SANTA BARBARA COUNTY
AGRICULTURAL RESOURCES ENVIRONMENTAL/ECONOMIC ASSESSMENT (AREA) STUDY

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SANTA BARBARA COUNTY
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American Farmland Trust

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This report is the result of a yearlong process initiated by Santa Barbara County Planning and Development in conjunction with the Santa Barbara County Agricultural Advisory Committee and project Steering Committee. American Farmland Trust (AFT) was engaged to research and assess the current state of the agricultural industry in the County and write this report.

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SANTA BARBARA COUNTY AGRICULTURAL RESOURCES ENVIRONMENTAL/ECONOMIC ASSESSMENT

EXECUTIVE SUMMARY

Agriculture is important to Santa Barbara County's economy, environment and landscape. Santa Barbara agriculture ranks in the top 1 percent of all U.S. agricultural counties, and its total economic impacts ripple through the local economy in many ways. In 2006, the value of its agricultural commodities topped $1 billion with production more than doubling between 1995 and 2005. Including food processing and farm support businesses, the agricultural sector contributes about $2 billion annually to Santa Barbara's economy. Well-managed farms and ranches provide open space and fire suppression as well as multiple environmental benefits, including biodiversity, habitat for endangered and other species, soil and water quality, and carbon sequestration, which offsets global warming.

In July 2006, the County of Santa Barbara hired American Farmland Trust (AFT) to conduct an Agricultural Resources Environmental/Economic Assessment (AREA) study. AFT is a private, nonprofit conservation organization founded in 1980 to stop the loss of productive farmland and promote farming practices that lead to a healthy environment. AFT is the nation's primary provider of technical assistance on farmland protection and conservation and has been providing contract services to federal agencies, state and local governments, planning commissions and land trusts since 1997. Last year, AFT's Farmland Information Center served 85,000 people with information and advice.

The purpose of the AREA study is to show the value that agriculture brings to Santa Barbara County's environment and economy in order to establish a baseline for consideration in addressing competing resource issues. Toward this end, AFT conducted research on Santa Barbara County agriculture as an environmental and economic resource, and identified challenges to expansion and intensification, most notably land area availability given planned urban development and environmental constraints.

The process was guided by the County's Agricultural Advisory Committee (AAC) as well as staff in both the Agricultural Commissioner's Office and the County Planning Department. The AAC also created a project Steering Committee, which was coordinated by the County's Agricultural Land Use Planner, and included farmers, ranchers and representatives from agricultural industry groups including COLAB. The process included four research tasks, findings from which AFT summarized in this final report.

The research included:

- Economic indicators to determine economic baseline conditions;
- Focus groups with major commodity sectors to inform the economic baseline and gather data on specific commodity sectors;
- Literature review of environmental benefits of agriculture; and
- Analyzing land area availability based on data provided by County Planning and Development Mapping, which created and printed a series of baseline maps to show areas of urban growth patterns, historical agricultural trends, areas of potential agricultural expansion or intensification, and environmental factors.

MAJOR FINDINGS INCLUDE:

- **Agriculture is becoming more intensive.**
  - From 1995 to 2005, agricultural production values increased by 54 percent led by wine grapes, which increased more than 500 percent.
  - 95 percent of the value of farm products was produced on 16 percent of harvested acreage.
  - Between 1984 and 2004, important farmland increased by 8,283 acres.
- **Livestock industries are endangered.**
  - The number of cattle operations declined by 40 percent in five years.
  - Grazing land declined by 18,385 acres in 20 years.
  - In 2006, cattle fell to 2.6 percent of the County's total agricultural value—down from almost 8 percent in 1981.
  - Over the last 25 years, cattle prices per unit dropped by 30 percent.
- **Major costs include the price of land, labor and labor housing.**
  - Farmland values have been rising rapidly in the 21st century. In 2006, the highest values were for wine grapes at $25,000 to $50,000 per acre, followed by row-crops ranging from $25,000 to $41,000 per acre.
  - The cost of labor increased 31 percent over 10 years.
  - In April 2007, the median price for a home in Santa Barbara County was $809,210 reflecting a wide range of values: $1,475,000 in the more developed South Coast area and $406,520 in the agricultural north.
- **Land use and population patterns threaten the agricultural land base.**
  - Land ownership is concentrated on 139 farms that cover 85 percent of the County's land in farms.
  - Development pressure is most intense in the Santa Maria Valley, which has the most prime farmland that is best for intensive production.
  - Since 2000, the County's total population increased 5.9 percent, while Santa Maria's increased 16.7 percent, surpassing the City of Santa Barbara, whose population decreased slightly.

- **Little land is available for agricultural intensification and expansion.**
    - The California Chapter of the American Society of Farm Managers and Rural Appraisers reports a "struggle between agriculture and urban sprawl," in which farmland continues to be converted resulting in shorter farmland supplies.
    - Out of 855,000 acres of privately owned land, less than 10 percent are available for agricultural expansion or intensification. Of this, nearly 50,000 acres have environmental constraints, including California Tiger Salamander (CTS) habitat range. Only 33,883 acres not currently in agricultural production potentially are available outside of existing urban and sphere of influence boundaries and any biological constraints.
    - Most of the County's agricultural land is in pasture and grazing use, but this land use has declined steadily for the past 20 or more years and the speed of the decline appears to be increasing.
- **Agricultural land has a direct and positive impact on environmental quality.**
    - Grazing supports and enhances biodiversity, potentially eliminating noxious weeds and maintaining and increasing the richness and abundance of grassland species while minimizing the invasion of woods species.
    - Cropland, perennial orchards and vineyards managed with low- or no-till practices increase the carbon in soil compared to more intensive tillage operations. Carbon sequestration helps offset global warming.
    - Intensive farming increases the amount of organic matter in the soil of California's agricultural land, which contributes to soil fertility, limits erosion and helps retain water.
    - Agricultural and grazing lands maintained with best management practices improve habitat for California Tiger Salamanders, red-legged frogs, and fish and bird populations.

While opportunities remain for agriculture to thrive in Santa Barbara, this is dependent on farm-friendly land use policies that support retail and value-added agriculture, keep land available and affordable for agriculture, and mediate high land values and housing costs. These include economic development and food system policies as well as policies that both protect prime and important farmlands and steer development away from them. Finally, Santa Barbara's important farm and grazing lands should be considered environmental resources when interpreting environmental conditions for agricultural expansion or intensification and given equal weight to other environmental resources. Great potential exists to expand into intensive, high value, and value-added agriculture including on-farm recreation and tourism, which are among the fastest growing rural industries and hold promise for Santa Barbara farmers and ranchers to improve profitability by capitalizing on agriculture's amenity values.

INTRODUCTION

Santa Barbara County is renowned for its miles of dramatic coastline, expansive grazing lands and its fine wines, made famous by the popular movie "Sideways." Supported by a Mediterranean climate, high quality soils and adequate water resources, Santa Barbara County is in the top 1 percent of all agricultural counties in the United States. It is 13th in the market value of products sold in California and 21st in the nation.[1]

Agriculture provides many benefits to Santa Barbara. Its economic impacts ripple through the County in many ways. Including food processing and farm support businesses, the agricultural sector contributes about $2 billion annually to the economy.[2] Its working landscape of farms and ranches provides multiple environmental values. Beyond open space, it supports biodiversity and provides habitat for endangered and other species, contributes to soil and water quality, and sequesters carbon, which can offset global warming.

However, the future of Santa Barbara's agriculture is uncertain. It is becoming increasingly concentrated with 95 percent of the value of farm products produced on only 16 percent of farm acreage. At the same time, 56 percent of the County's agricultural lands are in grazing, but livestock industries have declined significantly, placing these lands under tremendous pressure to convert to other uses or intensify. Rapidly escalating land values along the South Coast appear to be driving population to the Santa Maria Valley, which has the County's largest concentration of prime soils and supports the County's most profitable agricultural sectors. Since April 2000, Santa Maria's population increased 16.7 percent while the County's total population only increased 5.9 percent.[3] Housing prices have increased rapidly, making it especially difficult to support affordable housing for farm labor. In April 2007 the median price for a home in Santa Barbara County was $809,210—up from $475,000 in 2004.[4] Finally, all across the County, farmers and ranchers report formidable regulatory stumbling blocks to intensification and expansion, which they say make it difficult to remain competitive and responsive to market demands.[5]

PROJECT BACKGROUND

In 2006, the Center for Environmental Quality, the Santa Barbara Cattlemen's Association, and the Coalition of Labor, Agriculture and Business (COLAB) filed a lawsuit against the County regarding the Oak Tree Protection and Regeneration Program. Through a Memorandum of

[1] U.S. Department of Agriculture – National Agricultural Statistics Service (USDA–NASS), *Census of Agriculture* (Washington, D.C.: USDA–NASS, 2002).

[2] IMPLAN (Impact Planning Analysis) (Stillwater, Minn.: Minnesota IMPLAN Group, Inc., 2006). The most recent IMPLAN data available were for 2004, released in October 2006.

[3] State of California, Department of Finance, "E-4 Population Estimates for Cities, Counties and State, 2001–2007, with 2000 Benchmark" online at http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Estimates/E-4-01-06/HIST-4.php.

[4] California Association of Realtors (CAR), *Sales & Price Report* (Los Angeles, Calif.: April 2007, March 2004), online at www.car.org.

[5] This sentiment was expressed in every meeting AFT conducted with producers, including project interviews, site visits and focus groups.

Understanding (MOU) signed with the County, it was agreed that an Agricultural Resource/Baseline Condition Study would be authorized and approved for funding. The study was to be scoped and directed by the Agricultural Commissioner and the Agricultural Advisory Committee (AAC) and incorporated into an Environmental Impact Report for proposed revisions to the County's Grading Ordinance.

In July 2006, the County of Santa Barbara contracted with American Farmland Trust (AFT) to conduct the Agricultural Resource/Baseline Condition Study. AFT is a private, nonprofit conservation organization founded in 1980 to stop the loss of productive farmland and promote farming practices that lead to a healthy environment. AFT opened its California state office in 1983 and since then has contributed significantly to the state's farmland protection efforts, successfully promoting the establishment of the Farmland Mapping & Monitoring Program and the authorization and funding for the California Farmland Conservancy Program.

Nationally, AFT is the primary provider of technical assistance and information on farmland conservation and has been providing contract services to federal agencies, state and local governments, planning commissions and land trusts since 1997. (See Appendix I for list of projects.) AFT's technical assistance team includes farmers, planners, fiscal analysts, policy experts, and lawyers. Services include farmland protection program development, policy audits and program evaluation, community planning for agriculture, fiscal analysis and agricultural economic development studies. (See Appendix I for project team qualifications.) AFT's Farmland Information Center served 85,000 people last year.

AFT spent several months working with the AAC and the County's Agricultural Land Use (ALU) Planner to define the scope of this project. Throughout this process, AFT was told that Santa Barbara's agricultural community believes the value of agriculture is underestimated and its complexity not fully understood. This report is intended to provide information about the benefits agriculture provides to the County's economy and environment. It also evaluates land area available for agricultural expansion and intensification and addresses challenges and opportunities for six specific commodities. With a clear understanding of agriculture's economic and environmental importance, it is evident that the County must consider agriculture's benefits when conducting environmental review for proposed changes to policies or ordinances that affect agricultural intensification and expansion.

