

GMAP Highlights

As of mid-1999, Greenbelt Alliance's Greenbelt Mapping and Assessment Program (GMAP) determined that:

While overall acreage at risk has decreased since our last analysis in 1994, the Bay Area's Greenbelt remains vulnerable to widespread sprawl development. Despite recent progress, we are in danger of increasing our currently urbanized area by 66 percent.

- 490,525 Greenbelt acres are at risk of suburbanization, being "ranchetted" (turned into rural estates), or undergoing related conversion in the next 30 years. 490,525 acres are equal in size to more than 16 San Franciscos.
- Acreage at risk in the entire nine county Bay Area dropped by 78,252 acres (or 14 percent) since the last GMAP update in 1994.
- Significant reductions in Greenbelt acres at risk occurred in Marin (a 56 percent drop) Alameda (32 percent), and Sonoma (24 percent) Counties.
- More modest reductions were seen in Santa Clara County (12 percent), Solano County (6 percent), Napa County (5 percent), and Contra Costa County (3 percent).
- At risk acreage increased by 35 percent in San Mateo County, although the total is relatively low (19,309 acres).

- Secure Greenbelt acreage moved upward slightly from 21 percent of all land in the region to 22 percent. Major increases were seen in San Mateo, Sonoma, Santa Clara, and Contra Costa Counties.

The decline in at risk acreage can be attributed to a number of factors: increased local activity supporting Greenbelt protection, major land purchases by public and private open space acquisition organizations; and the adoption of urban growth boundaries and other land use regulations by a number of communities.

There is a clear difference between counties with relatively strong Greenbelt protections and those counties with weak protections.

- "Greenbelter" counties with the lowest percentage of their total acreage at risk are Marin, Napa, and San Mateo counties.
- "Greenbuster" counties with the largest percentage of their total acreage at risk are Contra Costa, Santa Clara, and Solano counties.
- Somewhere in the middle are counties like Alameda and Sonoma which have enacted some strong land use protection measures, but still have a relatively large percentage of their total acreage at risk.

WHAT IS GMAP?

GMAP is a periodic survey of all Bay Area open lands, highlighting those that are threatened by development pressures over the next three decades and are not firmly protected as agriculture, parklands or other open space.

It is a "snapshot" of current development pressures, showing likely directions of suburban, ranchette and related development — *if nothing is done by cities, counties and special agencies to alter these development trends.*

- The "Greenbuster" with the largest share of its lands at risk is Contra Costa County (22.8 percent). The "Greenbelter" with the least land at risk — apart from San Francisco — is Marin County (2.4 percent).
- The county with the most Secure Greenbelt acreage is Marin with a remarkable 51 percent. The county with the smallest proportion is Sonoma (approximately 10 percent).

Ten key development hot spots around the Bay Area threaten to consume as much as 144,000 acres of Greenbelt in the next ten years.

- In the **East Bay**, the main hot spots are the Tri-Valley Area straddling Alameda and Contra Costa Counties; the Diablo Country foothills near Antioch and Pittsburg; and the Delta farmlands near Brentwood.
- In the **North Bay**, major hot spots are south Napa, Marin's bayshore, rural Sonoma County, and the I-80 corridor in Solano County.
- Hot spots in the **South Bay** and on the **Peninsula** include San Jose's Coyote Valley, farmland surrounding Gilroy, and the Mid-Coast region around Half Moon Bay on the San Mateo coast.

Despite recent progress, sprawl threatens to pave over 490,525 Greenbelt acres.





1999 GMAP Findings

Beginning in 1989, Greenbelt Alliance has conducted a periodic computerized survey of development trends of the nine-county Bay Area – known as the Greenbelt Mapping and Assessment Program (GMAP). Based on an extensive review of community General Plans and interviews with scores of local planners and activists, this research identifies those Greenbelt lands most at risk of development.

Our 1994 GMAP report revealed that 568,777 Greenbelt acres were at risk over the next 30 years. Since that time, there has been a wave of public activity in communities throughout the Bay Area to protect open space and draw the line on sprawl. Nonetheless, our latest analysis indicates that a significant portion of the Greenbelt remains at serious risk of being lost to more costly sprawl development.

Our 1999 analysis reveals that a total of 490,525 acres of farmlands and other

open space are at risk of development or being removed from Greenbelt related uses in the next 30 years. 490,525 acres is equal in size to more than 16 new San Francisco or nearly 14 Oakland. If these Greenbelt lands are developed, the Bay Area's urbanized landscape will increase by 66 percent.

These lands are at risk during a time of booming economic activity and rapid new job growth. With the Bay Area's population expected to climb by another 1.1 million people by 2020, development pressures on the Greenbelt may be at an all time high.

Yet despite these pressures, there have been some positive trends since our last GMAP analysis in 1994. The total amount of acreage at risk has dropped by 14 percent since 1994 and several counties, including Marin, Alameda, and Sonoma have experienced significant reductions in land at risk. The region as a whole also increased its

land area in the "Secure Greenbelt" category from 864,830 acres to 982,498 acres, or nearly 22 percent of the region's total acreage.

Over the last five years, a number of communities have taken important steps toward protecting the Greenbelt from sprawl. A large part of the reduction in risk was due to successful efforts to protect Greenbelt hillsides. Notable examples of this include a

GMAP BACKGROUND

The Greenbelt Mapping and Assessment Program (GMAP) is a survey of all Bay Area open lands, highlighting those that are threatened by potential development in the next three decades.

It is a "snapshot" of current development pressures, showing likely directions of suburban, ranchette and related development — if nothing is done by cities, counties and special agencies to alter these development trends.

Under GMAP, the Bay Area's open lands have been classified into four categories based on the likelihood and timing of whether they will be developed or removed from Greenbelt-related uses (e.g. agriculture):

- **HIGH RISK:** Lands at risk in the next 10 years;
- **MEDIUM RISK:** Lands at risk in the next 10 to 30 years;
- **LOW RISK:** Lands which, for a variety of geographic, political or regulatory reasons, are not likely to be threatened in the near future;
- **SECURE GREENBELT:** Lands not threatened by development, including most public lands, land trust properties, conservation and agricultural easements and private land securely protected by a vote of the people.



While overall Greenbelt acreage at risk has dropped, the Bay Area's farms and open space remain vulnerable to major new sprawl development over the next 30 years.

voter approved measure that protects the Union City hills; the enactment of San Jose’s Greenline, which safeguards the city’s remaining farms and hillsides; and the adoption of large minimum parcel sizes for Alameda County ranchlands and ridgeland. In addition to San Jose, sixteen other Bay Area communities have adopted urban growth boundaries to prevent runaway development from damaging their quality of life.

At the same time, local land trusts and open space acquisition agencies have worked aggressively to purchase threatened Greenbelt lands so they are permanently protected. The public clearly favors greater Greenbelt protection and more and more local officials are beginning to understand the negative consequences of sprawl.

The bottom line is that progress is being made to protect threatened landscapes — but major portions of the Greenbelt, including much of its

Although overall acreage at risk has declined, many of the Greenbelt’s remaining croplands and hillsides are vulnerable to sprawl development.

remaining cropland and scenic hillsides, are at risk of being paved over for more sprawl. Clearly, there is a need to develop additional tools to protect our Greenbelt and encourage smarter growth.

Regional Findings

Overall, 490,525 acres of the Bay Area’s Greenbelt are at risk of sprawl development or being taken out of Greenbelt-related uses, such as agriculture (see

Table one). 234,746 acres are at high risk (in the next decade) and 255,779 acres are at medium risk (in the next 30 years) of development. Compared with our 1994 GMAP findings, lands at risk dropped by 14 percent from 568,777 acres to 490,525.

The decline in at risk acreage came in both the high risk category, where the acreage decreased from 275,940 to 234,746 (a 15 percent drop), and the medium risk category, where the acreage decreased from 292,837 to 255,779 (a 13 percent drop).

In addition, the amount of Secure Greenbelt land increased by 13.6 percent from 864,830 acres to 982,498 acres. Significant gains occurred in San Mateo, Sonoma, Santa Clara, and Alameda Counties. While a number of major open space acquisitions occurred in low risk areas (such as Round Valley and Brushy Peak in Contra Costa), others were in former high risk zones (such as the Bear

Table One: GMAP Findings (All figures in 1,000s)

County	Total Acreage	Urban	High Risk	Medium Risk	Low Risk	Secure Greenbelt*
Alameda	476.0	138.9 (29.2%)	29.6 (6.2%)	11.3 (2.4%)	187.4 (39.4%)	108.8 (19.9%)
Contra Costa	467.5	141.2 (30.2%)	59.8 (12.8%)	46.9 (10.0%)	108.6 (23.2%)	111.0 (22.9%)
Marin	335.6	46.8 (14.0%)	5.7 (1.7%)	2.5 (.8%)	109.4 (32.6%)	171.2 (51.0%)
Napa	504.0	20.0 (4.0%)	18.4 (3.6%)	1.1 (.2%)	362.7 (72.0%)	101.9 (20.2%)
San Francisco	30.2	24.0 (79.4%)	0.05 (0.2%)	0.1 (.4%)	0.2 (0.8%)	5.8 (19.3%)
San Mateo	290.2	75.9 (26.2%)	8.2 (2.8%)	11.1 (3.8%)	94.3 (32.5%)	100.7 (34.7%)
Santa Clara	832.6	179.3 (21.5%)	40.1 (4.8%)	60.1 (7.2%)	373.3 (44.8%)	179.8 (21.6%)
Solano	533.0	51.5 (9.7%)	42.7 (8.0%)	56.5 (10.6%)	280.2 (52.6%)	102.1 (19.2%)
Sonoma	1,015.2	63.8 (6.3%)	30.2 (3.0%)	66.1 (6.5%)	753.7 (74.3%)	101.3 (10.0%)
Totals	4,484.2 (100%)	741.3 (16.5%)	234.7 (5.2%)	255.8 (5.7%)	2,269.9 (50.6%)	982.5 (21.9%)

(Note: Columns may not add up precisely due to rounding) * Secure Greenbelt includes acreage covered by lakes and reservoirs

Table Two: Counties Ranked by Percentage of Total Land Area at Risk

County	Percentage of land area at risk (1999)	% of land area at risk (1994 % and rank)
<i>Contra Costa</i>	<i>22.8</i>	<i>23.3 (1)</i>
<i>Solano</i>	<i>18.6</i>	<i>19.8 (2)</i>
<i>Santa Clara</i>	<i>12.0</i>	<i>13.7 (3)</i>
<i>Sonoma</i>	<i>9.5</i>	<i>12.5 (5)</i>
<i>Alameda</i>	<i>8.6</i>	<i>12.9 (4)</i>
<i>San Mateo</i>	<i>6.6</i>	<i>4.9 (7)</i>
<i>Napa</i>	<i>3.9</i>	<i>4.1 (8)</i>
<i>Marin</i>	<i>2.4</i>	<i>5.6 (6)</i>
<i>San Francisco</i>	<i>0.5</i>	<i>1.0 (9)</i>
Regional Total	10.9%	12.7%

Creek Redwoods, Union City Hills, and Clayton Ranch).

Consequences of Sprawl

Despite these successes, 490,525 acres of threatened Greenbelt remain. 490,525 acres is equal to 66 percent of the region’s currently urbanized area. What would it mean to convert that acreage — or even a significant portion of that acreage — to non-Greenbelt uses? As the map on page 2 indicates:

- **The Bay Area’s urbanized landscape would substantially increase** in size and scope. Developing even half of the lands at risk in the next 30 years would spread Los Angeles-style

development across the length and breadth of the region.

- **The majority of the Bay Area’s remaining flatlands would be developed**, as well as large portions of the region’s buildable hillsides.
- **The Bay Area’s fertile croplands** (except some parts of Solano County’s plains, San Mateo’s coastal farmlands, and wine grape growing in the North Bay) **would be paved over** and good pasture available for ranching would be seriously diminished. Fertile valley farmlands and productive ranchlands in Contra Costa and Santa Clara Counties would be hard hit.



How Slow Can You Go? Bay Area traffic congestion will continue to worsen as more sprawl forces commuters to travel long distances from distant suburbs to their jobs.

- **Traffic congestion would get worse** as residents are forced to travel farther and farther each day from distant suburbs to get to their jobs. By 2020, traffic is expected to climb by 249 percent over 1990 levels. And with all this new traffic, air quality will continue to deteriorate to unhealthy levels. Runoff of pollution from streets and highways into the Bay and streams would also get worse. By 2020, the EPA expects a 60 percent increase in the levels of hazardous liquids and a 56 percent rise in the level of battery drainage compared to 1990 levels due to auto pollution.

- **Sensitive Greenbelt habitat would be lost**, including the remaining unprotected wetlands in Alameda County and baylands in Marin County.

In short, the development of 490,525 acres of the Bay Area’s Greenbelt — or even a substantial part of it — would have a severely damaging impact on the Bay Area’s quality of life. It would carve up huge sections of our unique Greenbelt — one of the chief reasons why so many people have been drawn to this region in the first place.

County Findings

Our analysis reveals a clear divide between counties (and their cities) with strong Greenbelt protections and those with relatively weak land use regulations. Table two (top left) reveals the Greenbelter/Greenbuster split.

“**Greenbelter**” counties with the lowest percentage of their total acreage at risk of development are Marin (2.4 percent), Napa (3.9 percent), and San Mateo (6.6 percent) counties.

“**Greenbuster**” counties with the largest percentage of their total acreage at risk are Contra Costa (22.8 percent), Solano (18.6 percent), and Santa Clara (12 percent) counties.

Somewhere in the middle are counties like Alameda and Sonoma which have enacted some strong land use protec-

tion measures, but still have a relatively large percentage of their acreage at risk (8.6 percent and 9.5 percent respectively). Heavily urbanized San Francisco, with less than one percent of its land at risk and its smaller size, is excluded from this comparison.

While the Greenbelter counties still face significant threats to open space within their boundaries, they also have a basic framework for guiding growth and protecting their open lands. Each county has a strong growth management plan, either by virtue of smart community planning or citizen initiative. The cities have also been hemmed in by land use constraints of some durability, whether steep ridgelines to the west (in the cases of Marin and San Mateo) or a long-lasting growth boundary (like Napa's Rural Urban Line). What makes the difference for Greenbelters is a combination of strong planning tools used by *both* counties and cities.

