply Watershed Map; PROS Plan; LCP LUP R&C Maps;	Source Maps	Water District/Agency Master Plans, General Plan amendment	Topographic survey by licensed surveyor



Resource/Constraint	Matrix Map	Original Mapping Source	Map Used to Convert to GIS	New Information Acceptable for Updating Maps	Parcel Specific Overriding Information
		Water Purveyor Information			
<b>Hazards and Geophysical</b>					
Critical Fire Hazard	✓	Growth Management Environmental Report Natural Fire Hazards Map	Source Map	Report from biologist showing site is not chaparral	Report from biologist showing site is not chaparral habitat
Fault Zones: State	✓	State of CA Special Studies Zones 1976; Seismic Safety Element, 1975	State Special Studies Zones 1992	Revision of State Special Studies Zones	Report by certified engineering geologist
Fault Zones: County	✓	Growth Mgmt Environmental Report Seismic Hazards Map, 1977; Seismic Safety Element, 1975	Source Maps	General Plan Amendment	Report by certified engineering geologist
Electric and Magnetic Fields		PG&E Maps	Not converted, will use PG&E Maps for locations of transmission and major distribution lines	Addition or removal of transmission or major distribution lines by any utility	Not applicable
Floodway/Floodplain (Figure 5-4)	✓	FEMA Floodway/Flood Insurance Maps	Source Maps	Revised FEMA Floodway/Flood Insurance Maps	Report by certified engineering geologist, licensed surveyor or civil engineer
Liquefaction	✓	Seismic Safety Element Liquefaction Map	Not converted, no map of appropriate scale available, USGS bedrock geology will be used when available	General Plan amendment	Report by certified engineering geologist or soils engineer



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Resource/Constraint	Matrix Map	Original Mapping Source	Map Used to Convert to GIS	New Information Acceptable for Updating Maps	Parcel Specific Overriding Information
Mineral Resources: Location (Figure 5-5)	✓	Growth Management Environmental Report Timber and Mineral Resource Map	Source Map	General Plan and LCP Amendment	Not applicable
Mineral Resources: Designations/ Classifications		CA Dept of Conservation, Division of Mines and Geology, Special Report 146 Part IV and SMARA Designation Report No. 7	Source Maps	Revision of State Mines and Geology Designation/ Classification Maps	Not applicable
<b>Land Use</b>					
Agriculture Resource Area	✓	Agricultural Resources Map, 1979; LCP LUP R&C Maps	Revised Agricultural Resource Maps, 1991 (Incorporates LCP Maps)	General Plan and LCP amendment	Not applicable
Airport Safety Compatibility Zones (Figure 2-14)		Watsonville Airport Plan	Source Map	Revised Airport Land Use Plan, Federal Aviation Regulations, staff recommended changes	Not applicable
Archaeological Resources		Resource Maps, County Archaeologic Consultant	Revised resource maps, County Archaeologic Consultant, 1992	Revised maps prepared by archaeologic consultant	Report prepared by qualified professional archaeologist
Noise Contours		Noise Corridor Maps from 1976	To be revised to reflect updated Noise Element	Update of Ground Trans. and Airport Noise Contours by an acoustical engineer	Study of noise levels by an acoustical engineer
Visual Resources (includes Scenic and Hydrologic/Geologic Features)		LCP LUP R&C Maps	Source Maps	General Plan and LCP Amendment	Visual analysis by architect, landscape architect, planner or other qualified professional



Resource/Constraint	Matrix Map	Original Mapping Source	Map Used to Convert to GIS	New Information Acceptable for Updating Maps	Parcel Specific Overriding Information
GIS = County of Santa Cruz Geographic Information System GP = General Plan LCP LUP R&C Maps = Local Coastal Program Land Use Plan Resource and Constraint Maps PROS PLAN = Parks Rec. & Open Space Plan			SMARA = State Mining and Reclamation Act USGS = United States Geological Survey ✓ = Used in Rural Residential Density Determinations (See Chapter 2: Land Use Element, section 2.3)		