PURPOSE OF STUDY

The purpose of this study is to show the value that agriculture brings to Santa Barbara County's environment and economy in order to establish a baseline for consideration in addressing competing resource issues. It also is meant to evaluate land area availability for intensification and expansion given planned urban development and environmental constraints. There are many things that studies of this nature could do that this one does not. While such studies are needed, this study is neither a cost–benefit analysis nor an analysis of the effect of County policies on agriculture or agricultural land use. It also does not evaluate beneficial synergies within the agricultural industry made possible by the industry's high concentration in the County.

PROCESS

AFT conducted a yearlong process to find out the contributions of Santa Barbara County agriculture as an environmental and economic resource, and to identify major challenges to

expansion and intensification of key agricultural sectors. To kick off the project and finalize the scope, AFT met with the AAC and the ALU Planner. AFT continued to work with the AAC to identify important agricultural sectors for more in-depth study. Committee members suggested names of agricultural experts and commodity leaders for AFT to talk to and helped AFT understand local conditions and relationships between agricultural stakeholders. The AAC also created a project Steering Committee, which was coordinated by the ALU Planner, and included farmers, ranchers and representatives from agricultural industry groups including COLAB. The process included four research tasks, findings from which AFT summarized according to an outline provided by the ALU, and approved by all the County parties involved in this project.

The research tasks included:

1. Economic indicators to determine economic baseline conditions;
2. Focus groups with major commodity sectors to inform the economic baseline and gather data on specific commodity sectors;
3. Literature review of environmental benefits of agriculture; and
4. Land area availability.

Economic Baseline

Under the ALU Planner's direction, AFT researched economic indicators and baseline conditions of Santa Barbara County's agricultural industry. AFT examined a variety of indicators of agricultural economic performance, including production values and the estimated market value of agricultural land, buildings and products sold, payroll, employment and cost of inputs. This baseline also describes trends that may provide insights into the industry's future.

AFT used national, state and local databases, including U.S. Census of Agriculture, Regional Economic Information System, IMPLAN, and County Agricultural Commission reports to compile information for different aspects of the agricultural industry. The use of several data sources may appear confusing but, given the limitations of each, multiple sources are necessary to understand the complexities of Santa Barbara agriculture and the issues it faces. The data used are the most current according to their source; the most recent Census of Agriculture data are for 2002 while Santa Barbara County Crop Reports and ASMFRA Reports are released annually. Given the project's time line, most trends from these sources were calculated from 1995 to 2005. Data from 2006 and 2007 were released after the economic baseline was researched and drafted, but some pertinent figures were updated afterwards to provide perspective in the final draft.

The data collected include:

1. Current agricultural land values;
2. Number of farms;
3. Average size of farms;
4. Land in farms;
5. Land values;
6. Total market value of agricultural products sold;
7. Net cash return;
8. Cost of inputs;
9. Market value of agricultural land and buildings;

10. Payroll and employment;
11. Age group of operators; and
12. Economic impacts (direct, secondary and value-added) of the larger agricultural industry, including agricultural services and food processing.

AFT presented preliminary findings on the economic status of agriculture at a public meeting in January 2007 and later expanded them after ground truthing the data in a series of focus groups that were held in March.

Focus Groups

Farm production varies widely across the County's major agricultural regions because each has its own distinct climate, soil, topography, water availability and economic conditions. AFT conducted a series of focus groups to ground truth economic baseline data and discern regional and commodity differences. The AAC selected the following commodity sectors for more in-depth study:

1. Avocados/Lemons
2. Greenhouse Products: Nursery/Flowers
3. Livestock/Dry-Land Crops and Forage
4. Seed/Fruit/Nut Crops
5. Vegetables/Strawberries
6. Wine Grapes

Under the direction of the AAC, AFT worked with the County's ALU Planner and the project Steering Committee to refine this list, set goals, identify commodity sectors and focus group participants, and prepare questions. Leaders from each of the commodity groups were responsible for inviting participants and securing a location to hold the focus groups. Participants were chosen based on several factors, most importantly their ability to represent diverse opinions within each commodity.

Steering committee members invited eight to 10 participants to each focus group. They mailed invitations to the selected individuals and were responsible for making follow-up calls to ensure attendance. Each meeting was scheduled for two hours and covered major areas of concern including land availability, infrastructure support, governmental regulations and profitability. In addition, surveys were passed out to participants at each session to garner additional information. In the end, between five and 10 producers and industry leaders participated in five focus groups. No producers attended the focus group for the strawberry sector.

AFT subcontracted with an agricultural economist from U.C. Davis to facilitate the focus groups and help with economic analysis. Kurt Richter seemed particularly well suited to this study because up until six years ago, he was involved in managing his family's cattle operation in Missouri. The focus groups were relaxed and conversational with short, open-ended questions designed to generate discussion. Participants were assured that their comments would be kept confidential. Everyone participated, and Richter was careful to manage the sessions so that no one person dominated the conversation.

The focus groups were essential to the research process. They provided an opportunity for AFT to ground truth data gathered in other parts of the project, to find out how producers perceive the current state of County agriculture and to understand threats and challenges that affect its future sustainability. However, because of AFT's promise of confidentiality to focus group participants, findings are summarized in this report but no statements are attributed to any of the farmers or ranchers who were interviewed as part of this process.

Agricultural Commodity Briefs

Over the course of the project, AFT was asked to highlight challenges to, as well as benefits of, specific commodities. After the focus groups, AFT conducted further research on the selected commodity sectors to better understand issues and recent trends in production and agricultural land use. Based on AAC input, AFT wrote six commodity briefs that identified trends, described overall economic health and availability of infrastructure, and identified challenges, including the cost of land, as well as regulatory barriers that affect each sector.

Literature Review

AFT conducted a literature review of articles and reports that show how agricultural land use can enhance the environment, especially in California. To perform the literature review, AFT consulted with experts in the fields of agriculture and the environment and reviewed academic, professional and scientific journals. We started by contacting researchers in the University of California (UC) system who provided specific information about their focus of study, such as biodiversity, soil and water quality, fire suppression and wildlife. AFT further consulted with research librarians at the University of Massachusetts and University of Vermont to identify key databases. These included AGRICOLA, Academic Search Premier and the Web of Science.

At the recommendation of the Steering Committee, AFT investigated the UC Melvyl system, which provides for searches of unpublished UC dissertations and theses. However, university colleagues advised against using Melvyl for the purpose of this literature review and encouraged us to rely on peer-reviewed and published reports. These included academic journals such as *Conservation Biology*, *Ecological Applications* and *Agriculture, Ecosystems & Environment.* AFT also talked to staff of organizations such as the Santa Barbara Watershed Coalition and the Central Coast Vineyard Team to find out about local initiatives specifically related to habitat, vineyards and water quality, and searched materials available on their Web sites.

Land Area Availability Calculations

AFT worked with the County's ALU Planner who coordinated the Steering Committee's input and garnered County GIS support to calculate land area availability and produce a series of maps. AFT identified data layers and developed criteria to calculate land area availability for agricultural intensification and expansion. AFT also identified available mapping sources to support this process.

County Planning and Development Mapping (P&D Mapping) created and printed a series of three baseline maps that can be seen on the CD accompanying this report. The maps show areas of urban growth patterns, historical agricultural trends, areas of potential agricultural expansion or intensification, and environmental factors. The maps were developed using available ARC

View/GIS Map Layers. The data behind these maps are the basis for the calculations reported in this study.[6]

REPORT

This report draws on all these tasks and research. The first section focuses on the status of agriculture, pointing to the benefits and the challenges it faces. The second section examines land area availability in greater detail because the future of Santa Barbara agriculture depends on its ability to expand production of higher value, more intensive crops. The report ends with general conclusions and recommendations, and a series of Appendices.

[6] The land area calculations provide a general assessment of baseline conditions. While they use the best data available, they are provided with the understanding that mapping calculations reflect a margin of error and represent a point in time. The results are not intended to be site specific or provide absolute values. They are offered to provide a reasonable baseline.

STATUS OF THE AGRICULTURAL INDUSTRY IN SANTA BARBARA COUNTY

EXISTING SETTING

Agriculture is the dominant land use in Santa Barbara County. Including public lands, the County's total mainland area is 1,634,393 acres.[1] Approximately 855,000 acres (52 percent) is privately owned. Close to 90 percent of this land is zoned for agriculture[2] and 85 percent of the County's agricultural land use takes place on the 139 largest (1,000 acres or more) operations, which cover 640,981 acres.[3]

Many people appreciate agriculture for its ability to preserve green or open space without realizing that well managed agricultural land also has a direct and positive impact on environmental quality. For example, grazing supports and enhances biodiversity, potentially eliminating noxious weeds and increasing the abundance of grassland species while minimizing invasive species. Cropland, perennial orchards and vineyards managed with low- or no-till practices increase carbon in soil, which can help offset global warming. Agricultural and grazing lands maintained with best management practices improve habitat for California Tiger Salamanders, red-legged frogs, and fish and bird populations. Grazing lands also provide an alternative, environmentally beneficial tool for managing fires. (See Appendix IV, Literature Review.)

Agriculture is important to the County economy as well as to its environment. In 2006, the production value of Santa Barbara's commodities topped $1 billion[4] with production more than doubling in the decade between 1995 and 2005.[5] The County's 1,444 farms ranked 13th in California in the market of products sold and 21st in the entire United States.[6] The agricultural industry's total economic output was about $2 billion,[7] including economic sectors such as agricultural support services and food processing. The estimated market value of its land and buildings was $2.7 billion in 2002, up 27 percent from 1997.

High value crops and intensive agricultural production such as vineyards and strawberries are thriving in Santa Barbara. From 1995 to 2005, agricultural production values increased 54 percent led by wine grapes, which increased nearly 522 percent.[8] However, livestock industries are struggling. For example, while the total agricultural economy increased in value, the cattle industry has declined in the number of farms, total acres in pastureland and value of production.[9]

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[1] County of Santa Barbara, *Status of Agriculture in Santa Barbara County*, April 1999. Acreage total cited does not include the Channel Islands.
[2] Ibid.
[3] Ibid.
[4] County of Santa Barbara, Agricultural Commissioner's Office, *Agricultural Production Report, 2006* (Santa Barbara, Calif.: April 2007).
[5] County of Santa Barbara, *Agricultural Production Report, 1995; 2005*, adjusted for inflation.
[6] USDA–NASS, *Census of Agriculture*, 2002.
[7] IMPLAN, 2006. Data available were for 2004.
[8] Both figures are adjusted for inflation.
[9] USDA–NASS, *Census of Agriculture*, 2002.

Intensification into high value crops and an associated decline in livestock production are common signs of urban influence on agriculture.[10] The effects of urbanization on agriculture have been reported widely. They include escalating land values, the loss of traditional input suppliers and increasing conflicts between farmers and non-farm neighbors. These range from nuisance complaints to vandalism and theft, and increased public demand for the "amenity value" of farmland without an associated acceptance of the commercial realities of production agriculture. This puts added strain on agricultural viability as regulations increase but producers are not compensated in the marketplace for the rural amenity values they supply.[11]

These traits are evident in Santa Barbara County. The California Chapter of the American Society of Farm Managers and Rural Appraisers (ASFMRA) reports a "struggle between agriculture and urban sprawl,"[12] which is exacerbated by a shortage of affordable housing that puts pressure on communities and farmers alike. Farmland continues to be converted, and "shorter farmland supplies result in higher land prices as farmers compete for remaining available farmland."[13] The costs of labor and labor housing also have escalated in recent years. Labor costs rose 31 percent or $75.8 million from 2000 to 2005,[14] and in April 2007, the listed median home price was $809,210[15]—$1,475,000 in the South Coast area—up from March 2004 when median home prices were $475,000 and $999,999 respectively.