In the case of Greenbusters, smart growth plans are lacking in either the county or city – or both. This is especially the case of Contra Costa and Solano Counties.

In Contra Costa, local communities such as Brentwood and Antioch have massive plans for expansion (Brentwood's General Plan calls for sprawling new growth to accommodate roughly 100,000 residents). Meanwhile the county has a capacious urban limit line, which allows the county along with its cities to urbanize 110 square miles of open space. This combination puts Contra Costa and its cities at the top of the Greenbuster list with 22.8 percent of its land area at risk.

In Solano, the county is currently out of the development business, thanks to a citizen-sponsored growth management ordinance. But the measure hasn't stopped Solano's cities from expanding – which has left the county second on the Greenbuster list with 18.6 percent of its land area at risk.

Table Three: Counties ranked by Greenbelt acreage at risk (all figures in 1,000s)

County	Total acres at risk (1999)	Total acres at risk (1994 # and rank)
Contra Costa	106.7	109.4 (3)
Santa Clara	100.2	113.7 (2)
Solano	99.2	105.7 (4)
Sonoma	96.3	126.0 (1)
Alameda	40.9	60.1 (5)
Napa	19.5	20.5 (6)
San Mateo	19.3	14.3 (8)
Marin	8.2	18.8 (7)
San Francisco	0.2	0.2 (9)
Regional Total	490.5	568.8

Nonetheless, several counties in both categories have reduced their Greenbelt lands at risk. Since 1994, significant reductions in land at risk have been made by Marin (56 percent), Alameda (32 percent), and Sonoma (24 percent). More modest reductions were made in Santa Clara (12 percent), Solano (6 percent), Napa (5 percent), and Contra Costa (3 percent). By contrast, San Mateo County experienced a 35 percent increase in acreage at risk, primarily due to subdivision and ranchette threats along the Mid-Coast area and coastal range foothills.

• *Acreage Comparisons*

Shifting from percentages to acreage comparisons, Table three (above) lists counties by the total amount of land at

risk of development. Contra Costa heads this list with 106,657 acres at risk. Santa Clara is second with 100,230 acres, followed by Solano (99,222 acres), and Sonoma (96,317 acres).

Table four (below) ranks counties by acreage in the high risk category, indicating those counties most likely to experience significant development pressures within the next decade. Contra Costa – with massive development planned for east county and the Tri-Valley – remains in the top slot for this category with 59,770 acres at high risk of development. Not far behind is Solano County with 42,724 Greenbelt acres at high risk, primarily around Fairfield and Vacaville. Excluding San Francisco, Marin remains the county with the smallest amount of Greenbelt

Table Four: Counties ranked by Greenbelt acreage at High Risk (all figures in 1,000s)

County	Total acres at high risk (1999)	Total acres at high risk (1994 # and rank)
Contra Costa	59.8	64.6 (1)
Solano	42.7	40.7 (4)
Santa Clara	40.1	63.2 (2)
Sonoma	30.2	42.3 (3)
Alameda	29.6	37.9 (5)
Napa	18.4	10.5 (6)
San Mateo	8.2	9.1 (7)
Marin	5.7	7.4 (8)
San Francisco	0.05	.1 (9)
Regional Total	234.7	275.9

Table Five: Counties ranked by Greenbelt acreage at Medium Risk (all figures in 1,000s)

County	Total acres at risk (1999)	Total acres at risk (1994 # and rank)
Sonoma	66.1	83.6 (1)
Santa Clara	60.1	50.5 (3)
Solano	56.5	65.0(2)
Contra Costa	46.9	44.8 (4)
Alameda	11.3	22.2 (5)
San Mateo	11.1	5.2 (8)
Marin	2.5	11.4 (6)
Napa	1.1	9.9 (7)
San Francisco	.1	.2 (9)
Regional Total	255.8	292.8

Table Six: Counties ranked by percentage of Secure Greenbelt

County	Percentage of land as Secure Greenbelt (1999)	% as Secure Greenbelt (1994 % and rank)
Marin	51.0	48.4 (1)
San Mateo	34.7	28.8 (2)
Contra Costa	23.8	20.4 (3)
Alameda	22.9	19.8 (4)
Santa Clara	21.6	17.7 (8)
Napa	20.2	19.1 (7)
Solano	19.2	19.1 (6)
San Francisco	19.3	19.0 (5)
Sonoma	10.0	7.7 (9)
Regional Total (in 1,000s)	982.5	864.8

Table Seven: Counties ranked by Greenbelt acreage at Low Risk (all figures in 1000s)

County	Total acres at risk (1999)	Total acres at low risk (1994 # and rank)
Sonoma	753.7	747.0 (1)
Santa Clara	373.3	393.3 (2)
Napa	362.7	368.2 (3)
Solano	280.2	277.0 (4)
Alameda	187.4	186.9 (5)
Marin	109.4	111.0 (6)
Contra Costa	108.6	123.5 (7)
San Mateo	94.3	115.7 (8)
San Francisco	0.2	.2 (9)
Regional Total	2,269.9	2,323.0

acreage at high risk (5,736 acres mostly concentrated on the bayshore near Highway 101).

Moving from high risk lands to those that could be developed or removed from Greenbelt-related uses over the

long term, Table five ranks counties by their acreage at medium risk. Typically, these lands – which could be developed in the next 10 to 30 years – are located at the fringe of high risk areas and/or are subject to temporary protections (such as a land protection ordinance with a limited lifespan).

Table five (left) shows that the county with the most amount of land at medium risk is Sonoma with 66,096 acres, followed by Santa Clara (60,142 acres), Solano (56,498 acres), and Contra Costa (46,887 acres).

• *Greenbelt Protection*

Looking at the other side of the Greenbelt ledger – lands unlikely to be developed in the next 30 years – Table six (left) ranks Bay Area counties by the percentage of their total land areas in Secure Greenbelt. Marin County leads this category with an incredible 51 percent of its land permanently protected. Following Marin is San Mateo with 34.7 percent, and then Contra Costa (23.8 percent), Alameda (21.9 percent), Santa Clara (21.6 percent), Napa (20.2 percent), and Solano (19.2 percent). Sonoma falls at the bottom of the list with just 10 percent of the county in Secure Greenbelt. However, it should be noted that Sonoma is also the largest county altogether (over one million acres) and that its open space district is actively working to protect farmlands and other open space.

Finally, Table seven (left) assesses the counties according to the amount of land at low risk. Sonoma – because of its size – easily tops this list with 753,740 acres followed by Santa Clara (373,318 acres) and Napa (362,652 acres). However, this reveals little of each county’s development posture since most of these lands are remote, steep mountainous areas that are relatively inaccessible.

To get a better sense of each county’s Greenbelt status, see pages 14-22 for profiles and maps of the Bay Area’s individual counties.

Piecing Together Greenbelt Protection

A smart growth check-list for safeguarding the Bay Area's Greenbelt

✓ **Strong and stable land use regulations to protect the integrity of the Greenbelt.** County General Plans should include rural zoning and ordinances which require large minimum lot sizes sufficient for economical agricultural production; limitations on subdivisions (major subdivisions over three lots should be strongly discouraged); and appropriate allowable uses (those which are necessary for agriculture or otherwise enhance the natural resource values of rural lands).

✓ **Urban growth boundaries to guide the growth of our cities and towns.** City General Plans should include long-term (at least 20-year) urban growth boundaries (UGBs), to provide a stable and predictable outer limit to growth and serve to guide new development inward in a more compact manner. These UGBs will help ensure that cities won't sprawl outward and eventually take over farmland near the edge of town.

✓ **Additional protections for farms.** Communities should charge mitigation fees for development of open space or farmland and use these to protect farmland elsewhere. Local officials should enact agricultural buffer requirements to reduce friction between development at the edge of town and agriculture and "right to

farm" ordinances to give farmers the upper hand in resolving complaints from neighboring residences or businesses about "nuisances" caused by farm operations.

✓ **City and County ballot initiatives to lock in agricultural zoning.** In many communities, ballot initiatives have been used to lock in good agricultural and rural zoning (at the county level), and UGBs (typically at the city level). Voter adopted measures give local citizens the long term certainty of knowing that their community's land use planning policies will remain stable and not subject to changing political tides.

✓ **Regional and subregional open space/agricultural preservation districts.** Some of the Greenbelt, including farmland at the immediate outskirts of cities and other scenic or ecologically valuable lands, are best protected through fee title acquisition (where public access is appropriate) or through conservation easements (which permanently limit future development or subdivision potential). An adequate and stable funding source is the key to the success of such programs.

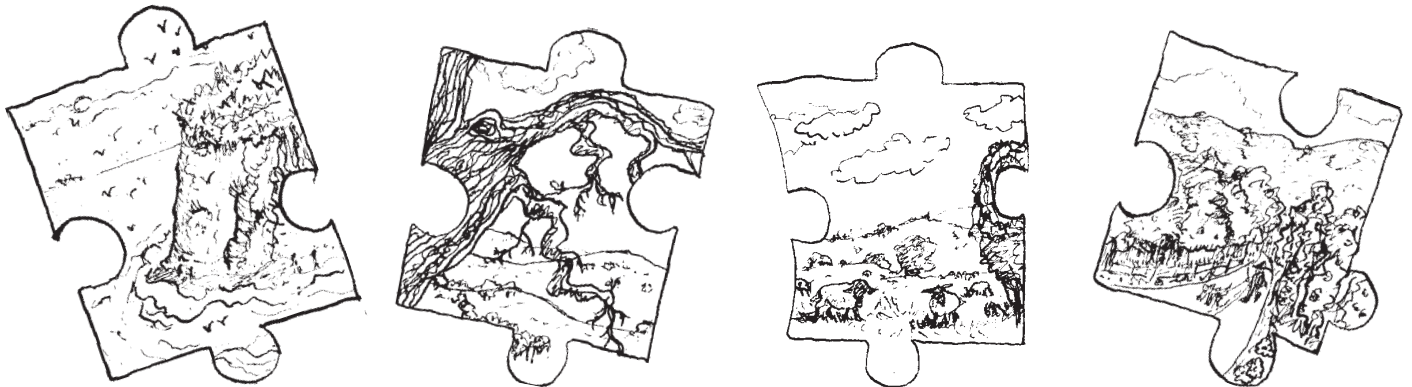
✓ **City policies which promote well-planned infill development.** Bay Area

communities need to make more efficient use of vacant and underutilized land and design infill development to blend into and enhance existing neighborhoods.

These steps will encourage more sustainable and cost effective development, allowing more people to live closer to their jobs, reducing traffic gridlock by shortening commutes, and focusing new public and private investment to improve neighborhoods, central business districts, and communities overall.

✓ **Regional Land Use Planning.** In order for many counties and cities to adopt and maintain these policies over the long haul, there needs to be true regional-level land use planning instead of every city and county acting independently. Unfortunately, despite several attempts at creating a meaningful regional planning framework, one does not exist.

Many well-intentioned voluntary programs are in place, but do not offer any meaningful incentives or disincentives to change overall development patterns for the region. In order for regional level planning to succeed, state-level reform in many areas such as local government tax revenue structures is needed.



HOT SPOTS

Ten Key Landscapes At Risk

While a total of 490,525 Greenbelt acres are at risk over the next 30 years, there are a number of “hot spots” facing significant sprawl development pressures. Here are ten current hot spots to watch out for:

South Napa

The hottest part of Napa County is south of the City of Napa where a major residential development (Stanley Ranch) and thousands of acres of commercial development are currently planned. With the economy booming, the stage is set for a major development from the Napa/Solano county border all the way to the southern edge of Napa.

I-80 Corridor in Solano

Development plans in both Fairfield and Vacaville threaten to chew up large chunks of farmland along the I-80 corridor. Farmland north of Travis Air Force Base in Fairfield is especially vulnerable. Open space surrounding Vacaville is threatened by more plans for big box retail, ranchettes and executive housing. New development is planned for Lagoon Valley, an important buffer between Fairfield and Vacaville.

Rural Sonoma County

Despite the passage of recent Greenbelt protection measures, rural development in Sonoma County continues at a steady pace, mainly due to existing rural residential zoning and certificates of compliance. County plans for sewer and water expansion could fuel rapid growth in unincorporated areas.

Diablo Country Foothills

Antioch and Pittsburg continue to march south from the Delta and toward Mt. Diablo. Both cities' General Plans are blueprints for land use disasters. Pittsburg wants to annex and develop thousands of acres of the steep, unstable slopes of Nortonville Canyon. Antioch has already approved 15,000 units on 4,500 acres in recent years. City officials and sprawl developers are pushing for more.

Marin Bayshore

Most of Marin's hotspots are along its eastern bayshore side. Among those major projects now under consideration are the 800-unit phase five development of Belle Marin Keys just south of Novato, a significant residential and commercial development of the St. Vincent-Silveira Ranch between San Rafael and Novato, and a canalways project in San Rafael that could destroy 25 acres of baylands.

Delta Farmlands

The remaining agricultural resources in eastern Contra Costa are under severe speculative pressure. Since 1970, the County has lost more than one half of its orchards and croplands; more are at risk. Brentwood's General Plan calls for paving its farmlands to create a city of 100,000 residents -- over four times its current population. More Delta destruction was approved when Contra Costa County signed off on Discovery Bay West, putting 756 acres at risk.

San Mateo Mid Coast

In recent years, Half Moon Bay and the unincorporated MidCoast communities to the north have become the last frontier for significant residential development in San Mateo County. Antiquated subdivisions, added sewer and water capacity, and new development plans create ongoing threats to the Greenbelt.

