

# California Revised Storie Index (CA)

## Rating Options

Attribute Name: California Revised Storie Index (CA)

The Revised Storie Index is a rating system based on soil properties that govern the potential for soil map unit components to be used for irrigated agriculture in California.

The Revised Storie Index assesses the productivity of a soil from the following four characteristics:

- Factor A: degree of soil profile development
- Factor B: texture of the surface layer
- Factor C: steepness of slope
- Factor X: drainage class, landform, erosion class, flooding and ponding frequency and duration, soil pH, soluble salt content as measured by electrical conductivity, and sodium adsorption ratio

Revised Storie Index numerical ratings have been combined into six classes as follows:

- Grade 1: Excellent (81 to 100)
- Grade 2: Good (61 to 80)
- Grade 3: Fair (41 to 60)
- Grade 4: Poor (21 to 40)
- Grade 5: Very poor (11 to 20)
- Grade 6: Nonagricultural (10 or less)

The components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as the one shown for the map unit. The percent composition of each component in a particular map unit is given to help the user better understand the extent to which the rating applies to the map unit.

Other components with different ratings may occur in each map unit. The ratings for all components, regardless the aggregated rating of the map unit, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Aggregation Method: Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value to represent the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. The components in the map unit name represent the major soils within a map unit delineation. Minor components make up the balance of the map unit. Great differences in soil properties can occur between map unit components and within short distances. Minor components may be very different from the major components. Such differences could significantly affect use and management of the map unit. Minor components may or may not be documented in the database. The results of aggregation do not reflect the presence or absence of limitations of the components which are not listed in the database. An on-site investigation is required to identify the location of individual map unit components.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be generated. Aggregation must be done because, on any soil map, map units are delineated but components are not.

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie. The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

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Aggregation Method: Dominant Condition  
Tie-break Rule: Lower

Santa Clara Area, California, Western Part  
Survey Area Version and Date: 8 - 09/16/2019

Map symbol	Map unit name	Rating	Map unit percent
101	Urban land, 0 to 2 percent slopes, basins	Not Applicable for Storie Index	98
102	Urban land, 0 to 2 percent slopes, alluvial fans	Not Applicable for Storie Index	98
110	Xerorthents, trash substratum, 0 to 2 percent slopes	Grade 1 - Excellent	100
110sc	Ben Lomond sandy loam, 5 to 15 percent slopes	Grade 2 - Good	91
111	Xerorthents, trash substratum, 9 to 15 percent slopes	Grade 1 - Excellent	100
112	Xerorthents, trash substratum 15 to 30 percent slopes	Grade 2 - Good	100
113	Xerorthents, trash substratum, 30 to 50 percent slopes	Grade 3 - Fair	100
115	Pits, mine	Not Applicable for Storie Index	100
116sc	Bonnydoon loam, 5 to 50 percent slopes, MLRA 4B	Grade 5 - Very Poor	85
120	Aquic Xerorthents, bay mud substratum, 0 to 2 percent slopes	Grade 4 - Poor	95
121	Aquic Xerorthents, bay mud substratum, 2 to 5 percent slopes	Grade 4 - Poor	95
122	Xerorthents, anthropogenic fill, 0 to 2 percent slopes	Grade 3 - Fair	100
123	Urban Land-Xerorthents, anthropogenic fill complex, 0 to 2 percent slopes	Not Applicable for Storie Index	70
129	Urban land-Still complex, 2 to 5 percent slopes	Not Applicable for Storie Index	70
130	Urban land-Still complex, 0 to 2 percent slopes	Not Applicable for Storie Index	70
131	Urban land-Elpaloalto complex, 0 to 2 percent slopes	Not Applicable for Storie Index	70
135	Urban land-Stevenscreek complex, 0 to 2 percent slopes	Not Applicable for Storie Index	70
136	Urban land-Stevenscreek complex, 2 to 9 percent slopes	Not Applicable for Storie Index	68
137	Stevenscreek sandy clay loam, 0 to 2 percent slopes	Grade 1 - Excellent	100
140	Urban land-Flaskan complex, 0 to 2 percent slopes	Not Applicable for Storie Index	70
141	Urban land-Flaskan complex, 2 to 9 percent slopes	Not Applicable for Storie Index	70
142	Flaskan sandy loam, 15 to 30 percent slopes	Grade 2 - Good	90
142sc	Lompico-Felton complex, 5 to 30 percent slopes	Grade 3 - Fair	55
143	Flaskan sandy clay loam, 5 to 9 percent slopes	Grade 1 - Excellent	95
143sc	Lompico-Felton complex, 30 to 50 percent slopes, MLRA 4B	Grade 3 - Fair	93
144	Flaskan sandy clay loam, 0 to 2 percent slopes	Grade 1 - Excellent	90
145	Urbanland-Hangerone complex, 0 to 2 percent slopes, drained	Not Applicable for Storie Index	70
146	Hangerone clay loam, drained, 0 to 2 percent slopes	Grade 4 - Poor	98
149sc	Madonna loam, 15 to 30 percent slopes	Grade 4 - Poor	89
150	Urbanland-Embarcadero complex, 0 to 2 percent slopes, drained	Not Applicable for Storie Index	70
150sc	Maymen stony loam, 15 to 30 percent slopes	Grade 5 - Very Poor	85
151	Embarcadero silty clay loam, drained, 0 to 2 percent slopes	Grade 4 - Poor	95
151sc	Maymen stony loam, 30 to 75 percent slopes	Grade 6 - Nonagricultural	85
155	Novato clay, 0 to 1 percent slopes, tidally flooded	Grade 6 - Nonagricultural	96
156	Novato silty clay loam, excessive salinity, 0 to 1 percent slopes, protected	Grade 6 - Nonagricultural	96
157	Novato clay, 0 to 1 percent slopes, protected	Grade 6 - Nonagricultural	96
160	Urbanland-Clear Lake complex, 0 to 2 percent slopes	Not Applicable for Storie Index	65
161	Clear Lake silty clay, 0 to 2 percent slopes, drained	Grade 4 - Poor	95