These factors affect profitability. The most recent *Census of Agriculture* reported that 57 percent of Santa Barbara's farms had net losses and only 199 operations, or about 14 percent, produced 90 percent of the sales.[16] The County's 2006 *Agricultural Production Report* indicated that 95 percent of the value of farm products was produced on only 16 percent of harvested acreage.[17]

According to the *Census of Agriculture*, the total number of farms in Santa Barbara County declined 18 percent from 1997 to 2002 and land in farms decreased 9 percent.[18] Over this period, cropland decreased 4 percent, pastureland 10 percent and other land 24 percent, while woodland acres increased from 11,243 acres to 16,261 acres. Farm size increased 11 percent in the same period.

It is important to note that the National Agricultural Statistics Service (NASS) *Census of Agriculture* data used to report land in farms, number of farms and farm size are only for the most recent survey years, 1997 and 2002. Trends were not calculated using earlier data due to several changes and adjustments in the way data are reported.[19]

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[10] Julia Freedgood, et al, *Saving American Farmland: What Works* (Northampton, Mass., American Farmland Trust, 1997), 11.

[11] USDA, Economic Research Service (ERS) ERS Briefing Room Report, "Land Use, Value, and Management: Urbanization and Agricultural Land," online at http://www.ers.usda.gov/Briefing/LandUse/urbanchapter.htm.

[12] California Chapter of the American Society of Farm Managers and Rural Appraisers (ASFMRA), *Trends in Agricultural Land and Lease Values, Region Six*, (Woodbridge, Calif.: 2007). Data used with permission, www.calasfmra.com. Reports show data for the previous year.

[13] Ibid.

[14] U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System (REIS), data from 1995 to 2005 online at www.bea.gov/regional/reis/default.cfm?catable=45.

[15] CAR, *Sales & Price Report*, April 2007.

[16] USDA–NASS, *Census of Agriculture*, 2002.

[17] County of Santa Barbara, *Agricultural Production Report*, 2006.

[18] "Land in farms" consists of pastureland, cropland, woodland and other land, which includes house and barn lots, ponds, roads, ditches, and so on.

[19] For the first time, in 1997 NASS adjusted the data to account for farms missed or misclassified and measured the incompleteness of the census mailing list (CML) by interviewing each producer identified on randomly selected

Since 1997, the average age of the County's farmers has increased faster than both national averages and the rest of California. In 2002, the average age of Santa Barbara farm operators was 58.1 years, more than a year older than the 1997 County average of 56.8 years. The California average was 56.5 years and the national average 55.3 years. Given this demographic, rising land values and the loss of profitability in the cattle industry, which controls the majority of agricultural land, forces are in play for a significant transfer of land in the next decade. The County must develop farm-friendly policies, programs and business processes to sustain agriculture and the agricultural land base for their economic and environmental values. (See Conclusions and Recommendations for specific ideas.)

HIGHLIGHTS

- Santa Barbara is in the top 1 percent of agricultural counties in the U.S.[20]
- From 1995 to 2005, agricultural production values increased by 54 percent led by wine grapes, which increased nearly 522 percent.[21]
- Agriculture is becoming increasingly intensive with 95 percent of the value of farm products produced on 16 percent of harvested acreage.[22] At the same time, livestock industries have declined significantly.[23]
- Land ownership is concentrated on 139 farms that cover 85 percent of land in farms.[24]
- Farmland values are rising rapidly. The highest values reported for sales were in wine grapes at $25,000 to $50,000 per acre, followed by row-crops ranging from $25,000 to $41,000 per acre.[25]
- The cost of labor increased 31 percent over 10 years.[26]
- Farm operators are getting older and few young people are entering agriculture. In 2002, almost 32 percent of its farm operators were over 65 years, while only 15 percent were under 44 and only 2 percent under 35 years of age.
- Agricultural land has a direct and positive impact on environmental quality.[27]

REGIONS

To understand agriculture, agricultural land use and the issues facing Santa Barbara's most important agricultural commodities, it is important to understand variations among the County's agricultural regions.

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sample tracts and comparing this information to the CML. Census data were then weighted to approximate data for operations that were not included. As a result of this coverage adjustment, there was an apparent increase in the number of farms, farmers and land in farms from figures reported in the 1997 Census of Agriculture from previous Census periods. As a result, adjusted figures in these categories are not comparable to data from previous years.

[20] USDA–NASS, *Census of Agriculture*, 2002.

[21] Both figures are adjusted for inflation.

[22] County of Santa Barbara, *Agricultural Production Report*, 2006.

[23] USDA–NASS, *Census of Agriculture*, 2002.

[24] Ibid.

[25] ASFMRA, *Trends in Agricultural Land and Lease Values, Region Six*, 2007.

[26] REIS data, 1995 to 2005.

[27] See Appendix IV, Literature Review.

With 290,000 acres, the Santa Maria Valley is the County's largest agricultural region. It has the largest concentration of prime agricultural soils and is under the most imminent threat of development. The floodplains of the Santa Maria and Sisquoc Rivers provide level fields and fertile soils, and the valley's temperate climate makes it ideal for intensive vegetable production. The surrounding foothills support vineyards and cattle grazing. Although few agricultural support services and little infrastructure are left in the County, most of those that remain are located in Santa Maria.

The Santa Ynez Valley is the County's second largest agricultural region with 231,000 acres in production. Wine grapes and row crops are produced along the Santa Ynez River in upper Santa Ynez Valley. While the hills along the valley edges are used for cattle grazing and vineyards, the valley's floor supports orchards, grains, hay and alfalfa. However, grazing lands increasingly are being converted to vineyards and rural residential development.

Vegetables, wine grapes and cattle also are produced in the Lompoc Valley's alluvial soils near the Santa Ynez River. Flower seed is another important crop grown on the region's 136,000 agricultural acres. The surrounding hills support combined farming operations that produce livestock, dry farmed beans and hay.

Vineyard expansion and row crops are replacing grazing operations in the 79,000 acres of agricultural land in the Los Alamos Valley. The alluvial plain of the San Antonio Creek watershed supports vineyards to the east and row crops to the west, and the surrounding hills still support some livestock grazing.

In the South Coast region, the Carpinteria Valley retains world-class production of cut flowers and nursery products. Avocados, as well as exotic fruits such as sapotes and cherimoyas, are grown on the hillsides north of Carpinteria. Avocados, lemons and row crops also are grown in the Goleta Valley. Farther north, 51,000 acres of the Gaviota Coast support avocado, citrus and cherimoya orchards, cattle grazing and aquaculture producing abalone.[28] The primary land use in the North Gaviota Coast is cattle grazing, with much of the land owned by a small number of ranchers. However, according to a memo from the Agricultural Commissioner about Williamson Act renewals, about 19,000 acres will soon come out of contract because one of these ranches did not renew in 2004.

Despite cold winters and hot, dry summers, the alluvial plain of the Cuyama River supports row crops including carrots, onions and garlic, and field crops of small grains and alfalfa. The valley's Ventucopa region consists of pistachio orchards, while deciduous fruits are grown along Highway 166 and cattle are grazed in the Los Padres National Forest and the foothills of the Sierra Madre Mountains.

REGIONAL ECONOMIC CONTRIBUTION OF THE AGRICULTURAL INDUSTRY

The agricultural industry is one of the single most significant industries in Santa Barbara with potential to expand to provide even greater economic contributions. The total economic output

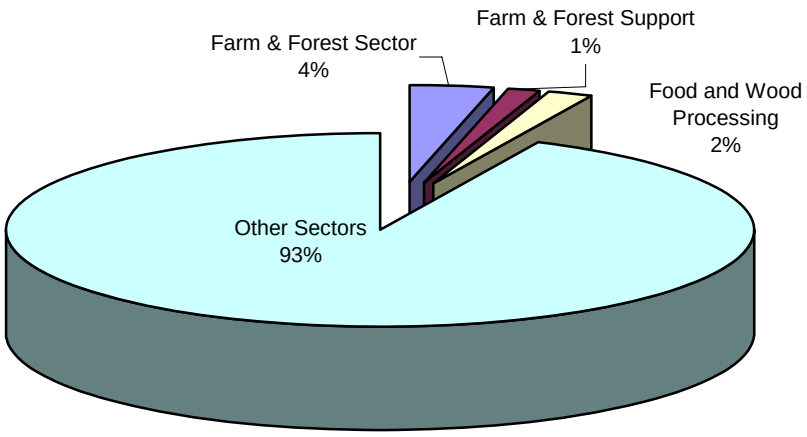
[28] Regional agricultural acreages from County of Santa Barbara, *Status of Agriculture in Santa Barbara County*.

of the County's agricultural industry (farming, farm and forestry support services and food and wood processing) was $1.9 billion in 2004. This represents about 7 percent of the County's total economic output of $27.4 billion from all sectors (see Figure 1).

Santa Barbara County's total economic output was comprised of agricultural output (just over $1 billion), $339 million from agricultural support services and $554 million of food and wood processing (see Table 1).

AFT used a software program called Impact Planning Analysis (IMPLAN)[29] to document the flow of goods and services through the County economy. IMPLAN combines data about the national economy with state- and county-level data. It breaks county data into 509 different economic sectors, including 14 agricultural sectors that include forestry, manufacturing,

Figure 1. Agricultural Industry Represented 7 Percent of County Output in 2004



Source: IMPLAN, 2006.

commercial, services and institutions. IMPLAN contains formulas to calculate economic impacts including industry output, employment, employment compensation, proprietor income, other proprietor income, indirect business tax and total-added. They are defined as follows:

Output (value of production) – Total production value or output is estimated using the 1992 Benchmark Input-Output (92IO) study for the Bureau of Economic Analysis (BEA), the 1992 *Census of Agriculture* and current NASS *Census* data. Agricultural data are collected on a commodity basis and by using estimates of the total production value for every county, state and the entire U.S. output equals shipments plus net additions to inventory including commodities used in farm production but not sold in the open market, such as feed grain and hay. Thus output estimates almost always exceed published cash receipts data.

Employment – No data source provides information on employment and income by the 23 agricultural sectors. The BEA Regional Economic Information System (REIS) data provide

[29] IMPLAN, 2006. Data available were for 2004.

a single farm employment and income number. Using the output estimate described above, IMPLAN creates a vector of employment and income to allocate the single REIS value to the 23 IMPLAN sectors. This is done by deriving output to employment ratios from the *Census of Agriculture* and Bureau of Labor Statistics ES202 programs.