Tri-Valley

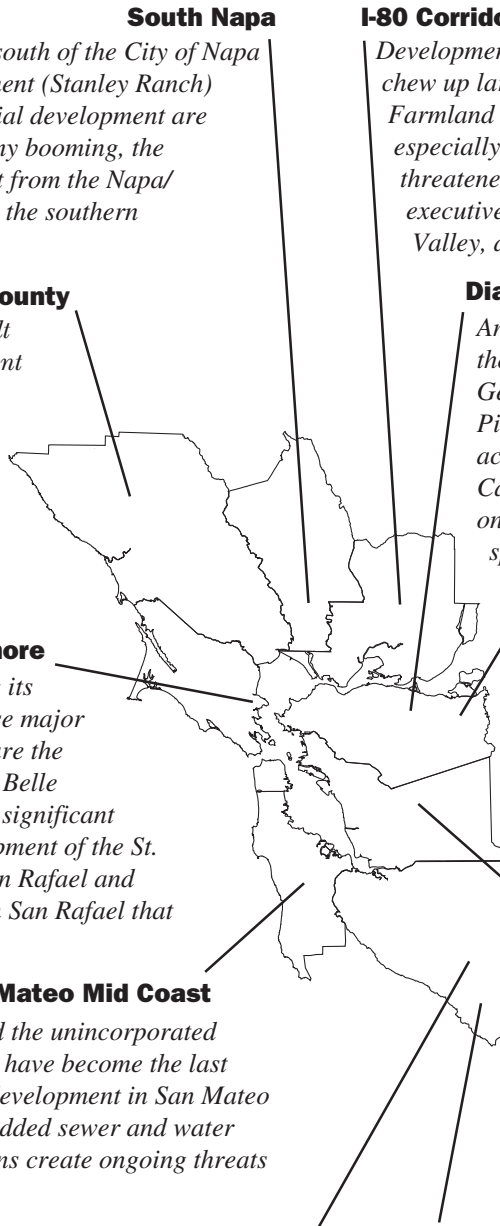
This is one of the hottest sub-regions in the Bay Area. Housing projects that have been approved or are in the planning pipeline will add over 40,000 new units — the equivalent of two new Danvilles and another San Ramon to the area.

Coyote Valley

Large-scale development of Coyote Valley has become a real possibility following the announcement last March by Cisco Systems, Inc., a San Jose based computer networking company, that it plans to build a 400 acre office campus in the northern portion of the Valley. The Cisco project could trigger full development of Coyote Valley that would extend Silicon Valley far to the south and result in as many as 27,000 new housing units in the immediate area and tens of thousands more in nearby cities and counties.

South Santa Clara County

Fueled by the explosion of job growth in Silicon Valley, development pressures around Gilroy and Morgan Hill remain intense. At risk are the prime farmlands surrounding Gilroy north to Morgan Hill and open lands stretching west to Hecker Pass. The outcome of Gilroy's ongoing General Plan revision process will have a big impact on how much more Greenbelt is sacrificed to new sprawl over the next 20 years.



RANCHETTES

A Long Term Greenbelt Threat

Rural estates may seem idyllic, but their proliferation poses a long term threat to the Greenbelt by undermining Bay Area farming and paving the way for major sprawl development.

While the most obvious threat to the Greenbelt remains suburban-style sprawl development, an equally destructive force is the increasing number of large-lot ranchettes on rural lands. Ranchettes — also called rural estates or hobby farms — are large parcel homesites in farming and ranching areas. They range in size from one or two acres to over 100 acres. Typically, a ranchette has no more than one or two housing units.

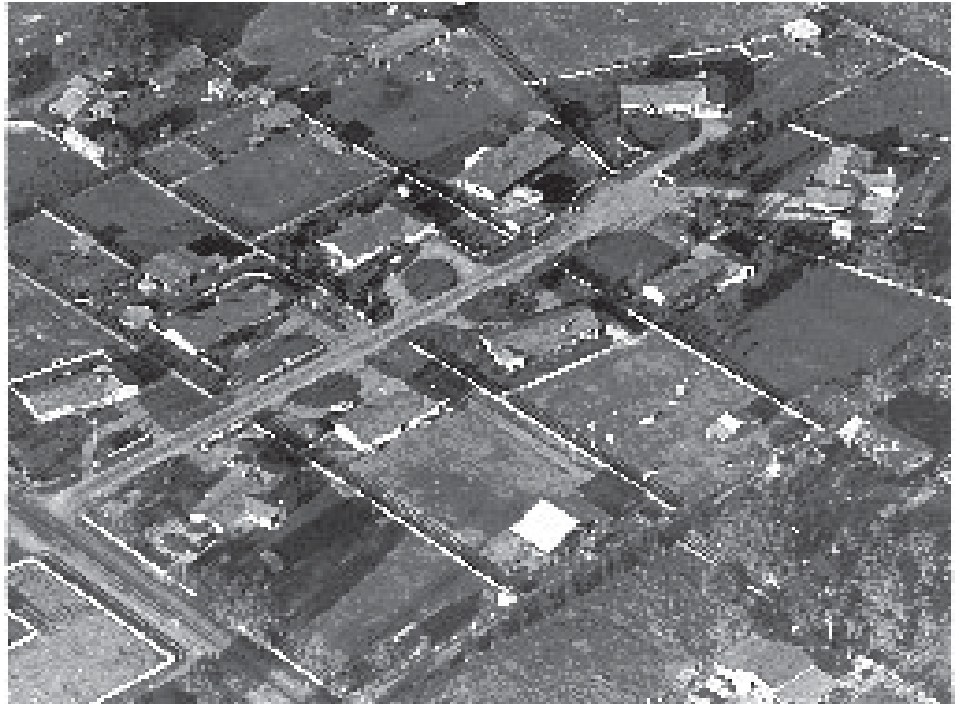
Slow Death for the Greenbelt

While ranchettes may appear idyllic, their long term effect on the viability of agriculture is extremely negative. By carving up rural lands with huge estates, ranchettes inevitably drive up land values far beyond what farming can support.

The development of ranchettes also creates a patchwork of parcels often too small to lease for commercial agriculture. Most farms require substantial land holdings (ranging from 20 acres and up for prime farmlands and 640 acres and up for grazing lands) to be economically viable.

In addition, conflicts inevitably arise between farmers and homeowners because they have competing needs. Homeowners resent noises, smells, dust, and slow-moving machinery

Large lot ranchettes are carving up significant chunks of the Bay Area's Greenbelt and making way for more suburban sprawl development.



Rural ranchettes create a patchwork of parcels that carve up the Greenbelt and make farming more difficult.

necessary for nearby farm operations. Farmers suffer from vandalism and harassment of their stock.

More fundamentally, once ranchettes and homes wedge their way into farmlands, farm communities often begin to lose their vitality. Businesses that support agriculture start leaving and farmers need to spend more time and money traveling to distant service centers. Eventually, rising costs and difficulties push one farmer off the land, then another, feeding a vicious circle as farm supply centers lose clients and go out of business, ultimately making farm life even tougher for those still struggling to hang on.

How significant is ranchetting in the Bay Area? A recent report by the American Farmland Trust showed significant incursion of ranchettes (defined as parcels ranging from 1.5

to 20 acres in size). In Solano County, for example, there are 4,003 ranchette parcels totaling 26,434 acres. In Contra Costa County, there are 3,975 ranchette parcels totaling 22,668 acres. Ranchettes are also prevalent in the southern reaches of Santa Clara County (especially around San Martin between Gilroy and Morgan Hill), and the western part of Sonoma County (near Sebastopol and Petaluma).

Ranchette Remedy

The key to keeping agricultural areas in farming is simple. Keep large tracts of Greenbelt in large parcels. Make a clear demarcation between rural and urban land uses, and don't allow the in-between lot splits that permit ranchettes to flourish. Counties that have done well with this are San Mateo, Solano and Napa, and to some extent, Marin and Sonoma.

CERTIFICATES OF COMPLIANCE

Night of the Living Deed

Developers are taking advantage of a loophole in state law that allows them to use property records from the 1800s to circumvent local zoning and other laws limiting development in the Greenbelt..

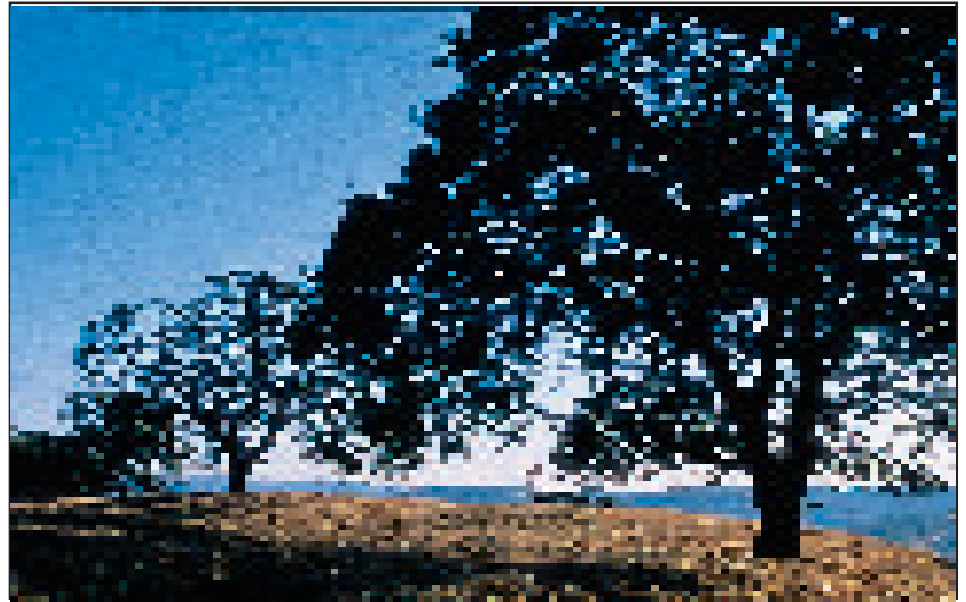
The Bay Area, as well as much of California, continues to face a significant but not widely known threat to its rural landscape—the problem of antiquated subdivisions, sometimes known as Certificates of Compliance.

Antiquated subdivisions were created prior to the time when local governments were empowered to review and approve subdivisions. Until 1937, the only role of local governments in land use decisions was to record the maps or deeds describing the subdivision lots. Prior to this time, lots were created by property owners simply by dividing up their land into multiple parcels and transferring each parcel by deed.

Unfortunately, developers are able to use these antiquated deeds to justify more buildable lots than a community would allow today under modern zoning laws.

Here's how it works: Say a 400-acre vineyard, deemed one parcel in 1999, was recorded as 10 lots in 1860. California law lets the owner demand a Certificate of Compliance from the county to recognize the 10 antiquated lots. A lot line adjustment can then produce nine smaller, salable parcels, each generally assured a home building permit. The county planning commission and Board of Supervisors have no discretion in such matters; they are not consulted. The additional nine lots do not have to comply with the county's minimum lot size because the original lots pre-date the county's ordinance. These lots are also exempt from environmental review.

There are an estimated 400,000-1,000,000 antiquated subdivision lots throughout California. In the 1990s, more lots have been recognized by Certificates of Compliance for anti-



Before it was purchased by the Nature Conservancy and the Santa Clara County Open Space Authority, the Lakeview Meadows Ranch near Gilroy was threatened by a development scheme based on antiquated property records from the 1800s.

quated subdivision lots in Napa and Sonoma Counties than have been created by means of subdivision maps. In other Bay Area counties, antiquated subdivisions are also quite common.

This loophole not only keeps local governments from restricting subdivisions in environmentally sensitive and remote areas, it also makes land acquisitions for public open space or agricultural preservation more expensive since the creation of more lots drives up the market value of the land.

State legislative efforts to solve this problem have not been successful to date and three recent court decisions have exacerbated the problem. The U.S. Supreme Court ruled in *Lucas v. South Carolina Coastal Council* that a public entity could not deny a building permit for any legal lot unless there was a health, safety, or nuisance basis. In *San Dieguito Partnership v. City of San Diego*, the court effectively allowed a re-

subdivision of any legal lot, under the guise of a lot line adjustment, without any compliance with the Subdivision Map Act. The *Morehart v. County of Santa Barbara County* decision further restricted the ability of local governments to address the problem of antiquated subdivisions.

A comprehensive solution to this problem will require either the political will to craft a legislative fix (by clarifying the Subdivision Map Act) or a judicial ruling that subdivisions that occurred prior to the advent of modern zoning laws do not create legal lots. Although such reform would simply level the playing field by requiring all property owners to follow the same land use regulations, past efforts to reach a legislative compromise have been vigorously opposed by development interests that benefit from the Certificate of Compliance loophole.

BRIGHT SPOTS

Greenbelt Lands Protected

Since GMAP was last updated in 1994, Bay Area citizens, non-profit organizations, and public officials have pursued a number of innovative ways to protect the Greenbelt. Here are a few examples:

1. Urban Growth Boundaries

Over the last three years a total of seventeen Bay Area communities have adopted sprawl-busting urban growth boundaries (UGBs) that will provide protection for Greenbelt farms and open space. UGBs create a firm, long-term line around a community, limiting development outside the boundary for 20 years or more, while encouraging new investment inside the line. UGBs have enjoyed wide support because they help communities balance the need to accommodate new development without sacrificing open space and the region's quality of life. *See page 13 for more information and a complete list of recently adopted UGBs.*

2. Sonoma County Acquisitions

Since its creation by voters in 1990, the Sonoma County Agricultural Preservation and Open Space District has permanently protected more than 28,000 acres of Greenbelt lands through the purchase of conservation or agricultural easements. This public agency is funded by a quarter cent

countywide sales tax, which brings in more than \$11 million each year. The Sonoma program is the fastest growing open space acquisition effort in the United States.

3. Solano Tri-City Agreement

In 1994, three cities in southern Solano County – Fairfield, Benicia, and Vallejo – teamed up with the County and adopted a joint agreement to preserve a 10,000 acre Greenbelt buffer between the communities. The agreement is similar to one negotiated by Greenbelt Alliance in 1993 to protect the Pleasanton Ridglands in Alameda County. The cities and county have used a combination of land regulation and acquisition to preserve the area – equal in size to five Tilden Regional Parks. The “Tri-City Open Space” area is expected to become a major recreation destination for cyclists, equestrians and hikers.