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165	Urbanland-Campbell complex, 0 to 2 percent slopes, protected	Not Applicable for Storie Index	70
166	Campbell silt loam, 0 to 2 percent slopes, protected	Grade 1 - Excellent	95
168	Elder fine sandy loam, protected, 0 to 2 percent slopes	Grade 1 - Excellent	100
169	Urbanland-Elder complex, 0 to 2 percent slopes, protected	Not Applicable for Storie Index	72
170	Urbanland-Landelspark complex, 0 to 2 percent slopes	Not Applicable for Storie Index	70
171	Elder fine sandy loam, 0 to 2 percent slopes, rarely flooded	Grade 1 - Excellent	98
173	Caninecreek-Elder complex, 0 to 2 percent slopes, rarely flooded	Grade 1 - Excellent	90
174	Urban Land-Caninecreek-Elder complex, 0 to 2 percent slopes	Not Applicable for Storie Index	70
175	Urbanland-Botella complex, 0 to 2 percent slopes	Not Applicable for Storie Index	75
176	Urban land-Botella complex, 2 to 9 percent slopes	Not Applicable for Storie Index	75
177	Urban land-Botella complex, 9 to 15 percent slopes	Not Applicable for Storie Index	75
178	Caninecreek-Elder complex, 1 to 5 percent slopes, protected	Grade 1 - Excellent	95
180	Urbanland-Newpark complex, 0 to 2 percent slopes	Not Applicable for Storie Index	70
181	Newpark silty clay loam, 0 to 2 percent slopes	Grade 1 - Excellent	100
185	Urban Land - Bayshore complex, 0 to 2 percent slopes, drained	Not Applicable for Storie Index	70
190	Cumulic Haploxerolls, 1 to 5 percent slopes	Grade 3 - Fair	80
300	Urbanland-Montara complex, 15 to 30 percent slopes	Not Applicable for Storie Index	70
301	Montara sandy loam, 15 to 50 percent slopes	Grade 4 - Poor	85
302	Montara-Rock outcrop complex, 30 to 50 percent slopes	Grade 5 - Very Poor	80
303	Montara-Santerhill complex, 15 to 30 percent slopes	Grade 4 - Poor	90
304	Montara-Santerhill complex, 30 to 50 percent slopes	Grade 4 - Poor	90
305	Alo-Altamont complex, 15 to 30 percent slopes	Grade 4 - Poor	60
306	Alo-Altamont complex, 30 to 50 percent slopes	Grade 5 - Very Poor	60
307	Kawenga-Alo complex, 20 to 40 percent slopes	Grade 2 - Good	60
308	Urbanland-Santerhill-Montara complex, 9 to 15 percent slopes	Not Applicable for Storie Index	60
309	Urbanland-Altamont-Alo complex, 9 to 15 percent slopes	Not Applicable for Storie Index	60
310	Diablo clay, 15 to 30 percent slopes, MLRA 15	Grade 4 - Poor	89
311	Diablo clay, 30 to 50 percent slopes, MLRA 15	Grade 4 - Poor	85
312	Diablo-Urbanland complex, 9 to 15 percent slopes	Grade 4 - Poor	60
313	Diablo-Urbanland complex, 15 to 30 percent slopes	Grade 4 - Poor	60
314	Urbanland-Altamont-Alo complex, 15 to 30 percent slopes	Not Applicable for Storie Index	60
315	Cropley clay, 0 to 2 percent slopes, MLRA 14	Grade 3 - Fair	85
316	Cropley clay, 2 to 9 percent slopes, MLRA 14	Grade 3 - Fair	90
317	Urbanland-Cropley complex, 0 to 2 percent slopes	Not Applicable for Storie Index	75
318	Urban land-Cropley complex, 2 to 9 percent slopes	Not Applicable for Storie Index	75
320	Literr-Merbeth complex, 15 to 30 percent slopes	Grade 2 - Good	100
321	Merbeth-Literr complex, 30 to 65 percent slopes	Grade 3 - Fair	90