Table 1. Economic Impacts of Agriculture in Santa Barbara, California, 2004

Agricultural Sectors	Output Impacts ($1,000s)	Employ-ment (# Jobs)	Total Value-Added ($1,000s)	Labor Income ($1,000s)	Indirect Business Tax ($1,000s)
Oilseed farming	53	1	34	1	1
Grain farming	2,361	85	1,363	110	48
Vegetable and melon farming	481,206	3,761	359,183	74,680	5,008
Tree nut farming	4,355	60	3,160	801	119
Fruit farming	266,478	4,022	158,877	75,364	7,038
Greenhouse and nursery production	179,149	1,845	139,878	63,818	2,343
All other crop farming	8,947	90	5,270	1,075	200
Cattle ranching and farming	23,313	370	3,857	1,860	622
Poultry and egg production	18,257	61	8,480	2,014	75
Animal production, except cattle and poultry	6,434	227	863	1,018	131
Forest nurseries, forest products and timber	31,491	56	7,211	12	995
Total	**1,022,044**	**10,578**	**688,176**	**220,753**	**16,580**
Support Services	**338,795**	**9,333**	**218,378**	**225,556**	**3,640**
Other animal food manufacturing	7,219	10	888	593	58
Frozen food manufacturing	126,940	475	28,611	12,953	689
Fruit and vegetable canning and drying	3,207	8	659	263	18
Ice cream and frozen dessert manufacturing	727	2	207	85	6
Wineries	418,922	1,099	131,055	36,807	47,384
Sawmills	243	1	69	32	1
Total Food & Wood Processing	557,258	1,595	161,489	225,556	48,156
TOTAL ALL SECTORS	**1,918,097**	**21,506**	**1,068,043**	**497,042**	**68,376**

Source: IMPLAN, 2006.

Secondary Output and Employment – AFT also used IMPLAN to calculate "secondary impacts," which measure "backward linkages"—or agricultural industry suppliers. For example, a cattle operation purchases gasoline, electricity, feed grain, fertilizer and other inputs. The portion of output and employment associated with these support industries determines the secondary impact.

Value-added is the sum of all income minus all associated business taxes. Income includes total payroll, proprietor income, rental income and so on.

Wineries contributed the largest output value at $419 million, with the balance coming from frozen and other food manufacturing, and fruit and vegetable canning and drying. The agricultural industry employed 21,506 workers and provided $497 million of income. In addition, agriculture contributed $907 million in value-added, while food and wood processing industries contributed $161 million in value-added to the local economy. Combined, the total value-added for the agricultural industry was just over $1 billion. Data for the entire County including all 509 sectors are provided in Appendix II.

PRODUCTION VALUES AND PROFITABILITY

Production Values

In 2006, the gross production of Santa Barbara County's agricultural commodities topped $1 billion. According to County crop reports, in the decade between 1995 and 2005, production value almost doubled—from $534 million to $998 million. Even after adjusting for inflation, the real increase in value was 54 percent. Wine grapes increased the most from $20 million in 1995 to $160 million in 2005. On the other hand, the cattle industry is in decline. Almost 8 percent of the total value of the County's agricultural production in 1980, cattle only represented 3 percent in 2005.[30]

In 2006, strawberries topped broccoli as the largest single crop by sales with a gross production value of $231.4 million. Broccoli followed with $128.9 million with wine grapes third at $107.4 million. Other leading crops included head lettuce, celery, avocados, cauliflower, leaf lettuce and lilies.

Table 2 shows Santa Barbara's million dollar crops in 2006. The 10 highest value crops represent 71.4 percent of the County's gross production value. Twenty other individual crops reached the $1 million level, most of them vegetables and flowers.

High value commodities including vegetables, fruit, nut and seed crops, and nursery products increased significantly over the 10-year period. At the same time, traditional field crops and livestock declined. The greatest decline was in livestock, poultry and apiary products, including milk, milk products and miscellaneous, which dropped by 61 percent, while the entire Livestock category including cattle and calves declined by 18 percent, adjusted for inflation. Cattle and calves production was essentially flat, increasing 1 percent from 1995 to 2005. Commodity production values are shown in Table 3.

[30] County of Santa Barbara, *Agricultural Production Report, 1995, 2000, 2005*.

Table 2. Million-Dollar Crops, 2006

Rank	Product	Value	Percent of Production
1	Strawberries	$ 231,391,853	22.8%
2	Broccoli	$ 128,873,188	12.7%
3	Wine Grapes	$ 107,377,849	10.6%
4	Head Lettuce	$ 66,950,045	6.6%
5	Celery	$ 41,691,008	4.1%
6	Avocados	$ 40,287,927	4.0%
7	Cauliflower	$ 37,415,108	3.7%
8	Leaf Lettuce	$ 26,851,912	2.6%
9	Cattle	$ 26,603,767	2.6%
10	Lily cut flowers	$ 18,910,555	1.9%
	Total top 10	**$ 726,353,212**	**71.4%**
11	Gerbera cut flowers	$ 18,168,247	1.8%
12	Lemons	$ 13,703,130	1.3%
13	Orchid potted plants	$ 9,218,491	0.9%
14	Peas, edible pod	$ 8,893,048	0.9%
15	Chrysanthemum cut	$ 8,445,650	0.8%
16	Cabbage	$ 6,740,376	0.7%
17	Rose cut flowers	$ 6,029,218	0.6%
18	Flower Seed	$ 5,954,551	0.6%
19	Spinach	$ 5,688,033	0.6%
20	Bell Peppers	$ 4,504,366	0.4%
	Total 11 to 20	**$ 87,345,110**	**8.6%**
21	Summer Squash	$ 4,326,723	0.4%
22	Beans, dry edible	$ 3,919,890	0.4%
23	Vegetable seed	$ 3,603,653	0.4%
24	Tulip cut flowers	$ 3,275,883	0.3%
25	Delphinium cut flowers	$ 2,528,870	0.2%
26	Foliage potted plants	$ 2,451,808	0.2%
27	Snapdragon cut flowers	$ 1,472,437	0.1%
28	Bean seed	$ 1,341,022	0.1%
29	Hay, grain	$ 1,327,988	0.1%
30	Dahlia cut flowers	$ 1,137,115	0.1%
	Total 21 to 30	**$ 25,385,389**	**2.5%**
	Total Million $ Crops	**$ 839,083,711**	**82.5%**
	Other products	$ 177,651,433	17.5%

Source: County of Santa Barbara, Agricultural Production Report, 2006.

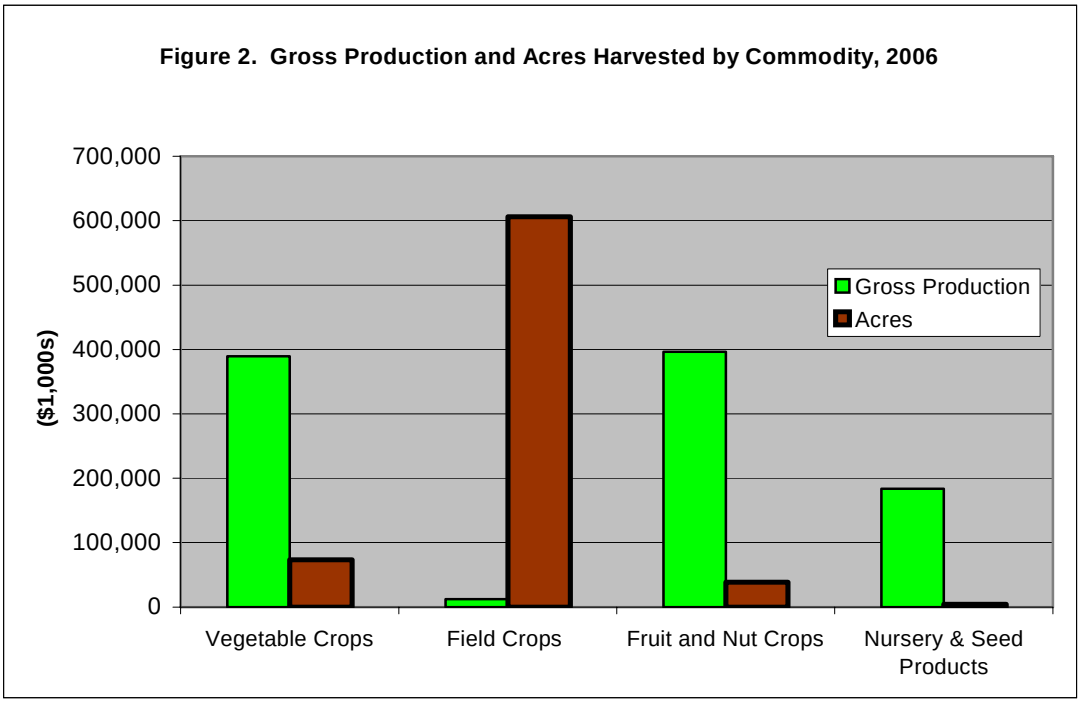
Table 3. Gross Production Values for 1995, 2000 and 2005 (In Year 2000 $)					
Commodity	**1995**	**2000**	**2005**	**Percent of Total Value 2005**	**Change, 1995 to 2005**
Vegetable Crops (1)	$ 240,459,154	$ 328,670,574	$ 296,964,840	35 %	23 %
Field Crops (2)	$ 14,457,335	$ 12,161,431	$ 9,133,177	1 %	-37 %
Fruit & Nut Crops (3)	$ 166,273,870	$ 204,555,071	$ 366,118,864	42 %	120 %
Nursery Products (4)	$ 98,182,852	$ 140,718,788	$ 149,874,624	17 %	53 %
Seed Crops	$ 6,772,848	$ 7,740,832	$ 10,105,187	1 %	32 %
Total Crops	**$ 526,146,059**	**$ 693,846,696**	**$ 842,283,378**	96 %	60 %
Livestock and Poultry (5)	$ 31,425,909	$ 27,361,296	$ 31,893,928	3.6 %	1 %
Livestock, Poultry and Apiary Products (6)	$ 14,379,142	$ 13,795,909	$ 5,538,845	0.6 %	-61 %
Total Livestock	**$ 45,805,051**	**$ 41,157,205**	**$ 37,432,774**	4%	- 18 %
Total Value	**$ 571,951,110**	**$ 735,003,901**	**$ 879,716,151**		**54%**

(1) Bell Pepper, Broccoli, Cabbage, Cauliflower, Celery, Lettuce, Peas, Spinach, Squash, Miscellaneous
(2) Beans, Alfalfa, Hay, Irrigated and Non Irrigated Pasture, Silage, Miscellaneous
(3) Avocados, Wine Grapes, Melons, Strawberries, Miscellaneous
(4) Cut Flowers, Cut Foliage, Potted Plants, Other Nursery Products
(5) Cattle and Calves
(6) Milk, Milk Products, Miscellaneous

Source: County of Santa Barbara, Agricultural Production Report, 1995, 2000, 2005.

Given these trends and the potential for profitability that would come with further intensification into high value crops, it is notable that 84 percent of agricultural acreage was in field crops in 2006, with the remaining 16 percent producing vegetables, fruit and nut crops, and nursery products[31] (see Figure 2). The majority of the field crop acreage was in non irrigated pasture (589,640 acres, excluding federal grazing allotments) as reported by the Farmland Mapping and Monitoring Program (FMMP). With Santa Barbara's high land values and urban influences, to stay viable agriculture must intensify and expand into higher value products. Indeed, there appears to be a trend toward agricultural intensification as evidenced by increased irrigation for row crops, orchards, vineyards and nurseries (see Land Area Availability). This is occurring across the County in areas as diverse as Cuyama Valley, Los Alamos Valley, Santa Maria Valley and Santa Rita. For example, from 1995 to 2005, wine grape acreage increased more than 12,000 acres while dryland farming decreased more than 14,000 acres.

[31] County of Santa Barbara, *Agricultural Production Report,* 2006.



Source: County of Santa Barbara, Agricultural Production Report, 2006.

Profitability

According to the U.S. *Census of Agriculture*, [32] Santa Barbara operations' total net cash farm income[33] was $158 million in 2002, an average of $109,405 per farm. However, 57 percent of farms had net losses and only 199 operations, or about 14 percent, produced 90 percent of the sales. Table 4 provides a breakdown of farm operation size and product sales.