4. Bay Area Conservancy Program

Greenbelt advocates won a big victory in 1997 when state lawmakers autho-

rized legislation creating the Bay Area Conservancy Program. The measure, which was sponsored by Senators Byron Sher (Palo Alto), Quentin Kopp (San Francisco), and Assemblyman John Vasconcellos (Santa Clara), established the Conservancy to address the resource and recreation needs of the entire Bay Area. In particular, the Conservancy will work to improve public access to the Greenbelt; help protect and restore open space resources of regional significance; and promote open space projects that are accessible to urban populations. California's Fiscal Year 1999-2000 budget included \$10 million to help fund the newly created program and additional funding may come from a statewide park bond measure if it is passed by voters in March 2000.

5. Union City Hills

Perhaps one of the brightest spots for recently secured Greenbelt is the protection of Union City Hills, over 5,300 acres that had been threatened by a major 3,900 unit housing develop-



ment. The development would have had major negative impacts, including \$17 million in annual subsidies for schools and roads, 30,000 additional car trips, and increased flood and fire dangers. In 1995, grassroots opposition helped to defeat the project and spur the city council to adopt a hillside protection measure. In 1996, the East Bay Regional Park District acquired 1,164 acres of the hills and Union City voters supported a ballot initiative that locks in the city council's policies to protect the remaining hillside acres.

6. Alameda County Ranchlands

In 1996, East Bay Greenbelt activists scored a major victory that will help save Alameda County's ridgeland and ranchlands from sprawl development. After a big push by Greenbelt Alliance and other local environmental groups, the Alameda County Board of Supervisors adopted a measure that establishes a 320 acre minimum parcel size (mps) for the southern ridgeland and 160 acre mps for the eastern ridgeland. The Supervisors supported the large lot size because ranchers typically need to lease at least 320 acres for ranching to remain economically viable. Once agricultural lands are broken into smaller parcels, the door is open to low-density development and disruption of the farm network that sustains their long term viability.

7. Contra Costa Progress

While Contra Costa continues to top our list of Greenbuster Counties, local officials are beginning to heed the public's call for stronger Greenbelt protection. Over the last few years, two major sprawl proposals – the 5,200 unit Cowell Ranch project and the 6,000 unit development of Tassajara Valley – encountered intense public opposition. Fortunately, the proponents of the Tassajara Valley project eventually withdrew their proposal when it became clear that the County was unlikely to approve it. Likewise, the future of the proposed Cowell Ranch project is in doubt. And in 1999, the Board of Supervisors initiated an effort



In 1999, the Peninsula Open Space Trust teamed up with the MidPeninsula Regional Open Space District to save the Bear Creek Redwoods above Los Gatos.

to strengthen the County's urban limit line to protect areas such as Tassajara Valley, Clayton Ranch, Cowell Ranch, and other East County ranchlands.

8. Santa Clara Open Space Authority

In 1994, Greenbelt activists celebrated the passage of a ballot measure approved by voters in Santa Clara County to fund the acquisition of open space. Unfortunately, for the next four years, the property assessment collected to finance the newly created Santa Clara County Open Space Authority was tied up in a legal challenge and the funds remained unspent. But late in 1998, the opponents of the Open Space Authority exhausted their legal options and the agency was finally open for business. Its first purchase was the joint acquisition with the Nature Conservancy of over 9,000 acres of bucolic hillsides above Morgan Hill and Gilroy.

9. Peninsula Open Space Acquisitions

One of the most impressive open space protection success stories in recent years has been the tremendous work of the Peninsula Open Space Trust

(POST). Since our last update of GMAP in 1994, POST has purchased over 14,000 acres along the Peninsula and the South Bay, including Greenbelt gems such as Bair Island, Rancho Canada de Oro, and the Bear Creek Redwoods (a joint purchase with the Midpeninsula Regional Open Space District - MROSD). Since our last update, the MROSD has protected 8,756 acres, including the Phleger Estate and additional acres for the Purisima Creek Redwoods and the Sierra Azul Open Space Preserve.

10. Devils' Slide

Aggressive grassroots organizing by San Mateo County activists paid off in 1996 with the passage of Measure T, which garnered a stunning 74 percent of the vote. For over 30 years, local residents fought the proposed construction of a freeway bypass that would have scarred the County's beautiful coast. CalTrans had been pushing the bypass as a solution to the periodic washout of Highway 1 at Devils' Slide. Measure T authorized a greener and safer alternative — a tunnel through the San Pedro Mountains that independent engineers concluded was the most reliable roadway option.

URBAN GROWTH BOUNDARIES

Drawing the Line on Sprawl

Urban growth boundaries create a firm, long-term line around a community, limiting development outside the boundary for 20 years or more, while encouraging new investment inside the line.

As development pressures continue to intensify here in the Bay Area, one promising trend has been the increasing number of communities that have recently adopted urban growth boundaries (UGBs) to curb sprawl and encourage smarter growth.

UGBs — officially mapped lines that separate a city from its surrounding Greenbelt — differ from city limits in that they're set for long periods of time (typically 20 years) to discourage sprawl and speculation at the fringe.

But a UGB is more than just a line. As Florida land use analyst Marie York has noted, "an urban growth boundary is a proactive growth management tool that seeks to contain, control, direct, or phase growth in order to promote more compact, contiguous urban development." UGBs also help to protect farmlands and other resource lands outside the boundary from scattershot or low density development.

So far, UGBs have been adopted by 17 Bay Area communities: Benicia, Cotati, Cupertino, Healdsburg, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Napa, Novato, Palo Alto, Petaluma, Pleasanton, San Jose, Santa Rosa, Sebastopol, and Windsor. In California, UGBs can be established by city councils or by voters through a ballot initiative. Virtually every time UGBs have been put on the ballot, they've been strongly approved by voters by margins of 55 to 79 percent.

UGBs have proven popular because they offer a balanced land use solution. Bay Area residents have made it clear that they aren't in favor of "no growth" or "uncontrolled growth." They want "smart growth," with a careful balance

As development pressures continue to intensify here in the Bay Area, one promising



communities' futures. They also offer enough flexibility to adapt land use plans to

In the last four years, seventeen Bay Area communities have adopted urban growth boundaries to curb sprawl and promote smarter growth.

between land preservation and development. For example, Windsor's UGB steers new development away from farmlands and the Russian River, but allows a 55 percent increase in the city's buildable land.

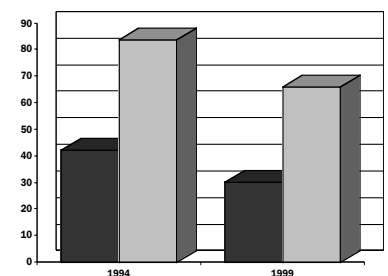
In the long run, UGBs also help to save taxpayer dollars. Most research reveals that sprawl — with its need for huge new investments in roads, sewers and water — doesn't pay for itself. By concentrating new development close to existing services, UGBs help taxpayers avoid big new bills.

Voter approved UGBs enable local citizens to shape their communities' futures. They also offer enough flexibility to adapt land use plans to long range development needs.

Because they promote smart growth, UGBs have been endorsed by diverse

interests. San Jose's UGB was backed by the Silicon Valley Manufacturing Group, the South Bay Affordable Housing Network, and the San Jose Downtown Association. Sonoma County's UGBs have earned the support of the League of Women Voters, United Wine Growers of Sonoma County, downtown business associations, and Community Alliance with Family Farmers.

Learn more about urban growth

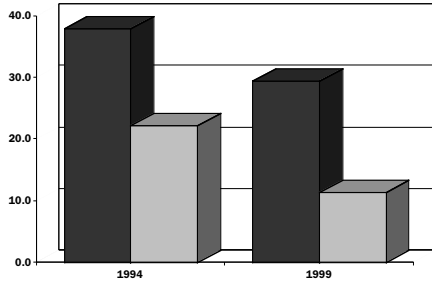


County Comparisons

These charts show how much High and Medium Risk acreages have changed in each county (except San Francisco) since the last GMAP edition in 1994. The dark bars represent High Risk acreage (in 1000s) and the light bars represent Medium Risk acreage (in 1000s).

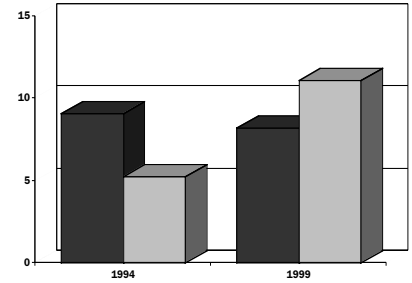
Alameda

Overall lands at risk dropped by 35 percent since our last analysis, from 61,100 acres in 1994 to 39,456 in 1999.



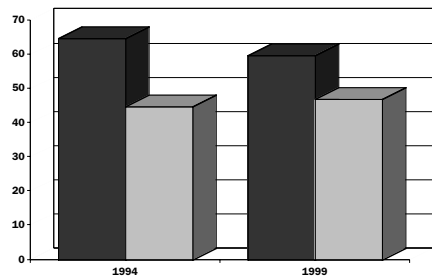
San Mateo

While San Mateo remains a Greenbelter, High Risk lands stayed steady while Medium Risk lands rose moderately, leading to an overall 40 percent increase in threatened lands.



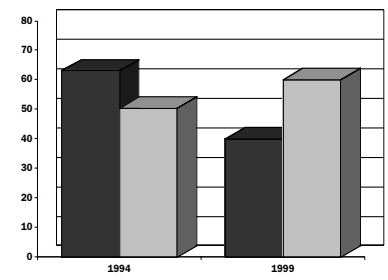
Contra Costa

High Risk lands dropped moderately, matched by a similar jump in Medium Risk lands, leading to a slight decrease in lands at risk in the top Greenbuster of all Bay Area counties.



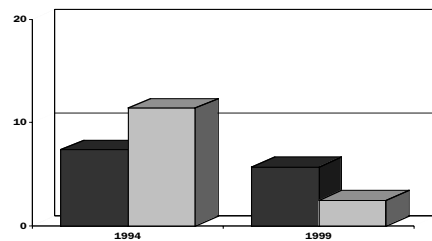
Santa Clara

This South Bay county showed solid progress in reducing High Risk lands through the adoption of urban growth boundaries, but Medium Risk acreage rose moderately.



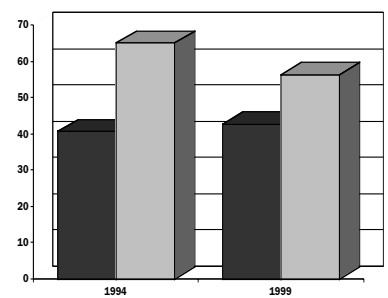
Marin

High Risk lands stayed steady while Medium Risk lands decreased significantly, improving the status of this Greenbelter county, with over half its land in the Secure Greenbelt category.



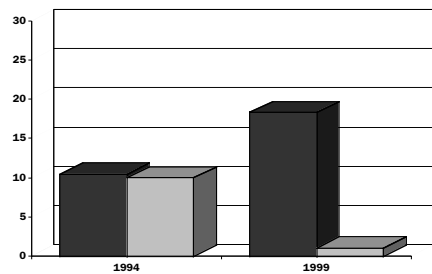
Solano

High Risk lands increased slightly, while Medium Risk lands dropped moderately, leaving Solano in second place among the Bay Area's Greenbusters.



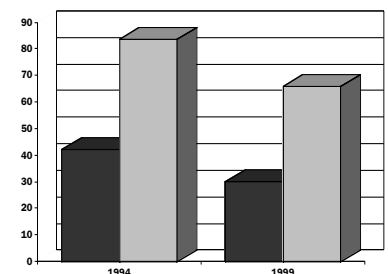
Napa

High Risk lands increased significantly matched by a similar drop in Medium Risk lands, keeping Napa's overall acreage at risk steady.



Sonoma

Recently adopted Greenbelt measures have helped Sonoma whittle away its acreage at risk — with moderate reductions in High and Medium Risk lands.



Alameda County

General Assessment

Land use battles continue to rage throughout Alameda County. Some, such as the fight to protect the Union City Hillside, are reflected as solid victories on this year's map. In the long run, success in Greenbelt protection will hinge on the County's ability to further its commitment to protect vast ranchland resources from sprawling subdivisions. Numerically, Greenbelt acreage at risk dropped by 32 percent from 60,122 in 1994 to 40,916 in 1999.

Hot spots

Thousands of acres are at risk in the Tri-Valley, home of nightmarish traffic and the Bay Area's worst air quality. West Dublin ranchlands are under constant speculative pressure, but a ballot measure in November of 2000 could lock in protection from city sponsored sprawl. In East Dublin, massive development is underway; a

whopping 12,000 unit development already has been approved for nearly 7,000 acres. The future of North Livermore is the biggest growth question facing Alameda County. Development proposals have been scaled back, but a 12,000 unit proposal still puts thousands of acres at risk.