## DEVELOPMENT CONSTRAINTS: LAND DIVISION AND RESIDENTIAL DENSITY ON RESOURCE LANDS

Type of Resource <sup>1</sup>	Land Division (Minimum average area required PER PARCEL) <sup>2</sup>	Density (Minimum average site area PER RESIDENTIAL UNIT) <sup>2</sup>
<b>AGRICULTURAL LANDS</b> (Objective ARC-1.1):  Type 1 Commercial Agricultural land Type 2 Commercial Agricultural land Type 3 Commercial Agricultural land*	(only under special conditions)  10 arable acres 20 arable acres 20 arable acres	1 unit per parcel 1 unit per parcel 1 unit per parcel
<b>NON-COMMERCIAL AGRICULTURAL LANDS</b> (Objective ARC-1.6)  Land designated Agricultural on land use maps, not designated as Agricultural Resource land	10-40 net developable acres, or 2 ½ -20 acres net developable acres with Special Findings; based on Rural Density Matrix	10-40 net developable acres, or 2 ½ -20 acres net developable acres with Special Findings; based on Rural Density Matrix
<b>SPECIAL FORESTS</b> (Objective ARC-3.1)	No division of mapped special forest habitat.	The lowest density in the range allowable by the applicable General Plan designation for land outside mapped habitat area. Otherwise 1 unit per parcel.
<b>MAPPED GRASSLANDS*</b> in the Coastal Zone (Objective ARC-3.1 and ARC-5.1)	No division of mapped grassland habitat.	The lowest density in the range allowable by the applicable General Plan designation for land outside mapped habitat area. Otherwise 1 unit per parcel.
<b>MINERAL RESOURCE LANDS</b> (Objective ARC-7.2)	40 gross acres	40 gross acres
<b>TIMBER RESOURCE LANDS</b> (Objective ARC-7.1): *Land with Timber Production Zone District inside the Coastal Zone  Land with Timber Production Zone District outside the Coastal Zone	160 gross acres, or 40 gross acres if clustered and a joint Timber Management Plan has been approved  40 gross acres, or 10 gross acres if clustered and a joint Timber Management Plan has been approved	160 gross acres, or 40 gross acres if clustered and a joint Timber Management Plan is approved  40 gross acres unless clustered, then 10 gross acres



Type of Resource <sup>1</sup>	Land Division (Minimum average area required PER PARCEL) <sup>2</sup>	Density (Minimum average site area PER RESIDENTIAL UNIT) <sup>2</sup>
Parcels over 20 acres in size in designated timber resource areas, not zoned Timber Production	Same requirements as Timber Production zoned lands if found to have equivalent resources	Same density as Timber Production zoned lands if found to have equivalent resources
<b>GROUNDWATER RECHARGE AREA</b> (Objective ARC-4.5)	10 gross acres	10 gross acres
<b>WATERSHEDS</b> (Objective ARC-4.2)		
Water supply watersheds in the Coastal Zone	20 gross acres	20 gross acres
Water supply watersheds outside Coastal Zone (except San Lorenzo River Watershed and under other circumstances)	10 gross acres	10 gross acres
Least disturbed watersheds	40 gross acres	40 gross acres
Proposed reservoir protection areas	No division of parcel	1 unit per parcel
<b>COASTAL HAZARD AREAS*</b> – bluffs and beaches (Objective 6.2)	New parcels must provide building sites outside areas of coastal hazards.	Density consistent with General Plan designation.
<b>CRITICAL FIRE HAZARD AREAS</b> (Objective 6.5):		
Building site in Critical Fire Hazard Area -with through road or secondary access	- Parcel size consistent with the lowest density in the range allowable by the applicable General Plan designation	- The lowest density in the range allowable by the applicable General Plan designation
-with dead end road	- No division allowed	- 1 unit per parcel
Mitigatable Critical Fire Hazard Area If all mitigations approved	Parcel size consistent with General Plan land use designation	Density consistent with General Plan land use designation
<b>100 YEAR FLOODPLAIN</b> (Objective 6.4)	Permitted only under special conditions	Density consistent with General Plan designation excluding



## Appendix F: Natural Resource + Environmental Hazard Areas

Type of Resource <sup>1</sup>	Land Division (Minimum average area required PER PARCEL) <sup>2</sup>	Density (Minimum average site area PER RESIDENTIAL UNIT) <sup>2</sup>
		floodway area
<b>SEISMIC REVIEW ZONES –</b> Fault zones (Objective 6.1)	20 net developable acres outside the USL/RSL. See 6.1.12 for exception for parcels meeting certain specific criteria. Consistent with General Plan designation inside USL/RSL.	Density consistent with General Plan designation and Geologic Report.

\*Denotes policies which only apply inside the Coastal Zone

<sup>1</sup> This table summarizes special land division and density provisions of General Plan and LCP Resources and Constraints policies. More specific standards are found in the General Plan and LCP Land Use Plan sections referenced in the table.

<sup>2</sup> These acreages are expressed as minimums. The maximum number of parcels and/or dwelling units resulting from any land division shall not exceed the total number of parcels and/or allowed units on one parcel as determined by this table and the Rural Residential Density Determination Matrix