The cattle industry had the greatest declines overall. In 1981, cattle represented almost 8 percent of the total value of agricultural production. This shrank to 3 percent by 2005. Between 1997 and 2002, the number of cattle operations in the county declined by 40 percent.[34] The trend is continuing. The 2006 Santa Barbara County *Agricultural Production Report* shows cattle fell to 2.6 percent or $26 million of the $1 billion of the County's total agricultural value. Over the last 25 years, cattle prices per unit dropped by 30 percent. Ranchers received an average per unit price of $89.03 in 2006 and $56.22 in 1981. Adjusted for inflation, this is a per unit price $106.50 in 1981 and $75.78 in 2006.

While Santa Barbara provides a natural environment that produces abundant feedstuffs, its high land values, low cattle prices and the expenses of transporting cattle to market have reduced profitability. Given these challenges, the few large-scale producers who own their land or can rent enough land to attain the economies of scale needed to attract livestock buyers to their ranches may be able to survive in Santa Barbara County. However, medium-sized producers who are not able to attain the economies of scale will continue to struggle and will need to seek

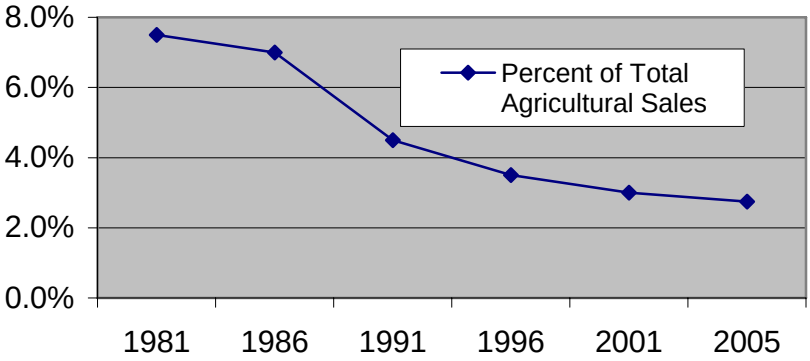
[32] This source of data was used because the *Census of Agriculture* collects information on net farm income, while County crop reports only provide production values and acreage.
[33] This is roughly equal to the market value of products sold minus production expenses, except for any government payments.
[34] USDA–NASS, *Census of Agriculture*, 2002.

Table 4. Number of Farms and Sales, 2002		
Sales Volume	**Number of Farms**	**Sales**
Less than $1,000	301	$ 36,000
$1,000 to $2,499	142	$ 231,000
$2,500 to $4,999	80	$ 284,000
$5,000 to $9,999	135	$ 912,000
$10,000 to $19,999	135	$ 1,893,000
$20,000 to $24,999	25	$ 552,000
$25,000 to $39,999	74	$ 2,291,000
$40,000 to $49,999	40	$ 1,750,000
$50,000 to $99,999	90	$ 6,587,000
$100,000 to $249,999	124	$ 18,998,000
$250,000 to $499,999	99	$ 33,526,000
$500,000 or more	**199**	$650,197,000
Totals	**1,444**	**$717,257,000**

Source: USDA–NASS, Census of Agriculture, 2002.

alternative revenue sources to survive. Small-scale producers who are able to supplement their cattle operations with income from other sources should continue to be a small percentage of the overall cattle industry in Santa Barbara County.

Figure 3. Cattle Sales as a Percentage of County Sales



Source: California Department of Food and Agriculture

On the other hand, intensively farmed vegetable, fruit and nut crops, and nursery and seed products had a relatively high gross return on comparatively few acres. For example, in 2006 strawberries had an average gross production of $37,261 per acre, with celery at $11,410 per acre and lemons at $8,275 per acre. With the intensive production methods required by these crops come significantly higher investment expenses for land improvement and production inputs.

Table 5 shows values per acre and harvested acreage for crops in the County. As gross returns increase, so do financial risks and the need for processing, packaging and market expansion to increase profitability.

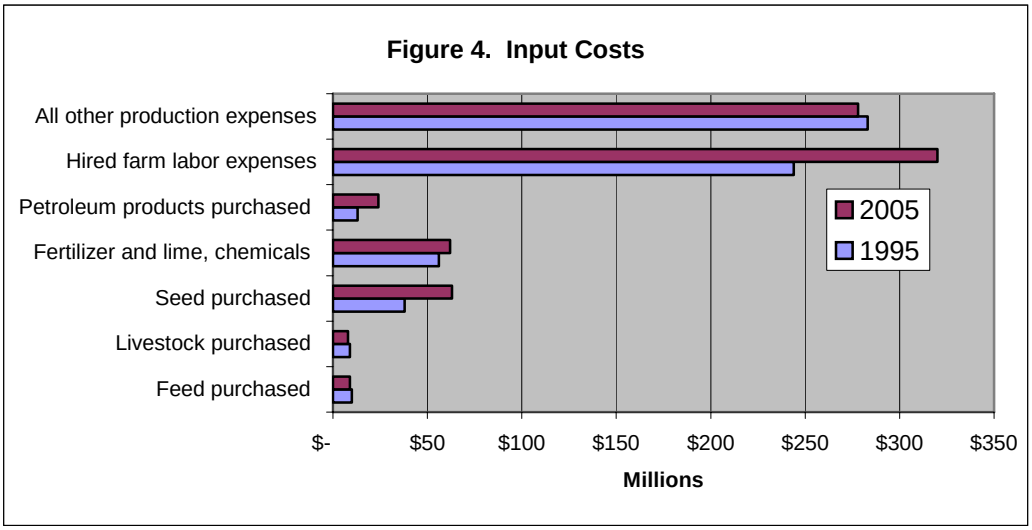
Table 5. Comparative Revenues from Agricultural Products, 2006

Product	Approximate Value/Acre	Harvested Acreage
Broccoli	$ 4,562	28,250
Head Lettuce	$ 5,142	13,021
Celery	$ 11, 410	3,654
Leaf Lettuce	$ 6,544	4,103
Cauliflower	$ 4,340	8,621
Nursery & Greenhouse	$ 89,566	1,928
Avocados	$ 4,681	8,607
Wine Grapes	$ 5,155	20,829
Lemons	$ 8,275	1,656
Strawberries	$ 37,261	6,210
Seed Crops	$ 4,720	2,309

Source: County of Santa Barbara, Agricultural Production Report, 2006.

REIS data from 1995 to 2005 reveal trends over a longer time period for the profitability of the farm sector. For the entire farm sector, total cash receipts and other income rose faster than input costs, resulting in higher total net income by 2005. In other words, sales appear to be increasing faster than input costs. Total agricultural production expenses increased 17 percent, adjusted for inflation. Feed and livestock input costs declined, mirroring the sector's overall decline, most notably the 61 percent drop in livestock, poultry and apiary products (see Table 3). Seed purchase costs increased 67 percent and fertilizer, lime and agricultural chemicals 10 percent, partly due to growth in higher value production and partly due to increased input costs. Petroleum products increased 86 percent or $11 million, with the sharpest incline from 2000 to 2005. Hired labor rose 31 percent or $75.8 million. (See Figure 4.)

Figure 4. Input Costs



Source: REIS data, 1995 to 2005.

REIS data do not provide data on input and other costs by individual commodity. Further research, including in-depth interviews and a review of financial records could help discern unique conditions affecting individual crops. However, after comparing REIS and *Census* data with input from producers in the focus groups (see Appendix V, Commodity Briefs), several overarching issues stand out.

All across the County and in all commodities represented by the focus groups, producers reported that one of their greatest challenges was the high cost of labor. According to these data, it is clear that, in dollar terms, the notable rise in the cost of labor had a significant impact on profitability, although it appears to have leveled off some in the past five years (see Figure 5). These increasing costs will have the greatest impact on sectors that rely on hired labor, such as strawberries, wine grapes and intensive vegetable production.

Source: REIS data, 1995 to 2005.

Beyond the pressing challenge of availability of labor is the associated cost of affordable housing for agricultural employees. For example, vegetable producers report that because of the high costs of housing there is more labor turnover and an increase in migrant workers. They also report competition for labor from strawberry producers.

Labor also is a major cost for strawberry production, which represented 23 percent of the County's total agricultural value in 2006. While strawberries have surpassed broccoli as the County's most highly valued crop—with values increasing 137 percent over five years—producers report labor is the greatest factor affecting expansion. The labor market is tight, the minimum wage is increasing, but most importantly, the cost of labor housing is becoming prohibitively expensive. According to the California Association of Realtors (CAR), as of April 2007 the median price for a home in north Santa Barbara County was $406,520. [35] (See Land Values and Competition for Land.) The costs of labor and labor housing also limit profitability for the orchard, wine grape and nursery/greenhouse sectors.

[35]CAR, *Sales & Price Report*, April 2007.

FARMS AND FARMLAND

This analysis draws on several different sources of data, so it is important to note that the definition of agriculture varies accordingly. The use of several data sources may appear confusing, but given the limitations of each, multiple sources were necessary to understand the complexities of Santa Barbara agriculture. The data used are the most current according to their source, which also may appear confusing as the most recent *Census of Agriculture* data are for 2002 while Santa Barbara County crop reports and ASMFRA reports are released annually.

While each section of this analysis notes the relevant source, one must be careful about making inferences based on combined data from different sources. For example, the "market value of products sold" from the *Census of Agriculture* has somewhat different coverage than the production value shown in County crop reports. The data sources were chosen because collectively they allow a more complete look at the structure and role of agriculture in the County.

The *Census of Agriculture* defines a farm as "any place from which $1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year." The $1,000 value is not adjusted for inflation between census years. The FMMP categorizes farmland by soil, water and other environmental factors. Other data sources do not provide definitions, including ASFMRA and County crop reports from the Agricultural Commissioner's Office.

Most of Santa Barbara's agricultural land use (85 percent) takes place on the 139 largest (1,000 acres or more) operations, which cover 640,981 acres. The County's 880 small farms (<50 acres) only cover 10,747 acres. Table 6 shows acres of farmland by farm size.

Table 6. Number of Farms and Acres of Farmland by Farm Size, 2002

Size Category	Number of Farms	Acres of Farmland
1 to 9 acres	463	1,549
10 to 49 acres	417	9,198
50 to 179 acres	236	23,264
180 to 499 acres	123	37,022
500 to 999 acres	66	44,923
1,000 acres or more	**139**	640,981
Totals	1,444	756,937

Source: USDA–NASS, Census of Agriculture, 2002.

The Department of Conservation Farmland Mapping and Monitoring Program (FMMP)[36] surveyed a total of 1,039,815 acres[37] in Santa Barbara County in 2004. The FMMP found "grazing land" accounted for 56 percent of the total mapped and "important farmland" comprised a little more than 13 percent.[38] Reviewing FMMP data from 1984 to 2004, AFT

[36] The FMMP uses aerial photographs, computer mapping system, public review and field reconnaissance to produce the information.

[37] The FMMP does not survey most of the Los Padres National Forest. This accounts for the discrepancy between the total acres of 1,634,393 for the County and the 1,039,815 acres mapped by the FMMP.

[38] See Land Area Availability for FMMP land use definitions.

found that grazing land decreased by 18,385 acres, or 3.1 percent. Since important farmland increased by 8,283 acres over the period, the net loss in agricultural land was 10,000 acres over the 20-year period, a 1.4 percent decline overall. See Table 7.