Bright Spots

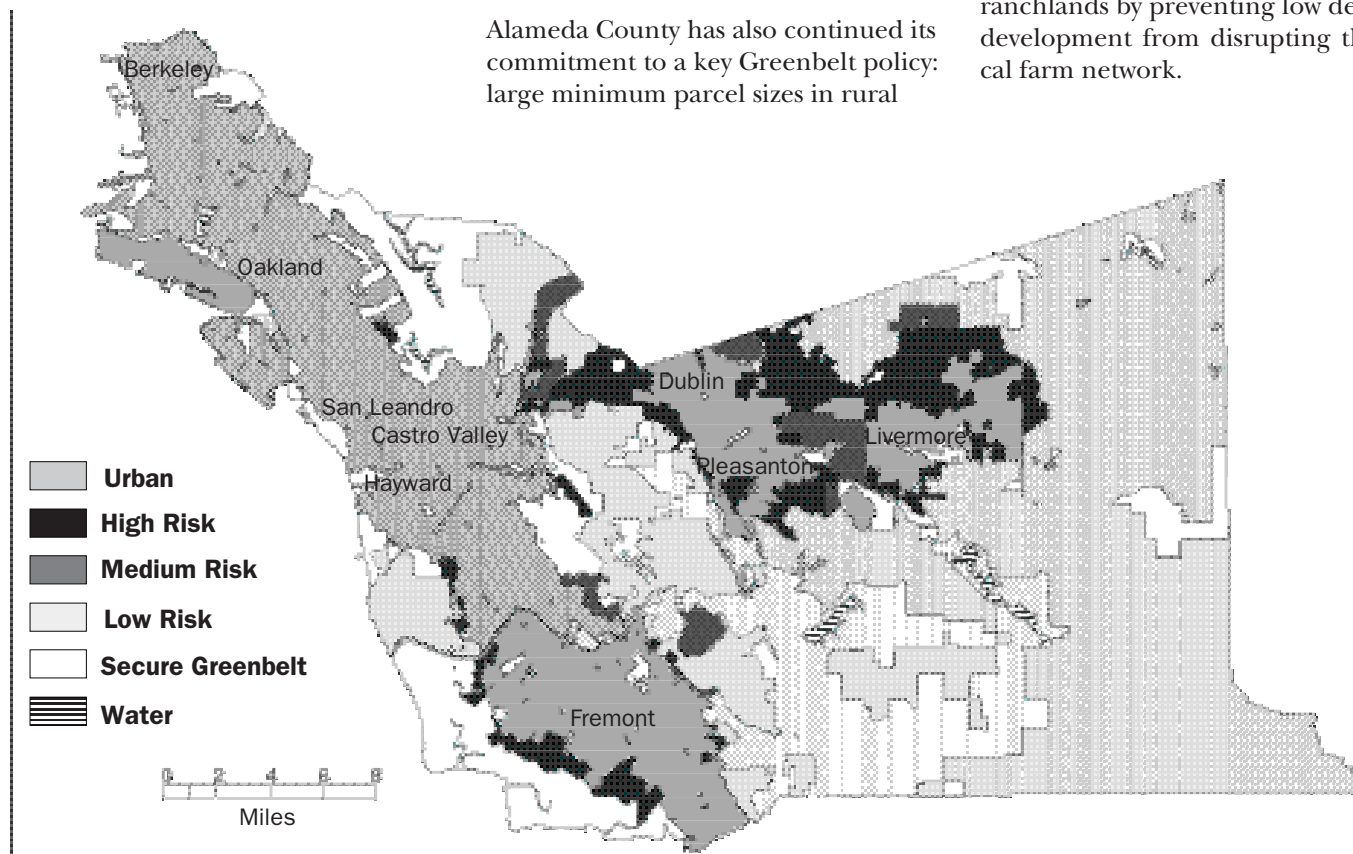
Alameda County approved an East Bay Regional Park District bond measure in 1988; that investment continues to pay dividends with new acquisitions on Brushy Peak, the Union City Hills, in West Dublin, and on Pleasanton Ridge.

Local residents have also gone to the ballot box to protect threatened Greenbelt lands from sprawl. In 1996, Union City voters locked in protection of the Union City Hills, once threatened by a 5,900 unit development. And that same year, Pleasanton adopted the East Bay's first voter approved city urban growth boundary.

Alameda County has also continued its commitment to a key Greenbelt policy: large minimum parcel sizes in rural

ALAMEDA GMAP ACRES		
Urban	138,895	29.2%
High Risk	29,598	6.2%
Medium Risk	11,318	2.4%
Low Risk	187,400	39.4%
Secure	108,826	22.9%

areas. The policy was originally adopted by the County Board of Supervisors in the early 1990s, but it was later rescinded after pressure from some large landowners. In 1996, the County re-adopted the policy by establishing a 320 acre minimum parcel size for the southern ridglands and a 160 acre minimum parcel size for the eastern ridglands. By doing so, the Supervisors have established a framework that will help protect ranchlands by preventing low density development from disrupting the local farm network.



Contra Costa County

General Assessment

While Greenbelt activists have recently helped to beat back a number of new development proposals, Contra Costa's underlying policies and plans put the County's Greenbelt and its quality of life at tremendous risk. Contra Costa has more Greenbelt acres at risk than any other Bay Area County – 106,657 acres or 22.8% of its total acreage.

Hot spots

Much of the land at risk is already lost to development approvals. Over 30,000 units have been approved for development but not yet built. Some major projects currently under construction are Dougherty Valley, where 11,000 units are being built on 5,900 acres east of San Ramon Hills, and the San Marcos development south of Pittsburg, where 2,938 units are slated for 554 acres. In Antioch's Southeast Planning Area, most of the whopping 15,000 units over 4,500 acres have been built, and the rest will soon be constructed. Gateway Valley, 238 acres west of Orinda, has been approved for about 1,000 units.

Additional development proposals have put still more acreage at high risk, including

Tassajara Valley (as many as 800 units on 500 acres), Cowell Ranch (up to 5,200 units on 4,000 acres), Roddy Ranch (a golf course and luxury houses on nearly 1,000 acres), and a potential annexation of 1,500 Greenbelt acres by the city of Pittsburg for a leapfrog luxury housing development.

Underlying land use in Contra Costa are the General Plans of the County and its cities, which encourage continued sprawl. Particularly troubling are the General Plans in place in Antioch, Brentwood, and Pittsburg. The County's 1990 General Plan opened up a staggering 110 square miles of open space to development.

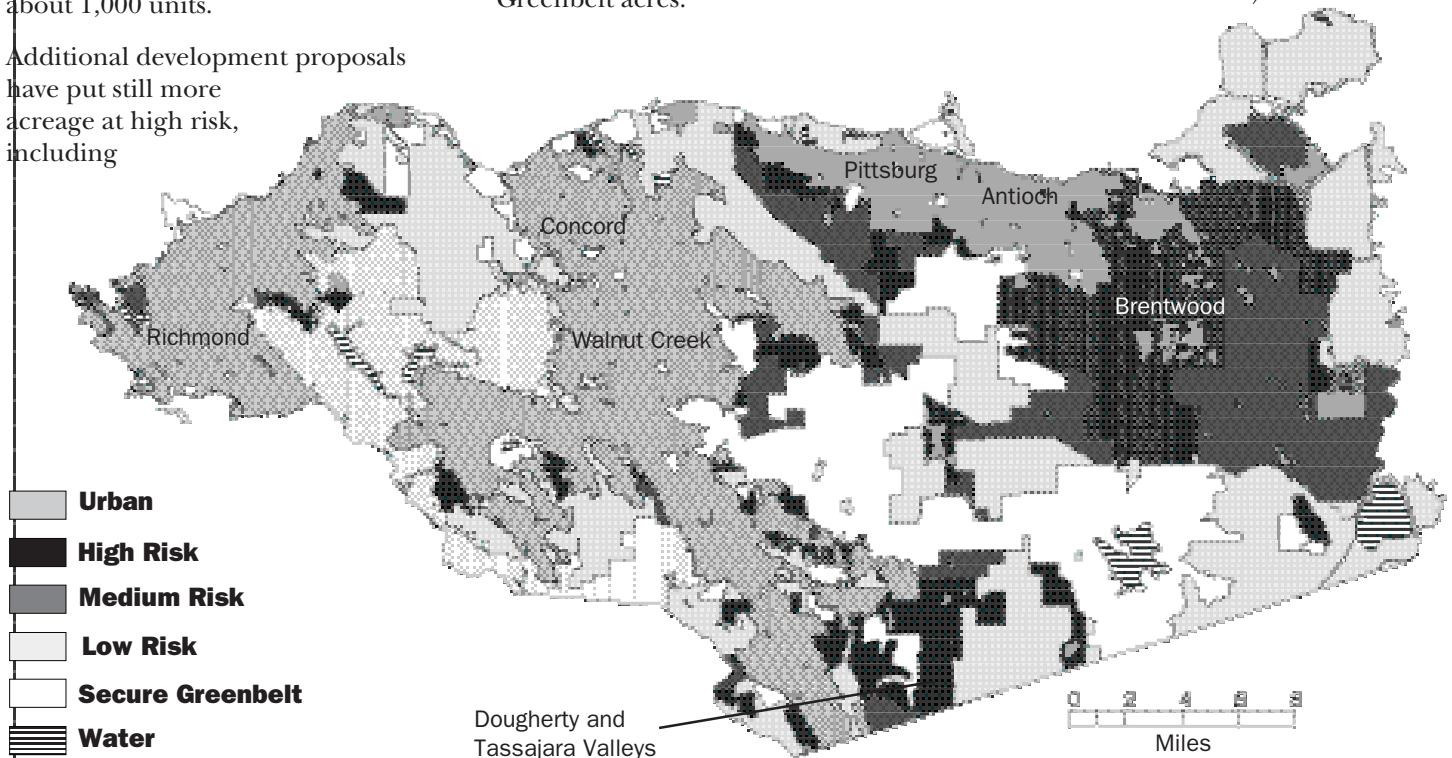
Bright Spots

Nonetheless, there are some signs of positive change. Public sentiment clearly favors greater Greenbelt protection and the County's elected leaders are beginning to respond. In early 1999, the Board of Supervisors voted to re-examine Contra Costa's Urban Limit Line to see how it could be strengthened to protect additional Greenbelt acres.

CONTRA COSTA GMAP ACRES

Urban	141,201	30.2%
High Risk	59,770	12.8%
Medium Risk	46,887	10.0%
Low Risk	108,597	23.2%
Secure	111,002	23.8%

Secure Greenbelt has been expanded by nearly 11,000 acres, thanks to the work of groups such as the East Bay Regional Park District, Save Mount Diablo, and the Martinez Agricultural Land Trust. Newly protected land includes the 1,030 acre Clayton Ranch, which was once slated for development and included in the County Urban Limit Line. Other newly secured Greenbelt lands are the 771 acre Garaventa property, which was added to the Black Diamond Mines Regional Preserve; and a portion of Roddy Ranch (environmentalists secured deed restrictions on 1,123 acres and a 4.5 mile trail easement).



Marin County

General Assessment

Overall, Marin continues to lead the Bay Area with the largest share of its Greenbelt protected from development. Our analysis shows that 51 percent of Marin (more than 171,000 acres) is now secure Greenbelt. Both the Marin Agricultural Land Trust (MALT) and the County Open Space District have an impressive track record of preserving open space and farmland in the County. These agencies are now likely to receive additional help from the Federal Government as a result of

funds available to expand the Golden Gate National Recreation Area (GGNRA). But development pressures leave parts of Marin's Greenbelt vulnerable, especially the bayshore along Highway 101.

Hot Spots

Development along the bayshore in Marin County has already resulted in the loss of the vast majority of baylands from San Rafael southward. Activists are mobilizing to protect the remaining undeveloped baylands in the northern part of the county.

Shapell Industries plans to build 1,975 houses and 361,000 square feet of commercial space on the St. Vincent's - Silveira property between San Rafael and Novato, the last piece of Greenbelt between these two communities and the largest piece of developable land

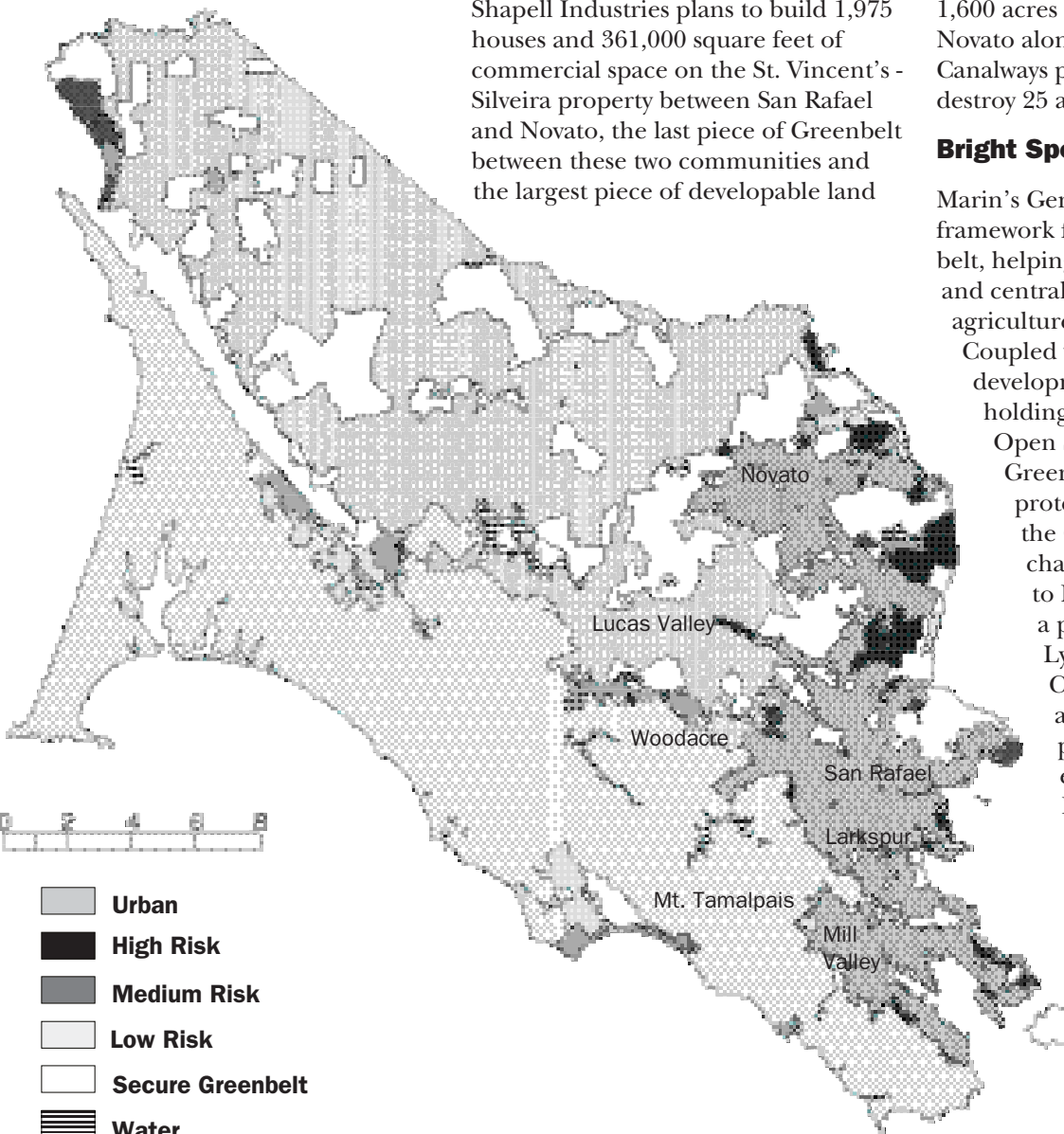
MARIN GMAP ACRES		
Urban	46,819	14.0%
High Risk	5,736	1.7%
Medium Risk	2,510	0.8%
Low Risk	109,389	32.6%
Secure	171,172	51.0%

along Highway 101 in Marin County. The Belle Marin Keys phase five development would add 800 units over 1,600 acres in the county south of Novato along bayshore, and the Canalways project in San Rafael could destroy 25 acres of baylands.