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322	Literr-Urbanland-Merbeth complex, 15 to 30 percent slopes	Grade 2 - Good	70
323	Minlum-Airship-Literr complex, 40 to 65 percent slopes	Grade 3 - Fair	35
324	Literr loam, 15 to 30 percent slopes	Grade 2 - Good	100
326	Airship-Minlum complex, 40 to 65 percent slopes	Grade 5 - Very Poor	60
327	Literr-Urbanland-Merbeth complex, 9 to 15 percent slopes	Grade 1 - Excellent	70
330	Montavista clay loam, 15 to 30 percent slopes	Grade 2 - Good	99
331	Urbanland-Montavista complex, 15 to 30 percent slopes	Not Applicable for Storie Index	55
332	Urbanland-Montavista complex, 2 to 9 percent slopes	Not Applicable for Storie Index	55
333	Montavista-Togasara complex, 9 to 15 percent slopes	Grade 2 - Good	95
334	Urban Land-Montavista-Togasara complex, 9 to 15 percent slopes	Not Applicable for Storie Index	55
335	Montavista-Togasara complex, 2 to 9 percent slopes	Grade 1 - Excellent	64
337	Urban Land-Togasara-Montavista complex, 2 to 9 percent slopes	Not Applicable for Storie Index	55
339	Togasara-Montavista complex, 15 to 30 percent slopes	Grade 2 - Good	100
345	Argixerolls, 20 to 50 percent slopes	Grade 2 - Good	90
350	Urban Land-Togasara-Montavista complex, 15 to 30 percent slopes	Not Applicable for Storie Index	55
365	Unistan-Rock outcrop complex, 5 to 9 percent slopes	Grade 5 - Very Poor	70
366	Unistan-Rock outcrop complex, 15 to 30 percent slopes	Grade 5 - Very Poor	70
367	Urban land-Unistan complex, 15 to 30 percent slopes	Not Applicable for Storie Index	70
368	Urbanland-Unistan complex, 9 to 15 percent slopes	Not Applicable for Storie Index	70
370	Zeppelin-Mccooy complex, 5 to 9 percent slopes	Grade 2 - Good	55
371	Zeppelin-Mccooy complex, 15 to 30 percent slopes	Grade 3 - Fair	85
375	Alumrock-Zeppelin complex, 15 to 30 percent slopes	Grade 4 - Poor	60
376	Zeppelin-Alumrock complex, 30 to 50 percent slopes	Grade 4 - Poor	50
377	Alumrock fine sandy loam, 15 to 30 percent slopes	Grade 4 - Poor	90
378	Urbanland-Alumrock-Zeppelin complex, 9 to 15 percent slopes	Not Applicable for Storie Index	60
379	Urbanland-Alumrock complex, 9 to 15 percent slopes	Not Applicable for Storie Index	60
380	Lodo-Zeppelin complex, 30 to 50 percent slopes	Grade 5 - Very Poor	50
385	Alo-Altamont complex, 9 to 15 percent slopes	Grade 4 - Poor	50
386	Alumrock-Zeppelin complex, 9 to 15 percent slopes	Grade 4 - Poor	55
390	Rock outcrop-Lodo complex, 50 to 75 percent slopes	Not Applicable for Storie Index	70
391	Kawenga-Lodo complex, 15 to 30 percent slopes	Grade 2 - Good	45
392	Lodo-Rock outcrop complex, 50 to 75 percent slopes	Grade 5 - Very Poor	65
400	Diablo clay, 5 to 25 percent slopes, MLRA 15	Grade 4 - Poor	87
401	Gaviota loam, 15 to 30 percent slopes	Grade 4 - Poor	85
402	Gaviota loam, 30 to 75 percent slopes	Grade 5 - Very Poor	88
403	Gaviota gravelly loam, 30 to 75 percent slopes, eroded, MLRA 15	Grade 5 - Very Poor	90
404	Gaviota gravelly loam, 30 to 75 percent slopes, severely eroded, MLRA 15	Grade 5 - Very Poor	90