Table 7. Santa Barbara County Land Use, 1984 to 2004

LAND USE CATEGORY	1984	2004	Net Acreage	% Change	Average Annual Acreage Change
Prime Farmland	67,703	67,774	71	0.1%	4
Farmland of State Importance	4,985	12,380	7,395	148.3%	370
Unique Farmland	21,763	35,136	13,373	61.4%	669
Farmland of Local Importance	33,392	20,836	-12,556	-37.6%	-628
Important Farmland Subtotal	**127,843**	**136,126**	**8,283**	**6.5%**	**414**
Grazing Land	601,695	583,310	-18,385	-3.1%	-919
Agricultural Land Subtotal	**729,538**	**719,436**	**-10,102**	**-1.4%**	**-505**
Urban and Built-Up Land	53,466	62,028	8,562	16.0%	428
Other	252,593	254,087	1,494	0.6%	75
Water Area	4,218	4,264	46	1.1%	2
Total Area	**1,039,815**	**1,039,815**			

Source: California Department of Conservation, FMMP, 1984 to 2004.

The decreases in grazing land and in "farmland of local importance" were partially due to conversion to more intensive irrigated crops such as vineyards, strawberries and vegetables. The remaining decreases were due to increasing urban development. "Urban and built-up land" grew by 8,562 acres, or 428 acres per year. Of this total, 3,214 acres were converted from "prime farmland," "farmland of statewide importance," "unique farmland" and farmland of local importance, with the remaining 5,348 acres converted to development from grazing land.[39]

The relative stability of prime farmland appears to be the result of more irrigation, changes in land use reclassification, and improved mapping accuracy within the FMMP. More intensive agriculture is driving increased irrigation for row crops, orchards, vineyards and nurseries. This occurred across the County in areas as diverse as Cuyama Valley, Los Alamos Valley, Santa Maria Valley and Santa Rita. For example, from 1995 to 2005, wine grape acreage increased more than 12,000 acres while dryland farming decreased more than 14,000 acres.[40] Differences in definitions, data collection methods and reporting periods make it impossible to compare specific details of *Census of Agriculture* and FMMP findings, but data are sufficiently comparable to reveal certain trends. Reviewing these data, it becomes clear that the majority of the County's agricultural land remains in pasture and grazing use, but that this land use has

[39] County of Santa Barbara, Planning and Development Mapping (P&D Mapping).

[40] The FMMP also notes that advancements in technology have resulted in improved imagery and accuracy of acreage totals using aerial photographs, a computer mapping system, public review and field reconnaissance. In 2002, the FMMP incorporated the use of digital soil survey data. The improved accuracy of this technology may have resulted in acreages for farmland, grazing and the other land categories that differ from those published in the 2000–2002 Farmland Conversion Report. In other words, the acreage totals in 2004 are more accurate than the acreage totals in 1984 due to technological advances that have enhanced the methodology.

declined steadily for the past 20 or more years and the speed of the decline appears to be increasing. Much of this is due to the decline in livestock operations, first dairy[41] and, more recently, the decline in cattle ranching.

According to the 2002 *Census of Agriculture*, cattle operations decreased by 40 percent between 1997 and 2002. This trend appears to be continuing. The 2006 Santa Barbara *Agricultural Production Report* shows cattle dropped to 2.6 percent or $26 million of the County's $1 billion total agricultural production value. This can be attributed largely to falling cattle prices and rising land values.

Over the last 25 years, cattle prices per unit have dropped by 30 percent. In 2006, ranchers received an average per unit price of $89.03. They received a per unit price adjusted for inflation[42] of $106.50 in 1981 and $75.78 in 2006. According to the ASFMRA, in 2006 prices to purchase grazing land ranged between $500 and $12,500 per acre with rental rates ranging from $6 to $15 per acre. The industry is not profitable with such low cattle prices and such high land values**.**

LAND VALUES AND COMPETITION FOR LAND

One of the factors most affecting profitability is escalating land values. AFT reviewed multiple years of the ASFMRA report, *Trends in Agricultural Land and Lease Values,* to understand agricultural real estate values. In the 2007 ASFMRA report the authors explain, "The struggle between agriculture and urban sprawl continues" with land values for agriculture becoming prohibitively high. At the same time, the report indicates that an extreme shortage in affordable housing puts pressure on communities and farmers alike. Farmland continues to be converted, and "shorter farmland supplies result in higher land prices as farmers compete for remaining available farmland." Lastly, while farmland prices continue to increase, the rate of appreciation is generally less than the increases earned on commercial and residential real estate.[43]

The ASFMRA did not report on competition for land from environmental preservation, but Santa Barbara County's diverse natural environment includes a large number of acres identified as environmentally sensitive or endangered species habitat. Using NRCS criteria and environmental constraints, P&D Mapping estimated that potentially a total of 83,287 acres countywide are available for agricultural expansion or intensification outside of existing urban and sphere of influence boundaries, including 4,101 acres identified for expansion but slated for projected growth. However, of this total, 49,404 acres have environmental constraints, including California Tiger Salamander (CTS) habitat range. This leaves only a potential of 33,883 acres that are not currently in production available for agricultural expansion or intensification outside of existing urban and sphere of influence boundaries or areas with biological or environmental constraints. (See Land Area Availability for information on P&D Mapping guidelines and Map 3 on pages 45–46.) Further research is needed to determine how suitable these acres are for agricultural production, especially for intensive production of high value crops. Research could include a site analysis, identifying the exact slope, water availability, accessibility and climate, and the crops that could be grown in each area. It also should include an economic analysis as to the feasibility of converting this land to more intensive farming.

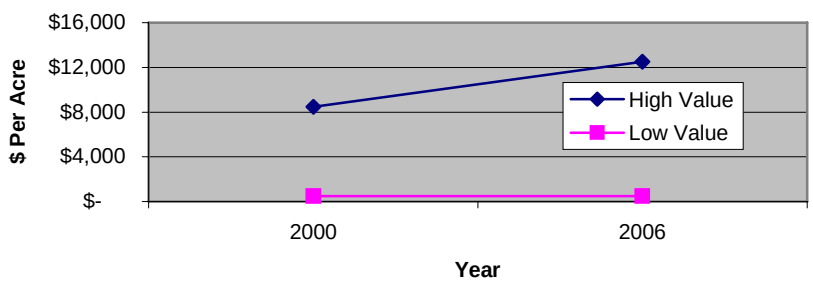
[41] County of Santa Barbara, *Status of Agriculture in Santa Barbara County,* April 1999.
[42] Indexed to year 2000.
[43] ASFMRA, *Trends in Agricultural Land and Lease Values,* 2007.

The CTS has been listed as a federally endangered species since 2000. These salamanders breed in vernal ponds and swales, then spend most of their lives estivating underground in adjacent valley oak woodland or grassland habitat. Due to the wide dispersal range of juveniles (up to two miles) from breeding ponds, a minimum of several hundred acres of uplands habitat is needed surrounding a breeding pond. Reserves of multiple breeding ponds surrounded by 1,000 acres or more of habitat are recommended.[44]

The office of Long Range Planning in the County Planning and Development Department is conducting a Regional Conservation Study (RCS) to improve CTS protection and potentially other threatened and endangered species in the range of the CTS. This study should help inform issues related to agricultural intensification and expansion. Toward that end, at an August 22, 2007, RCS meeting, the County Agricultural Commissioner provided the following acreage of crops affected by CTS: Rotational crops (vegetables, beans, squash) – 15,410 acres (40%), Grapes – 12,179 acres (31%), Strawberries – 3,768 acres (9%), All other acreage – Rangeland.

Competition for land has become pronounced between agricultural sectors as well as between agriculture and other sectors. A review of historical data shows large increases in land value since 2000, particularly for wine grapes and row crops. Corresponding increases in rangeland values (see Figure 6) suggest that this land is being converted to more intensive agriculture or to low-density housing development because, according to the ASFMRA, "the cost of land in this area is far too strong to be viable for the production of beef by itself."[45] (See Land Area Availability for more analysis of these trends.)

Figure 6. Rangeland Values



Source: ASFMRA, 2007.

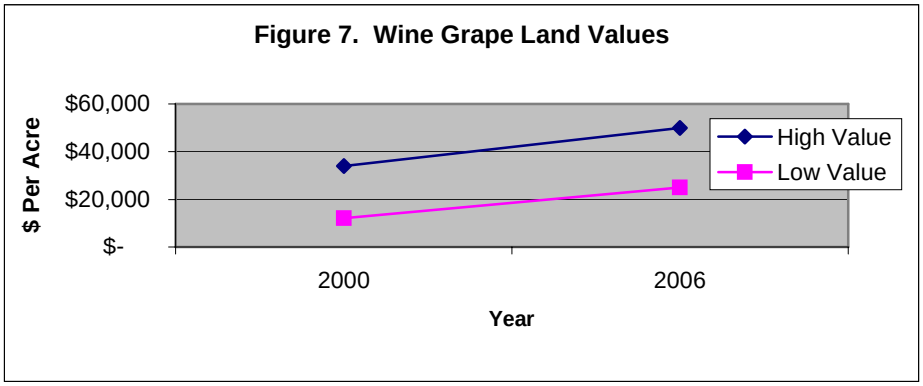
[44] Center for Biological Diversity, "California Tiger Salamander: Center Moves to Protect Vanishing Amphibian under Both Federal and California Endangered Species Acts" (Tucson, Ariz.: 2004), online at http://www.biologicaldiversity.org/swcbd/species/ctigersal/index.html.

[45] ASFMRA, *Trends in Agricultural Land and Lease Values, Region Six*, 2007.

Overall, values per acre reported for 2006 were:

Wine Grapes – $25,000 to $50,000 (See Figure 7.)
Row Crops/Strawberries – $25,000 to $41,000
Rangeland – $500 to $12,500

The high range value of land sold for wine grape production increased 47 percent, from $34,000 per acre in 2000 to $50,000 in 2006.



Source: ASFMRA, 2007.

ASFMRA conclusions on increasing land values are corroborated by data from the CAR. In April 2007, the CAR listed the median price for a home at $809,210 in Santa Barbara County and $1,475,000 in the South Coast area—up from March 2004 when median home prices were $475,000 and $999,999 respectively. The CAR also reports the scarcity of affordable housing, especially in the South Coast area.

In terms of agriculture, rising land values and housing prices are of particular concern in the Santa Maria Valley, which has the County's highest concentration of prime soils. In April 2007, the median home price in North Santa Barbara County was $406,520,[46] roughly half of the County median. From April 2000 to January 2007, Santa Maria's population increased 16.7 percent to 90,333 people, surpassing Santa Barbara as the County's largest city. This compares to a 5.9 percent total population increase in the County as a whole.[47] According to ASFMRA, most of the development is occurring on the flatter land, which is ideal for agricultural production. The ASFMRA reports that "The current market for the best farmland in Santa Maria Valley is strong to increasing. Currently, there is very little inventory of land offered for sale."[48] This could have a significant impact on land availability for agriculture in years to come. More research is needed on the dynamics of these changes and their effects on the natural resources of this important agricultural region.

[46] CAR, *Sales & Price Report*, April 2007.
[47] State of California, Department of Finance, "E-4 Population Estimates for Cities, Counties and State, 2001–2007, with 2000 Benchmark" online at http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPaers/Estimates/E-4-01-06/HIST-4.php.
[48] ASFMRA, *Trends in Agricultural Land and Lease Values, Region Six*, 2007.