Bright Spots

Marin's General Plan provides a strong framework for preserving the Greenbelt, helping to safeguard the western and central part of the county for agriculture and the coast as parkland. Coupled with the acquisition of development rights on large ranch holdings by MALT and the County Open Space District, Marin's Greenbelt enjoys unparalleled protection. New funding for the GGNRA will help it purchase more open space closer to Marin's urban centers. And a proposal by Representative Lynn Woolsey pending in Congress could provide additional funding to purchase agricultural easements along Tomales Bay.

In 1998, voters in Novato adopted a 20-year urban growth boundary that will help protect the community's hillsides and bayshore areas by directing new development within city limits.



Napa County

General Assessment

Napa County continues to protect its agricultural lands from development with the strongest countywide land use measure in the Bay Area. Measure J, which was adopted by voters in 1990, locks in strong General Plan protections for Napa's world famous vineyards and other agriculture until 2020.

Along with large minimum parcel sizes on most Greenbelt lands, Measure J has helped to protect the valley floor from significant new development. Just under four percent of Napa's total acreage is at risk of sprawl.

Hot Spots

The major hot spot for the county is south of the City of Napa, where construction is occurring at a rapid pace with the development of the Airport industrial park and the City of American Canyon. Development of the area will accelerate if the City of Napa builds out Stanley Ranch on the

west side of the Napa River. This development has regional traffic and housing implications for the whole North Bay. To create the housing needed for the employees of the airport industrial park, a large number of additional units may have to

NAPA GMAP ACRES		
Urban	19,961	4.0%
High Risk	18,361	3.6%
Medium Risk	1,111	0.2%
Low Risk	362,652	72.0%
Secure	101,889	20.2%

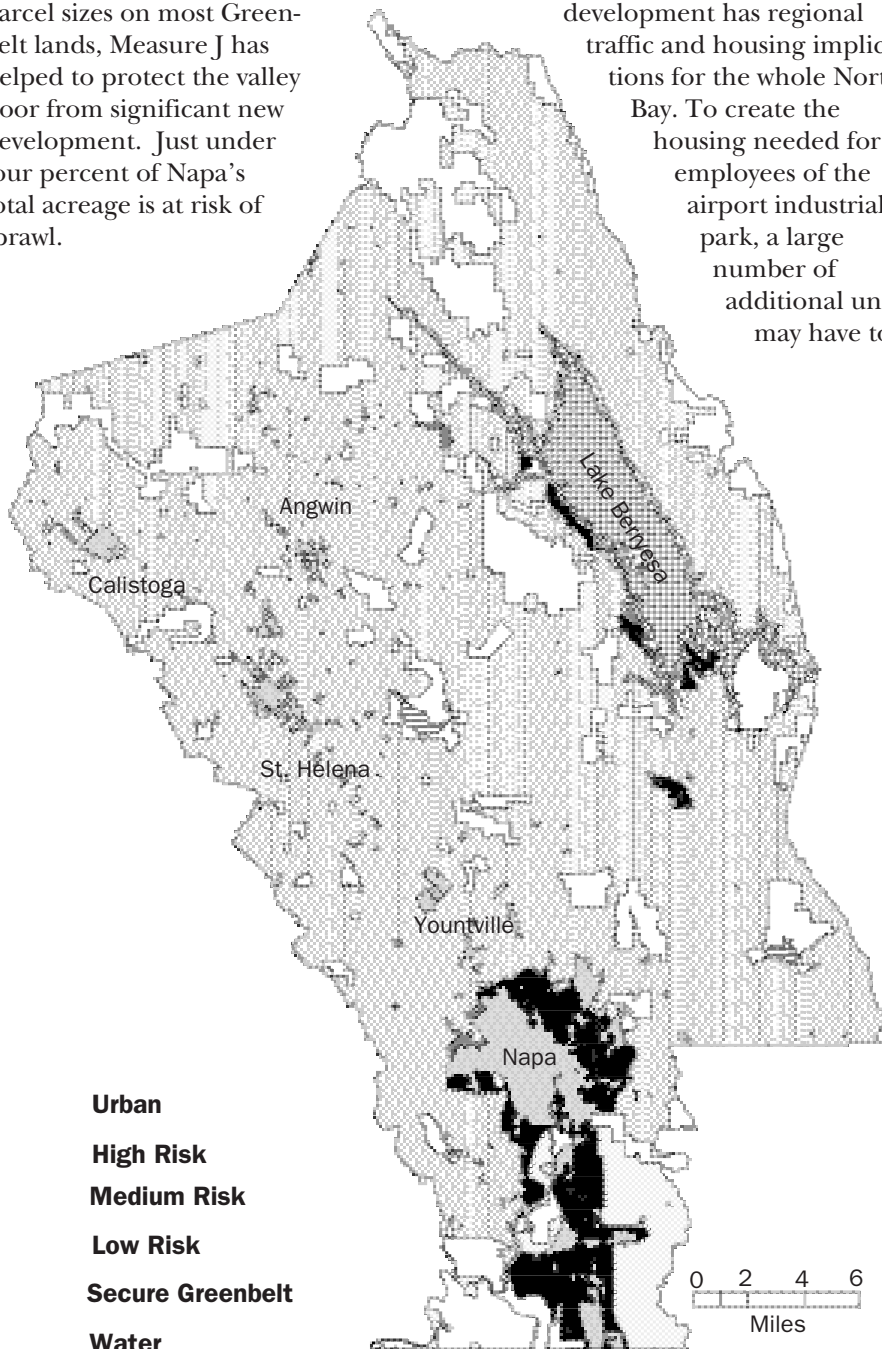
be built in the area directly east of the City of Napa. In addition, road widening will likely need to occur on Highway 12 and Highway 29, which could fuel additional sprawl. Finally, the proposed Aenta Springs development in the remote northeast part of the county could create a controversial commercial and tourist attraction in the middle of an agricultural district.

Bright Spots

The City of Napa placed an urban growth boundary measure (in their case called an Rural Urban Line measure) on the ballot in March 1999. This measure, which was unopposed and won passage by a large margin, placed the city's urban limits under the voters' control for the next 20 years.

The protections afforded by Measure J and the County's large minimum parcel sizes offer a strong framework for protecting agriculture in the County. By setting minimum parcel sizes at 160 acres for agricultural watershed areas, Napa's General Plan helps deter speculators from carving up farmlands into hobby farms or residential estates.

In addition, the private Napa Land Trust has permanently protected over 12,000 acres countywide from development. Federal efforts to restore wetlands along San Pablo Bay continue.



San Francisco County

General Assessment

San Francisco is the anomaly of our Bay Area *At Risk* analysis. A majority of the land has either been urbanized or protected as parks and open space. In San Francisco, the more relevant planning issue is the redevelopment or recycling of abandoned or underutilized land. Less than two percent of the City and County of San Francisco is still up for grabs — a total of 390 acres of open space (most of which is at low risk of development).

Hot Spots

The main threatened area in San Francisco is a portion of the Candlestick State Park Recreation Area. Due to the San Francisco 49er's proposal to build a new football stadium and mall where the old ball park exists, about 80 acres of state park land are at risk of becoming parking lots. The transfer of 20 acres for permanent parking to the 49er's stadium and the use of 60 additional acres for game day parking was mandated by the state legislature. Although the whole project is still under negotiation, these lands could be converted for parking uses in the near future.

Bright Spots

The City of San Francisco has acquired two areas that were at risk in our previous report. Both Bayview Hill and O'Shaunessy Hollow have been acquired since 1994, adding 45 protected acres to the City's acquisitions. Hawk Hill, a third property which was listed as high risk in our last analysis, is also in the process of being protected through a conservation easement by the city.

The Mission Bay redevelopment project is an excellent example of the planning concerns which affect San Francisco. This project, endorsed by Greenbelt Alliance, will redevelop 303 acres of land with more than 6,000 units of housing, a 43 acre University of California campus, office and retail

SF GMAP ACRES		
Urban	23,975	79.4%
High Risk	47	0.2%
Medium Risk	109	0.4%
Low Risk	233	0.8%
Secure	5,831	19.3%

space, and 49 acres of open space and parks. Infill projects like the Mission Bay project are the key to accommodating new growth without sacrificing the Greenbelt and our quality of life.



San Mateo County

General Assessment

While San Mateo has traditionally been a "Greenbelter," it was the only Bay Area County where acreage at risk increased since our last analysis. In 1999, a total of 19,309 acres were at risk of development, compared to 14,298 in 1994 (a 35 percent increase). None-

theless, only 6.7 percent of the County's total acreage is currently at risk of development. Like other Greenbelter counties, San Mateo has a very informed and active citizenry that has worked to protect the County's precious open space. However, development pressures remain intense.

Hot Spots

The major hot spot in the county is the coastal unincorporated areas north of Half Moon Bay, where antiquated subdivisions, added sewer and water capacity, and new development plans create ongoing threats to the Greenbelt. The remaining undeveloped land adjacent to San Bruno Mountain in Brisbane and South San

Francisco continues to be at risk. Home to 22 endangered plant and animal species, the area is threatened by additional residential development as well as a massive office tower, hotel and other commercial development. Also worth watching are the Stanford University lands where proposals to establish "satellite" think tanks in remote areas of the campus put currently undeveloped areas outside the core campus at risk. One final development hot spot is the proposed SFO runway

SAN MATEO GMAP ACRES

Urban	75,935	26.2%
High Risk	8,201	2.8%
Medium Risk	11,108	3.8%
Low Risk	94,296	32.5%
Secure	100,653	34.7%

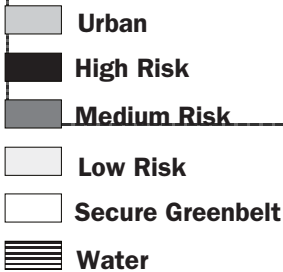
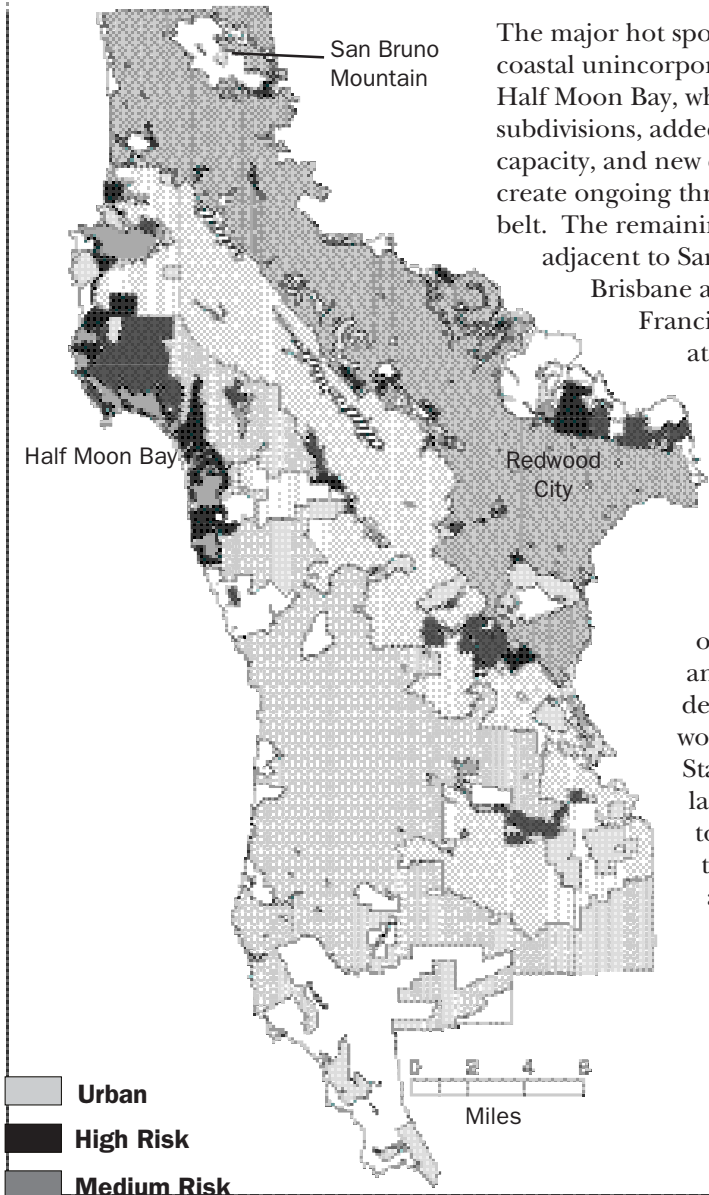
reconfiguration. While Greenbelt acres are not at stake here, the runway expansion would require filling more than 1,400 acres or two square miles of the Bay.

Bright Spots

There has been some good news for San Mateo over the past five years. In 1996, voters rejected a CalTrans proposal for the Devils' Slide Bypass, opting instead for a more environmentally sound two lane tunnel.

In 1998, voters approved an advisory measure to extend the jurisdiction of the Midpeninsula Regional Open Space District (MROSD) to the coast. The advisory vote will eventually be followed with a ballot initiative asking voters to fund coastal acquisition efforts. Since our last analysis, the MROSD has protected 8,756 acres, including the Phleger Estate, and additional acres for the Purisima Creek Redwoods and the Sierra Azul Open Space Preserve. The past five years have also been active ones for the Peninsula Open Space Trust, which acquired close to 11,000 acres of open space in San Mateo County, including Bair Island, Rancho Canada de Oro, and the Cloverdale Coastal Ranch.

In November 1999, Half Moon Bay residents passed a growth control ballot initiative for the November ballot which will limit the annual growth rate in the community from its current 3 percent to 1 percent.