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405	Gaviota-Los Gatos complex, 30 to 50 percent slopes, MLRA 15	Grade 4 - Poor	92
406	Los Gatos gravelly loam, 50 to 75 percent slopes	Grade 4 - Poor	100
407	Los Gatos-Gaviota complex, 50 to 75 percent slopes	Grade 4 - Poor	71
408	Vallecitos rocky loam, 15 to 30 percent slopes, eroded	Grade 4 - Poor	85
409	Zamora loam, 2 to 9 percent slopes	Grade 1 - Excellent	100
505	Casrock sandy loam, conglomerate bedrock, 15 to 30 percent slopes	Grade 4 - Poor	75
510	Casrock-Skyridge-Rock outcrop complex, 8 to 30 percent slopes	Grade 4 - Poor	40
516	Ben Lomond gravelly sandy loam, 15 to 30 percent slopes	Grade 3 - Fair	95
517	Ben Lomond-Casrock complex, 30 to 50 percent slopes	Grade 3 - Fair	75
518	Ben Lomond-Casrock complex, 50 to 75 percent slopes	Grade 4 - Poor	95
519	Ben Lomond-Felton complex, 30 to 75 percent slopes	Grade 4 - Poor	100
520	Mouser-Maymen complex, 30 to 75 percent slopes	Grade 4 - Poor	60
525	Felton fine sandy loam, 30 to 50 percent slopes	Grade 4 - Poor	100
530	Aptos loam, 15 to 30 percent slopes	Grade 3 - Fair	90
531	Aptos Loam, 30 to 50 percent slopes	Grade 4 - Poor	95
551	Maymen-Katykat complex, 8 to 30 percent slopes	Grade 4 - Poor	47
552	Elsman-Maymen-Sanikara, 30 to 50 percent slopes	Grade 3 - Fair	50
553	Elsman-Maymen, 50 to 75 percent slopes	Grade 4 - Poor	53
560	Katykat-Mouser-Sanikara complex, 30 to 50 percent slopes	Grade 3 - Fair	75
561	Footpath-Mouser complex, 30 to 50 percent slopes	Grade 4 - Poor	50
564	Santerhill-Xerolls-Mouser complex, 15 to 30 percent slopes, mined land	Grade 3 - Fair	65
566	Mouser-Katykat-Sanikara complex, 50 to 75 percent slopes	Grade 3 - Fair	70
567	Sanikara-Mouser-Rock outcrop complex, 50 to 75 percent slopes	Grade 6 - Nonagricultural	45
569	Katykat-Sanikara complex, 8 to 30 percent slopes	Grade 1 - Excellent	60
570	Footpath-Mouser complex, 50 to 75 percent slopes	Grade 4 - Poor	85
571	Sanikara-Rock Outcrop complex, 75 to 100 percent slopes	Grade 6 - Nonagricultural	65
575	Mouser-Footpath complex, 8 to 30 percent slopes	Grade 2 - Good	60
576	Sanikara-Footpath complex, 30 to 75 percent slopes	Grade 6 - Nonagricultural	75
580	Maymen gravelly sandy clay loam, 30 to 50 percent slopes	Grade 6 - Nonagricultural	85
581	Maymen gravelly sandy clay loam, 50 to 75 percent slopes	Grade 6 - Nonagricultural	85
DAM	Dams	Not Applicable for Storie Index	100
W	Water	Not Applicable for Storie Index	100