SUMMARY

Santa Barbara County has natural resources that support agricultural production, and agriculture provides multiple benefits that ripple through the economy and contribute to environmental quality in many ways. Including support sectors, agriculture's total economic output is about $2 billion and the estimated market value of its land and buildings nearly $3 billion. Well-managed agricultural lands also provide benefits such as biodiversity, habitat for endangered species, carbon sequestration, improved soil and water quality, and fire suppression.

Grazing lands, in particular, provide these environmental benefits, for example, enhancing biodiversity while potentially eliminating noxious weeds and increasing the abundance of grassland species while minimizing the invasion of woods species. They also help suppress fires. However, while 56 percent of the County's agricultural lands are in grazing, in the five years between 1997 and 2002, the number of cattle operations declined by 40 percent.

Cattle profitability is based on owning or renting enough land and grazing enough cattle to lower the fixed costs of production and marketing. Producers with shrinking profits naturally will try to reduce production costs or increase prices, adopt more profitable activities, diversify their operations or exit agricultural production. Given the rapid increases in labor and land prices, it is unlikely they can lower production costs. Given the trend in cattle prices, it is unlikely they will be able to make more money. Thus, the best way for the County to ensure that the majority of agricultural land remains in production is to support diversification and intensification.

This is particularly important given that high land values and increasing housing costs threaten the future of all Santa Barbara agriculture. Only 24 percent of the County's farms produced 90 percent of sales and 57 percent are losing money. In 2006, 95 percent of the value of farm products was produced on only 16 percent of harvested acreage. Although data are lacking on the profitability of individual commodities, recent trends coupled with the experience of other urbanizing agricultural counties point to the fact that agriculture needs to intensify and expand into higher value and value-added products to remain profitable and an engine of economic development for the county. The next section of this report explores the land area availability, and soil and water resources for intensification and expansion of higher value agricultural commodities.

American Farmland Trust

LAND AREA AVAILABILITY

Santa Barbara County's total mainland area, including all public lands is 1,634,393 acres.[1] Approximately 52 percent (855,000 acres) is privately owned, with close to 90 percent of this land zoned for agriculture.[2] In 2004, the Department of Conservation FMMP surveyed a total of 1,039,815 acres in Santa Barbara County.[3] "Grazing land" accounted for 56 percent of the total mapped, and "important farmland" comprised a little more than 13 percent.[4]

This section explores how much of the County's agricultural land has been converted to non-agricultural uses and how much remains available for expansion and intensification. Based upon the FMMP surveys and the Santa Barbara Agricultural Commissioner's Crop Layers, the data quantify how much farmland currently falls within designated "urban areas," "spheres of influence" or "projected growth areas." Calculations further estimate land area availability for agricultural expansion given constraints (water and environmental features) and potential for reclassification or conversion to irrigated agriculture.

HIGHLIGHTS

- From 1984 to 2004, grazing land declined by 18,385 acres while important farmland increased by 8,283 acres for a net loss of 10,000 acres.
- At the same time, urban and built up land increased by 8,562 acres.
- Since the turn of the 21st century, the County's total population increased 5.9 percent, while Santa Maria's increased 16.7 percent to 90,333, surpassing the City of Santa Barbara, whose population decreased slightly.[5]
- Countywide, 11,111 acres currently in active agriculture are designated for future development within an urban area, sphere of influence or an unincorporated urban area plan.
- Based on a list of potential projects within rural areas of the County, it appears that an additional 14,755 acres in active agriculture is slated for development.
- Potentially 33,883 acres that are not currently in agricultural production are available for agricultural expansion or intensification outside of existing urban and sphere of influence boundaries and any biological mapping constraints. However, it is not clear how suitable they are for production (see Land Area Available for Intensification, page 42).

[1] County of Santa Barbara, *Status of Agriculture in Santa Barbara County*, April 1999. Acreage total cited does not include the Channel Islands.
[2] Ibid.
[3] The FMMP uses aerial photographs, computer mapping system, public review and field reconnaissance to produce the information. The FMMP does not survey most of the Los Padres National Forest. This accounts for the discrepancy between the total acres of 1,634,393 for the County and the 1,039,815 acres mapped by the FMMP.
[4] Table 1 provides FMMP land use definitions.
[5] State of California, Department of Finance, "E-4 Population Estimates for Cities, Counties and State, 2001–2007, with 2000 Benchmark."

PROCESS

AFT identified data layers and developed criteria to calculate land area availability for agricultural intensification and expansion. Toward this end, AFT worked with the County's ALU Planner who coordinated the Steering Committee's input and garnered County GIS Support to calculate land area availability and produce a series of maps. AFT also identified available mapping sources to support this process.

Based on this input process, P&D Mapping created and printed a series of baseline maps to show areas of urban growth patterns, historical agricultural trends, areas of potential agricultural expansion or intensification, and environmental factors. The maps were developed using available ARC View/GIS Map Layers. The data behind these maps are the basis for the calculations reported in this narrative; sources and data criteria are listed here:

Important Farmlands Mapping (FMMP)[6]

- Urban and Built-up Land in 1984
- Additional Urban and Built-up Land in 1994
- Additional Urban and Built-up Land in 2004
- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland
- Farmland of Local Importance
- Grazing Land

Agricultural Commissioner's Office 2006 Crop Layer Data

- Additional 2006 Mapped Farmland

Additional Urban and Jurisdictional Boundaries

- Incorporated City Boundaries
- City Sphere of Influence Boundaries
- Vandenberg Air Force Base Boundary
- California Coastal Commission Coastal Zone Boundary
- Urban Limit Boundaries
- Los Padres National Forest Boundary
- County of Santa Barbara Boundary

United States Fish and Wildlife (USFW) Wetlands Inventory

- National Wetlands Inventory – Riparian Habitat
- National Wetlands Inventory – Wetland Area

USFW Critical Habitat Area

California Department of Fish and Game Natural Diversity Database (CNDDB)

- Known Sensitive Species Location
- Specific Habitat Area
- Non-Specific Habitat Area
- General Sensitive Species Location

[6] Using 2004 mapping data unless otherwise indicated.

U.S. Department of Agriculture Natural Resources Conservation Service (NRCS)
Soil Quality

Potential Prime Farmland
Potential Farmland of Statewide Importance

Other Resource Layers

Groundwater Basins
Groundwater Basin Boundaries
Slopes Greater than 30 Percent

Two additional layers were incorporated into calculations:

a. The California Tiger Salamander (CTS) Habitat map dated August 31, 2001;
b. Areas of potential future growth outside of existing urban boundary/sphere of influence designations based upon Long Range Planning's Cumulative Projects List used in the Uniform Rules and Housing Element EIRs.

The land area calculations provide a general assessment of baseline conditions. According to P&D Mapping, no specific margin of error was calculated for this project, but it is aware that some margin of error exists within each dataset it used. The data used generally are collected at the 1:24,000 or 1:100,000 scale, which is useful for a countywide analysis such as this. Thus, the data are provided with the understanding that mapping calculations reflect a margin of error and represent a point in time, and the results are intended for regional analysis and not to be site specific or provide absolute values. Instead, they are offered to provide a reasonable baseline of land area availability for agricultural intensification and expansion.

Historical Trends of Agricultural Lands Conversion

The FMMP produces maps and statistical data every two years to review the impacts on California's agricultural resources and to rate land according to soil quality and irrigation status. According to the FMMP, grazing land accounted for 583,310 acres of the total area mapped and important farmland accounted for another 136,126 acres. Important farmland includes "prime farmland," "farmland of statewide importance," "unique farmland" and "farmland of local importance." "Urban and built-up" areas are 6 percent of the County, with "other land" and "water" making up the remaining 25 percent. Table 8 provides FMMP land use definitions along with the 2004 acreage totals.

AFT reviewed FMMP data from 1984 to 2004 to evaluate County land use trends. Over this period, agricultural land decreased by more than 10,000 acres. Important farmland increased by 8,283 acres, while grazing land decreased by 18,385 acres, or 3.1 percent. See Table 9 for details.

Table 8. Agricultural and Urban Inventory			
	Land Use Category	**Definition**	**2004 County Acreage**
Important Farmland	Prime Farmland	Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. The land has the soil quality, growing season and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to mapping. Strawberry, vegetable and flower crops, along with some vineyards, are typically grown on prime farmland.	67,774
	Farmland of Statewide Importance	Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Irrigation production must have occurred at some time during the four years prior to the mapping date.	12,380
	Unique Farmland	Farmland of lesser quality soils used for the production of the state's leading agricultural crops. Land is usually irrigated, but may include non-irrigated orchards or vineyards found in some climatic zones of California. Land must have been cropped at some time during the four years prior to the mapping date.	35,136
	Farmland of Local Importance	Land of importance to the local agricultural economy as determined by each county's Board of Supervisors, including all dryland farmland areas for permanent pasture (if the soils were not eligible for either Prime or Statewide Importance.)[7]	20,836
		Important Farmland Subtotal	**136,126**
	Grazing Land	Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension and other groups.	583,310
		Agricultural Land Total	**719,436**
	Urban and Built-up Land	Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures and other developed purposes.	62,028
	OTHER LAND	Land not included in any other mapping category, such as low density rural developments; brush, timber, wetland and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies less than 40 acres; vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres.	254,087
	Water	Perennial water bodies with an extent of at least 40 acres.	4,264
		TOTAL AREA	**1,039,815**

Source: Department of Conservation, FMMP.

[7] Dryland farming includes various cereal grains (predominantly wheat, barley and oats), sudan and many varieties of beans.

Table 9. Santa Barbara County Land Use, 1984 to 2004					
LAND USE CATEGORY	**1984**	**2004**	**Net Acreage**	**% Change**	**Average Annual Acreage Change**
Prime Farmland	67,703	67,774	71	0.1%	4
Farmland of State Importance	4,985	12,380	7,395	148.3%	370
Unique Farmland	21,763	35,136	13,373	61.4%	669
Farmland of Local Importance	33,392	20,836	-12,556	-37.6%	-628
Important Farmland Subtotal	**127,843**	**136,126**	**8,283**	**6.5%**	**414**
Grazing Land	601,695	583,310	-18,385	-3.1%	-919
Agricultural Land Subtotal	**729,538**	**719,436**	**-10,102**	**-1.4%**	**-505**
Urban and Built-Up Land	53,466	62,028	8,562	16.0%	428
Other	252,593	254,087	1,494	0.6%	75
Water Area	4,218	4,264	46	1.1%	2
Total Area	1,039,815	1,039,815			

Source: Department of Conservation, FMMP, 1984 to 2004.

Some decreases in grazing land and most decreases in farmland of local importance were due to conversion to more intensive irrigated crops such as vineyards, strawberries and vegetables. The rest were due to increasing urban development. Urban and built-up land grew by 8,562 acres, or 428 acres per year. Of this total, 3,214 acres were converted from prime farmland, farmland of statewide importance, unique farmland and farmland of local importance, with the remaining 5,348 acres converted to development from grazing land.[8]

The relative stability of prime farmland appears to be the result of improved accuracy within the FMMP and more irrigation, which led to a reclassification in its agricultural land use category (see Table 8). More intensive agriculture is driving increased irrigation for row crops, orchards, vineyards and nurseries. This occurred across the County in areas as diverse as Cuyama Valley, Los Alamos Valley, Santa Maria Valley and Santa Rita. For example, from 1995 to 2005, wine grape acreage increased more than 12,000 acres while dryland farming decreased more than 14,000 acres.