Santa Clara County

General Assessment

Overall, Santa Clara County has improved over the last five years, with significant progress being made both in policy adoption and land acquisition efforts. Since 1994, more than 32,000 new Greenbelt acres have been secured and at risk acreage for the County has dropped by 13,494 acres. However, development pressures on Santa Clara County's remaining unprotected open space are tremendous.

Hot Spots

In spite of a number of Greenbelt policy victories and major new acquisitions, there are still many hot spots around the County. With virtually all of the valley floor of northern Santa Clara County built out and much of the hillsides protected with recently adopted UGBs, development pressures have intensified on the farmlands of southern Santa Clara County.

In March 1999, computer networking firm Cisco Systems announced its plan to build a 400 acre campus for 20,000 new workers in Coyote Valley. If built, this project would set the stage for buildout of the 1,400 acre North Coyote Industrial Area, creating a massive new job center (with up to 50,000 new jobs) and shifting Silicon Valley far to the south. The Cisco project could trigger up to 27,000 new housing units in the immediate vicinity and thousands more sprawling from Tracy to Salinas.

Other hot spots include the unincorporated land to the east and west of Gilroy. Particularly vulnerable is the Agricultural Preserve on the east side

of Highway 101. The outcome of Gilroy's General Plan update process (to be completed in 2000) will determine whether the area is protected by a UGB or paved over by new development.

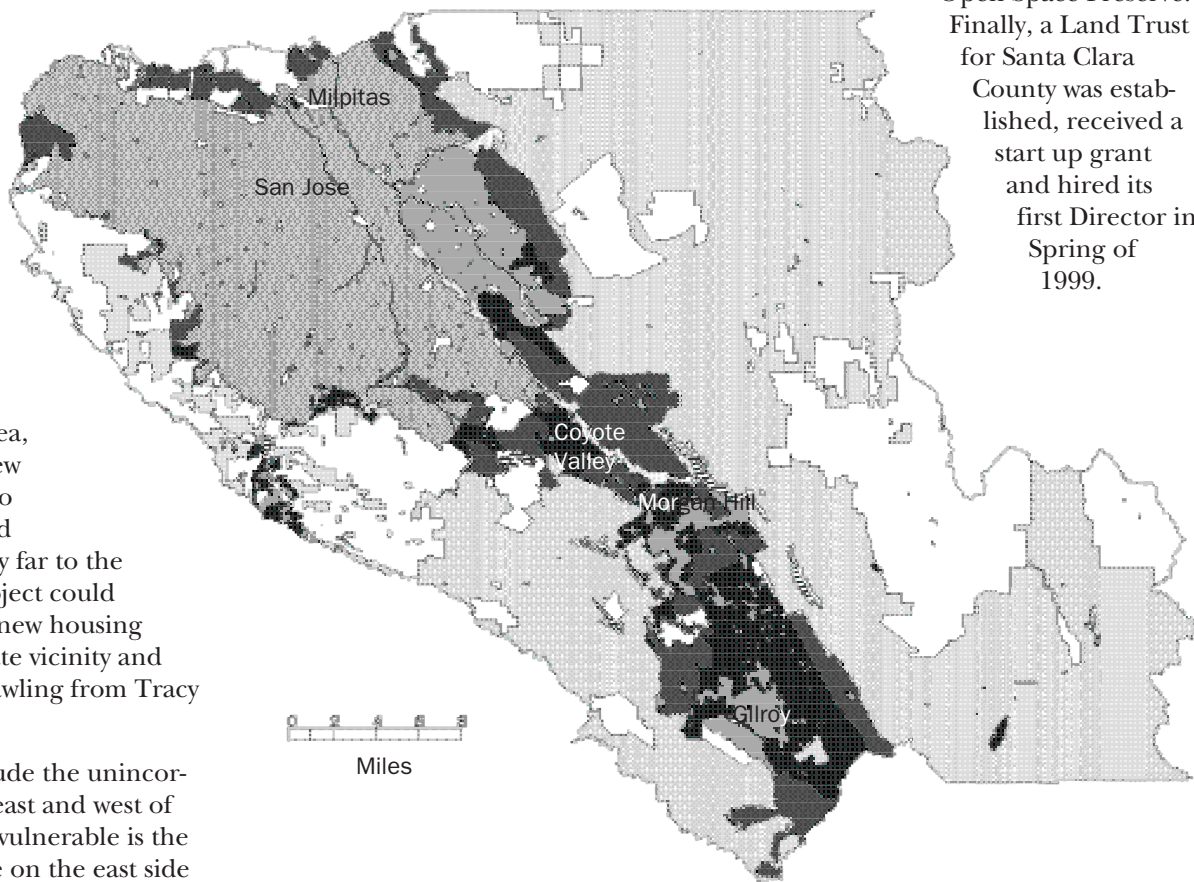
Bright Spots

Fortunately, there has been a lot of good news on the policy front. Since 1996, six cities in Santa Clara have adopted city council approved urban growth boundaries: San Jose, Monte Sereno, Cupertino, Los Gatos, Palo Alto, and Morgan Hill. In 1998, Milpitas became the first South Bay city to adopt a voter approved UGB.

The past five years have also been an active period for open space acquisition. After securing funding through a ballot initiative in 1994, the Santa Clara County Open Space Authority spent four years in litigation. Eventually, the agency was cleared to spend its funds,

SANTA CLARA GMAP ACRES		
Urban	179,277	21.5%
High Risk	40,088	4.8%
Medium Risk	60,142	7.2%
Low Risk	373,318	44.8%
Secure	179,752	21.6%

and began acquiring open space immediately. In late 1998, it joined the Nature Conservancy to purchase the 9,234 acre Lakeview Meadows Ranch in the hills above Gilroy, and teamed up with the Peninsula Open Space Trust (POST) to acquire a 2,428 acre ranch adjacent to Calero Reservoir in South San Jose. In 1999, the Midpeninsula Regional Open Space District and POST acquired the 1,065 acre Bear Creek Redwoods for a Regional Open Space Preserve. Finally, a Land Trust for Santa Clara County was established, received a start up grant and hired its first Director in Spring of 1999.



Solano County

General Assessment

Solano County is at a crossroads. Its location as the bridge between Sacramento and the Bay Area is generating pressure to turn its farms into suburban housing for two rapidly growing regions. With its large agricultural areas and relatively low land costs, Solano County has the potential to explode in population in the next 10 years. While Solano's total acreage at risk dropped by 6,493 acres since our 1994 report, it remains high — 99,222 acres are currently threatened. Solano ranks second behind Contra Costa County with the highest percentage of its acreage at risk (18.6 percent).

Hot Spots

Fairfield's General Plan allows for large scale development in the area directly north of Travis Air Force Base. So far, development has not occurred because the area is not served by water supply and highway. Under the current General Plan, development is not allowed in these problems are resolved.

In Vacaville, large development proposals ring the city. To the west, the city council has expressed interest in creating "Expansion," including ranch development and a likely golf course. Development along I-80 to the west of Vacaville will likely include "box" retail development. On the east side, development along the so-called "reliant" which runs south from Fairfield and Vacaville.

In Dixon, retail development along I-80 continues. However, the city has expressed a strong interest in creating Greenbelt buffers with Vacaville and Davis. Finally, Rio Vista, a small community of 4,000 residents in the southeastern corner of the County, is expected to double its population with large scale development in the near future.

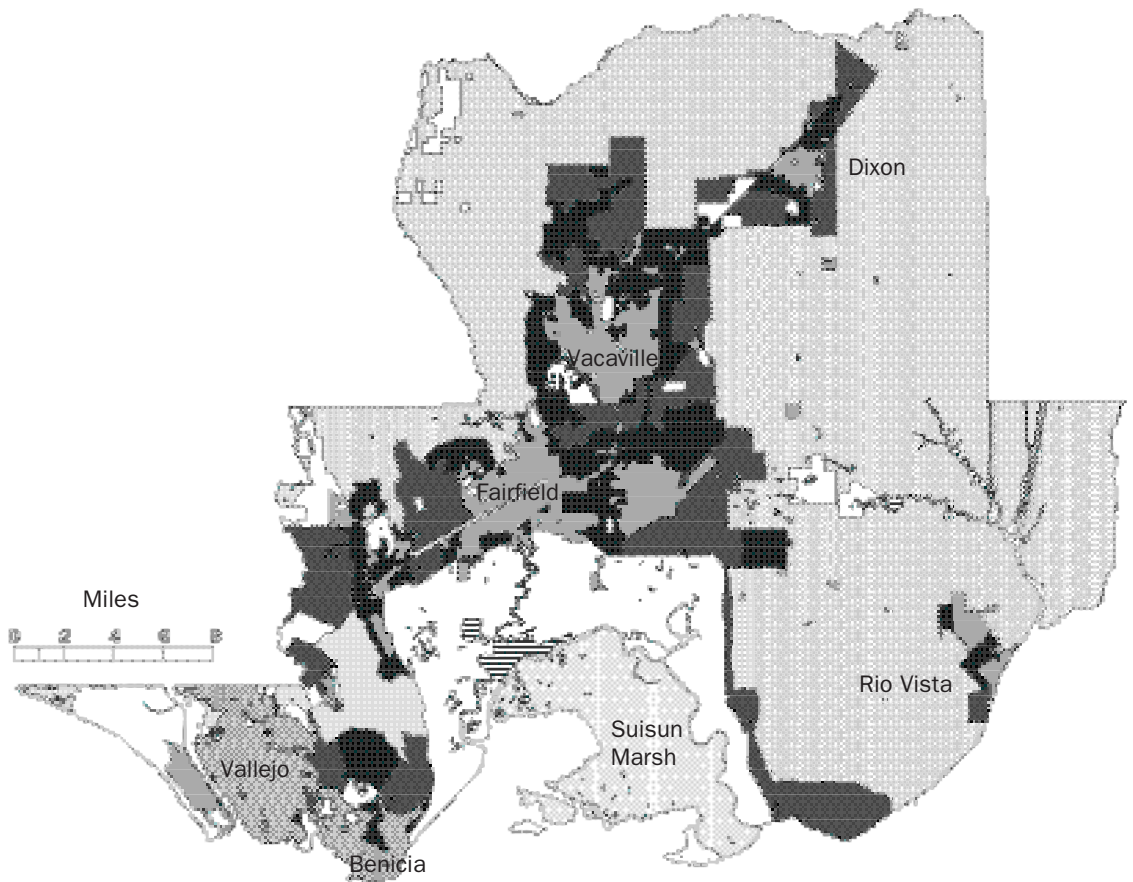
Bright Spots

At the county level, the Board of Supervisors has a strong commitment to agriculture and is unlikely to bow to pressure from developers, at least in the short term. Proposition A, which requires a public vote before agricultural land is rezoned, has helped prevent the county from approving development land outside existing cities.

In Benicia, geographic constraints and

SOLANO GMAP ACRES		
Urban	51,464	9.7%
High Risk	42,724	8.0%
Medium Risk	56,498	10.6%
Low Risk	280,234	52.6%
Secure	102,071	19.2%

an urban growth boundary are likely to keep development from expanding far beyond existing city limits. A Tri-City agreement protects a 10,000 acre Greenbelt buffer between Benicia, Vallejo and Fairfield. In Vallejo, the economic situation resulting from the closure of Mare Island and geographic restraints are likely to prevent large scale development in the near future.



Sonoma County

General Assessment

Over the last few years, Sonoma County has lead the Bay Area in the adoption of sprawl-busting urban growth boundaries. Other countywide open space protection measures have helped to safeguard additional Greenbelt acres. These measures along with some aggressive acquisitions by the Sonoma County Agricultural Preservation and Open Space District have reduced acreage at risk by 24 percent since our 1994 analysis. Nonetheless, development pressures remain strong and over 96,000 Greenbelt acres are threatened.

Hot Spots

Despite the success of UGBs, rural development in the county is proceeding at a steady pace, mainly because of existing rural residential zoning and certificates of compliance (see page nine and ten). The county's new lot line adjustment ordinance, adopted in March 1999, will help reduce the number of new lots developed using the certificate of compliance process. Unfortunately, county plans for sewer and water service expansions could fuel rapid growth in unincorporated areas. Development of rural lands is likely to continue west of Sebastopol and around Sonoma. Significant ranchetting has occurred west of Petaluma.

Development in Santa Rosa is now occurring at nearly 1,800 units per year, a rate that will build out the UGB before it expires in 2016. Healdsburg is planning to annex all land inside their UGB by 2002, leaving no land available for the last 14 years of growth. Significant new development is occurring in Windsor and Cloverdale as well.

Bright Spots

So far, voters in six of Sonoma County's nine incorporated cities have adopted 20-year UGBs: Cotati, Healdsburg, Petaluma, Santa Rosa, Sebastopol, and Windsor. The ballot measures have enjoyed broad community backing, passing by margins ranging from 59 to 79 percent. A countywide measure designed to protect community separators for cities adopting 20-year UGBs was also enacted by the voters in 1996.

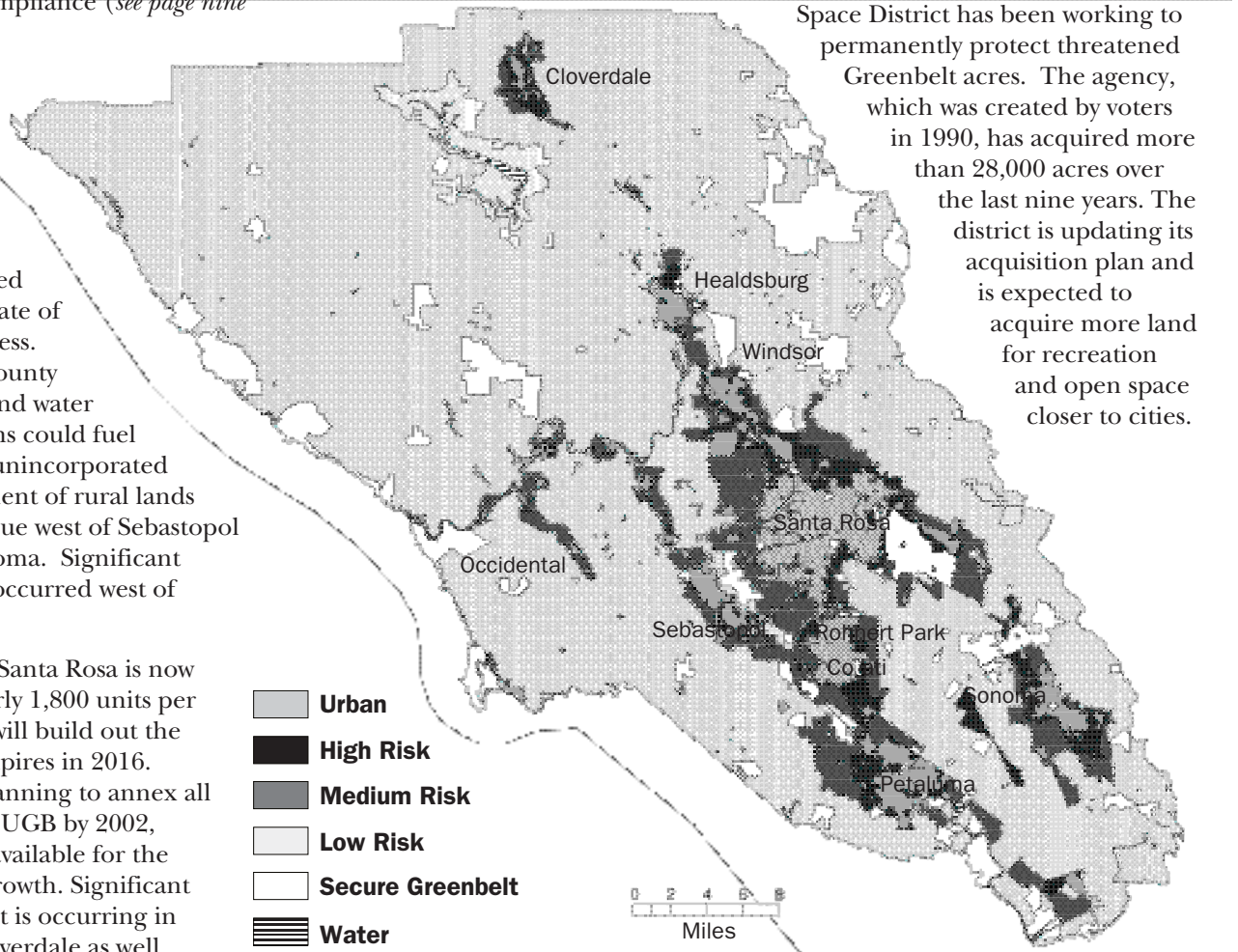
Two years later, County voters supported another measure which locks in agricultural zoning for the farmland along Highway 101 between Petaluma and the Marin County line for 20 years and requires voter approval for any major development in this area over

SONOMA GMAP ACRES

Urban	63,793	6.3%
High Risk	30,221	3.0%
Medium Risk	66,096	6.5%
Low Risk	753,740	74.3%
Secure	101,302	10.0%

the lifetime of the measure. Along with a County General Plan that strongly supports "city centered growth," these measures will help to protect farmland and other open space surrounding these communities.

At the same time, the Sonoma County Agricultural Preservation and Open Space District has been working to permanently protect threatened Greenbelt acres. The agency, which was created by voters in 1990, has acquired more than 28,000 acres over the last nine years. The district is updating its acquisition plan and is expected to acquire more land for recreation and open space closer to cities.



Program Description and Methodology

Established in 1988, the Greenbelt Mapping and Assessment Program (GMAP) is a survey of all Bay Area open lands, highlighting those within reach of development pressures and not firmly protected as open space (e.g. as privately owned farmlands or publicly held parks and watersheds). It is a “snapshot” of current development pressures, showing likely directions of suburban, ranchette, and related development.

Using GreenInfo Network’s advanced Geographic Information Systems, we have illustrated these land use patterns through striking maps of the entire Bay Area. It can also give a detailed numerical breakdown of which lands are already urbanized, which are unlikely to be developed, and which may be developed, and over what timeline.

With these qualities, GMAP has become a valuable planning and observation tool for Bay Area citizens, planners, and public officials. It gives residents a sense of the Bay Area’s future — and perhaps more important — how they can shape the region’s destiny.

This is especially the case now that Greenbelt Alliance is conducting regular updates of GMAP. With this

fourth update of GMAP’s findings, we continue to assess how changes in market dynamics and land use planning have brought about changes in local development trends. Through GMAP’s prism, we can see how counties like Marin have protected their share of the Bay Area’s Greenbelt and directed new development toward existing urban centers, while counties like Contra Costa have permitted pressures for development to spill out across their landscape.

At Risk: The Bay Area’s Greenbelt describes these land use lessons, as well as GMAP’s process, the program’s earlier findings, and GMAP’s new window on development trends at regional and county levels.

Classifying Lands At Risk

The Greenbelt Mapping and Assessment Program is a land classification system that separates the Bay Area’s 4.5 million acres into two broad categories: urbanized and open lands (the latter making up the region’s Greenbelt). Urban lands are those developed at a minimum of one unit to the acre. They make up 16.7 percent of the Bay Area’s total land area.

GMAP divides the remaining 83.3 percent of the region’s land into four categories, based on whether or not

they are likely to be developed and when they might be developed. The four categories are designated as:

High Risk: Greenbelt lands under imminent threat of development or being taken out of Greenbelt-related uses, such as agriculture. There will be strong pressure to develop these lands in the next decade.

Medium Risk: Greenbelt lands at risk due to partial land use protections or location just beyond high risk lands at the urban fringe. These are likely to be targeted for development in the next 30 years. GMAP treats some ranchette areas, particularly areas split down to 5 acre parcels or less, as “medium risk” lands, recognizing that these lands are no longer likely to be used as productive farmland, while also recognizing that many of these lands are not likely to be urbanized into a higher density in the near future due to infrastructure constraints and in some counties, strong policies precluding the further subdivision of these properties.

Low Risk: Greenbelt lands that, for a variety of geographic, political or regulatory reasons, are not likely to be threatened in the next 30 years.

Secure Greenbelt: Greenbelt lands not threatened by development, due to





their status as public lands (though not all public lands are automatically designated as “Secure Greenbelt”), land trust properties, easements, or private land securely protected by a vote of the people (by referendum or initiatives).

Each Bay Area county’s share of the Greenbelt was analyzed and divided among these four at risk categories. Important factors that were used to determine which Greenbelt lands were at risk included:

- *Current settlement patterns* - the location and configuration of current urban areas and the likelihood that new development will occur at the urban fringe;
- *Market dynamics* - where land is being bought and developed — and for what purpose it is being developed;
- *Parcelization* - extent and intensity of land parcelization;

- *Prospective local land use plans* - current county and city general plans and zoning;
- *Pipeline projects* - proposed development projects, including those that may not be reflected in general or specific plans;
- *Public land ownership* and other techniques to keep open lands in greenbelt-related uses - e.g. Williamson Act tax abatement contracts for farmers;
- *Land use regulatory history* of local jurisdictions - planning history of local planning commissions, city councils, Local Agency Formation Commissions, and county boards of supervisors;
- *Infrastructure capacity* - current and projected capacity of existing and planned road, sewer and water systems; and
- *Topography* - buildability of terrain,

depending on steepness of slopes and other physical factors such as soil stability.

Using these factors, GMAP’s land use analysis reveals that **High Risk** lands are typically distinguished by: buildable terrain; location near existing urban areas and along a significant transportation corridor; county or city planning for development (or a local planning process conducive to development); and, in many cases, a highly speculative real estate market.

Medium Risk lands are distinguished by many of the same factors, although they are usually further removed from existing urban areas. Their development may also be contingent on planned infrastructure construction (such as new roads, road widening, and the extension of sewer and water lines).

It should be noted here that many lands at high or medium risk of

Table Eight: Adjusted 1994 GMAP Findings (All figures in 1,000s)

County	Total Acreage	Urban	High Risk	Medium Risk	Low Risk	Secure Greenbelt*
Alameda	476.0	134.7 (28.3%)	37.9 (8.0%)	22.2 (4.7%)	186.9 (39.3%)	94.3 (19.8%)
Contra Costa	467.5	139.1 (29.8%)	64.6 (13.8%)	44.8 (9.6%)	123.5 (26.4%)	95.4 (20.4%)
Marin	335.6	43.3 (12.9%)	7.4 (2.2%)	11.4 (3.4%)	111.0 (33.1%)	162.6 (48.4%)
Napa	504.0	19.0 (3.8%)	10.5 (2.1%)	9.9 (2.0%)	368.2 (73.1%)	96.3 (19.1%)
San Francisco	30.2	23.9 (79.3%)	0.1 (0.3%)	0.2 (.6%)	0.2 (0.8%)	5.7 (19.0%)
San Mateo	290.2	76.7 (26.4%)	9.1 (3.1%)	5.2 (1.8%)	115.7 (39.9%)	83.5 (28.8%)
Santa Clara	832.6	178.3 (21.4%)	63.2 (7.6%)	50.5 (6.1%)	393.4 (47.3%)	147.2 (17.7%)
Solano	533.0	48.3 (9.1%)	40.7 (7.6%)	65.0 (12.2%)	277.0 (52.0%)	101.9 (19.1%)
Sonoma	1,015.2	64.3 (6.3%)	42.3 (4.2%)	83.6 (8.2%)	747.0 (73.6%)	77.9 (7.7%)
Totals	4,484.2 (100%)	727.6 (16.2%)	275.9 (6.2%)	292.8 (6.5%)	2,323.0 (51.8%)	864.8 (19.3%)

(Note: Columns may not add up precisely due to rounding) * Secure Greenbelt includes acreage covered by lakes and reservoirs

development are threatened by conversion to urban uses (minimum building density of one unit to the acre). However, in some cases, open lands may be at risk of being taken out of Greenbelt-compatible uses, particularly agriculture, through other forms of development. See sidebar on page 25 for the elements of the conversion.

The principal culprit besides outright suburban development is “ranchettes” — residential units built on lots (usually one to ten acres in size) that are larger than standard urban and suburban lots but too small for viable farming operations. Ranchettes, which usually carve up agricultural properties, are often the first step toward the intensive suburbanization and urbanization of rural areas (see sidebar on page nine).

Stepping away from lands at risk of development, the two other Greenbelt land categories — *Secure Greenbelt* and *Low Risk* — are characterized by: public ownership; remote or unbuildable locations (usually slopes in excess of a 15 percent grade, though

this is not always a deterrent to construction); and/or strong land use protections (large lot agricultural zoning, designation of agricultural preserves, Greenbelt protection locked in by the voters, and county-wide plans directing new development to existing urban areas).

The characteristics making up these four categories were applied on a county-by-county basis, resulting in development scenarios for each county along with its cities. The scenarios, along with data on urbanized lands, were then transferred to large scale maps (at a scale of 1:62,500) and digitized into a computer system (using ARC INFO software) at GreenInfo Network. This digitized data was then used to produce region-wide and county-specific maps and numerical breakdowns of the status of the region’s open lands.

Previous GMAP Findings

Prior editions of GMAP were released in 1989, 1991, and 1994. These reports found a very large portion of the

GMAP RISK FACTORS

- **Current settlement patterns**
- **Market dynamics**
- **Parcelization**
- **County and city land use plans**
- **Pipeline projects**
- **Public land ownership**
- **Land use regulatory history**
- **Infrastructure capacity**
- **Topography**

Greenbelt at risk, although the second and third edition also indicated steady improvements in the Greenbelt’s health.

The 1989 edition revealed 870,000 Greenbelt acres at risk. That was reduced to 620,000 acres in 1991, and 570,000 acres in 1994. The steady drop in acreage at risk is largely attributable to major land use changes in Sonoma County (which adopted a stronger land use plan and created a new open space and farm preservation district) and Napa County (which curtailed development pressures with a 30 year measure to maintain countywide protections for agriculture.

Nevertheless, the 1994 edition of GMAP still showed an area equal to nineteen new San Franciscos at risk of development. Major hotspots included Lagoon Valley (in Solano County), Brentwood (in Contra Costa County), the Tri-Valley (in Alameda County), Gilroy (in Santa Clara County), and the Mid-State Toll Road in the East Bay.

Unfortunately, while total acreage at risk has declined over the last five years, most of the hotspots highlighted in our 1994 report remain vulnerable to major sprawl development today. One major threat – the Mid-State Toll Road – which could have encouraged



▲ *The Bay Area’s flat farmlands have all the classic characteristics of high risk Greenbelt lands: adjacent to major urban centers; accessible, buildable terrain; and pockets of extensive parcelization.*



more sprawl over 100,000 Greenbelt acres in Contra Costa, Alameda, and Solano counties, appears to have faded. In addition, significant progress was made through the adoption of urban growth boundaries, especially in Sonoma and Santa Clara counties; key land acquisitions like the Bear Creek Redwoods above Los Gatos; and the adoption of protective large minimum parcel size regulations for ranchlands in Alameda County. Copies of the complete 1989, 1991, and 1994 GMAP reports are available from Greenbelt Alliance.

GMAP Changes

This edition of At Risk updates GMAP findings through July 1999. It incorporates changes in general plans, project proposals, public land acquisitions, as

well as the results of referenda and initiatives considered by Bay Area voters over the last five years. The primary source of information about Secure Greenbelt lands was the Bay Area Open Space Council's database of Public Lands, which was updated through July 1999.

Due to technical factors, there are some acreage differences between the 1994 and 1999 risk figures. The total of these differences was less than one percent of the region's land area and did not affect the High and Medium risk categories. Table eight on page 26 shows 1994 acreage adjusted to make it consistent with 1999 and should now be considered the final 1994 figures.

As in our 1994 report, GMAP identifies

bodies of water – almost entirely reservoirs – within public land areas. For accounting purposes, all water body acreage is included in the Secure Greenbelt category. Our GMAP analysis also identifies urban open space within cities, to give a better sense of the "greenspace" systems (or lack thereof) in our communities. Urban open space holdings of ten acres or more are shown. Information on Bay Area urbanization was based on 1996 data obtained from the California State Department of Conservation.

Along with the other updates, and the analyses of citizens, public officials, and planners from around the Bay Area, the 2000 edition of At Risk is an important tool for a region grappling with continued growth and change.