The FMMP also notes that advancements in technology have resulted in improved imagery and accuracy of acreage totals using aerial photographs, a computer mapping system, public review and field reconnaissance. In 2002, the FMMP incorporated the use of digital soil survey data. The improved accuracy of this technology may have resulted in acreages for farmland, grazing and the other land categories that differ from those published in the 2000–2002 Farmland Conversion Report. According to the FMMP, the acreage totals in 2004 are more accurate than the acreage totals in 1984 due to technological advances that have enhanced the methodology.

[8] County of Santa Barbara, P&D Mapping.

Land Area Conversion to Urban Uses

AFT was asked to evaluate how much farmland is at risk of conversion. According to P&D Mapping, the amount of land currently farmed but designated for future development within an urban area, sphere of influence or an unincorporated urban area plan, on a countywide basis totals 11,111 acres. Table 10 provides P&D Mapping definitions.

Table 10. Planning and Development Definitions

Urban Area[9]	An area shown on the Land Use Element Maps of the Santa Barbara County Comprehensive Plan within which is permitted the development of residential, commercial, industrial activity and their related uses and structures.
Sphere of Influence[10]	A plan for probable physical boundaries and service area of a local agency (city or district) as determined by the commission (Local Agency Formation Commission) of the County.
Local Agency Formation Commission (LAFCo)[11]	A five- or seven-member commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. Each county's LAFCo is empowered to approve, disapprove or conditionally approve such proposals. The LAFCo members generally include two county supervisors, two city council members and one member representing the general public. Some LAFCos include two representatives of special districts.

Source: County of Santa Barbara, Planning and Development.

[9] County of Santa Barbara, Land Use Development Code.
[10] Local Agency Formation Commission, Section 56078.
[11] California Planning Roundtable, "The California General Plan Glossary," 1997, available online at www.cproundtable.org/cprwww/docs/gpglossary.pdf.

Table 11 illustrates the acreage by lands within urban areas and a city's sphere of influence by FMMP land use categories.

Table 11. Farmland Designated for Future Development

Important Farmland Classifications	Urban and Within Sphere of Influence	Within a City's Sphere of Influence Only	Within Unincorporated Urban Area Only	Grand Total
Prime Farmland	47	1,921	539	**2,507**
Farmland of Statewide Importance	22	305	319	**646**
Unique Farmland	289	1,828	682	**2,799**
Farmland of Local Importance	4	526	98	**628**
Grazing Land	994	1,645	1,892	**4,531**
Grand Total	**1,356**	**6,225**	**3,530**	**11,111**

Source: County of Santa Barbara, Planning and Development.

Out of 11,111 acres, 4,531 acres are in grazing land and 6,580 acres are in important farmland. The Santa Barbara County Agricultural Commissioner's Crop Layer lists specific crops grown within these areas designated for future development (see Table 12). Please note that while this Table provides a good indication of farmland designated for future development, it is not complete as it only represents 4,523.10 acres of the 6,580 Important Farmland acres.[12]

Population Growth in the County

While the FMMP shows an annual average countywide increase of 428 acres of urban development over the 20-year mapping period, development has not been spread evenly throughout the County. Increases in population and growth of business and industry vary from one area to another and therefore affect the need for urban expansion. According to the California DOF Economic and Demographics division, cities north of the Santa Ynez Mountains experienced population growth while cities south of this mountain range saw slight decreases in population.

From April 2000 to January 2007, Santa Maria had a 16.7 percent increase in population to 90,333, surpassing the City of Santa Barbara, which had a slight population decrease from 89,606 to 89,456. Other cities in the north with a growth in population included Buellton (21.8 percent), Guadalupe (13 percent), Lompoc (2.2 percent) and Solvang (3.1 percent). In the south, Carpinteria and Goleta had a decrease of 0.5 percent and 1.9 percent, respectively.

[12] The Agricultural Commissioner's information is gathered and commodity type is determined based upon permit issuance. As such, a margin of error can be expected if permits were not obtained or commodity types changed following permit issuance.

According to the DOF, the County population increased 5.9 percent or nearly 23,500 people in just less than seven years—averaging 0.8 percent annually (July 2000 to January 2007).

Table 12. Summary of Agricultural Commissioner's Crop Layer Within Urban Areas and Spheres of Influence

Commodity	Acres	Commodity	Acres
(Not indicated)	38.14	N-GRNHS Flower	5.22
Alfalfa	15.10	N-GRNHS Plants in Containers	35.11
Apple	1.03	N-OUTDR Flower	167.12
Artichoke, Globe	0.01	N-OUTDR Plants in Containers	134.85
Avocado	328.59	N-OUTDR Transplants	21.17
Bean, Unspecified	6.27	Oat	1.23
Blackberry	0.02	Olive	1.58
Boysenberry	8.26	Orange	7.71
Broccoli	149.50	Peas	42.95
Carrot	1.96	Rotational	2,095.76
Cherimoya	8.86	Squash	7.08
Endive (Escarole)	2.92	Squash, Summer	9.93
Forage Hay/Silage	1.87	Stone Fruit	0.25
Granary	4.26	Strawberry	1,193.60
Grape, Wine	35.75	Tangerine	4.09
Interplanted	18.34	Uncultivated Ag.	0.81
Lemon	153.80	Undeclared Commodity	10.43
Lime	9.09	Walnut	0.44
Total			**4,523.10**

Source: County of Santa Barbara, Agricultural Production Report, 2006.

This rate of growth is 1 percent lower than, or less than half of, the rate that was predicted in *Santa Barbara County 2030 Land and Population – The Potential Effects of Population Growth on Urban and Rural Lands.*[13] The report estimated the population would grow 60 percent to 685,000 by 2030—a growth rate averaging 1.8 percent annually.

The *2030* report also indicated that 4 percent of the land was currently used for cities and unincorporated urban areas,[14] 48 percent in federal, state and local governments and another 38 percent in large agricultural operations—those in an "agricultural preserve" or at least 100 acres in agricultural production. The remaining 10 percent of land included agricultural parcels of less than 100 acres, with many of those bordering urban areas, and mountainous areas with little development potential.

The *2030* report estimated that Santa Barbara County would need to build more than 50,000 new homes on between 7,000 and 17,000 acres, depending on the density of the housing.[15] It also

[13] County of Santa Barbara, Planning and Development Department, November 2000.
[14] The 4 percent is based on the entire county area of 1,634,393 acres. The 6 percent urban usage figure cited earlier in the report is based on the FMMP study area of 1,039,815 acres in the County.
[15] County of Santa Barbara, *Santa Barbara County 2030 Land and Population – The Potential Effects of Population Growth on Urban and Rural Lands.*

predicted that several thousand more acres would be needed for schools, commercial and industrial development, parks and other urban infrastructure. The report concluded: "…some local governments will almost certainly feel pressure to secure large amounts of additional land for housing. The most likely areas are open space and agricultural lands adjacent to urban areas, in lots less than 100 acres in size and not in agriculture preserve."

Since the report was released, the DOF has revised the projected 2030 population for Santa Barbara County downward to 467,292. The County Planning and Development department was not able to provide updated information for this AREA study on the future rate of conversion of agricultural lands to urban uses based on the new estimate. However, P&D Mapping has identified "projected growth areas" in the County.

Projected Growth Areas

In addition to the 11,111 acres currently slated for future development, P&D Mapping has calculated another 19,304 acres for projected growth areas based on a list of potential projects within rural areas of the County. These projected growth areas are located outside of current urban areas and spheres of influence, but include 13,425 acres that are slated for urban development and 5,879 acres for the Burton Mesa Ecological Preserve. According to P&D Mapping, the projects proposed for projected growth areas include:

1. Proposed North County jail
2. North Hills proposed development
3. Bradley Land potential Santa Maria annexation
4. American Ethanol plant (proposed)
5. Proposed expansion (and annexation) of Santa Maria wastewater treatment plant
6. Proposed landfill and parklands on Santa Maria owned land (in County jurisdiction)
7. Rancho Maria golf course proposed development
8. PXP proposed development near Lompoc
9. Bailey Avenue potential Lompoc annexation
10. Burton Mesa Ecological Preserve Management Plan
11. Hunter proposed General Plan Amendment (proposed rural residential development near Lompoc)
12. Buellton Sphere of Influence Study Area
13. Santa Barbara Ranch (Naples) MOU project and Dos Pueblos Naples residential project
14. Carpinteria Peoples Self Help proposed housing development

According to the FMMP and the Agricultural Commissioner's Crop Layers, of these 19,304 acres projected for development, 14,775 acres currently are in active agriculture (including grazing). The 4,529 acres not currently farmed would be used for the Burton Mesa Ecological Preserve project and other urban development projects. The Burton Mesa Ecological Preserve project also would potentially remove 1,979 acres from current agricultural production. Table 13 provides a breakdown of this total by important farmland category.

Table 13. Agricultural Lands Within Projected Growth Areas	
Important Farmland Classification	**Acreage**
Prime Farmland	1,241.84
Farmland of Statewide Importance	1,100.84
Unique Farmland	506.69
Farmland of Local Importance	783.00
Grazing Land	11,137.38
Other Farmland according to Ag. Commissioner	5.50
Total Farmland	**14,775.25**

Source: County of Santa Barbara, Planning and Development.

Table 14 lists this farmland by the Agricultural Commissioner's Crop Layer commodity types. (Please note that this list includes only farms that recently applied for permits.)

Table 14. Agricultural Commissioner's Crop Layer Within Projected Growth Areas			
Commodity	**Acreage**	**Commodity**	**Acreage**
Avocado	18.45	Nursery – Outdoor Plants in Containers	5.53
Bean, Succulent	14.14	Oat	48.33
Bean, Unspecified	336.23	Orange	0.23
Endive (Escarole)	38.74	Pastureland	89.62
Forage Hay/Silage	123.79	Peas	109.44
Grape, Wine	8.71	Pepper, Fruiting	25.18
Kale	76.62	Rotational	916.47
Lemon	0.67	Squash, Summer	3.49
Nursery – Outdoor Flower	30.36	Strawberry	619.26
		Total	**2,465.25**

Source: County of Santa Barbara, Planning and Development.

Lastly, countywide 4,101 acres within the projected growth areas are suitable for expansion or intensification of agriculture. Some of this acreage overlaps with the 14,775 acres already farmed, as it is in grazing land or locally important farmland but has the capability to support more intensive farming. The rest currently is not being farmed. These areas are not within current classifications of prime, statewide importance, or unique farmland categories but have the potential to be upgraded.

Land Area Available for Agricultural Intensification

As farmland is taken out of production and converted to development, it is important to identify whether there is land available that could be used for agricultural expansion and more intensive production. Toward this end, P&D Mapping developed acreage calculations assuming potential reclassification to prime farmland or farmland of statewide importance based on NRCS Soil Quality Data.

Using NRCS soil mapping, which includes constraints such as slopes, water and environmental habitat factors, P&D Mapping employed the following guidelines:

- Soil types that are less than 30 percent slope and have the potential for prime or statewide importance category;
- Soil types as one unit on top of any important farmland category[1] that is not actively irrigated farmland, already urban or developed;
- Categories that were mainly grazing land and farmland of local importance;[2]
- Areas that are not utilized or are underutilized for irrigated agriculture but offer the potential for agricultural expansion; and
- Areas with potential water availability.

P&D Mapping further illustrated the environmental habitat factors by using three datasets:

- California Natural Diversity Database (CNDDB)
- California Tiger Salamander (CTS) Habitat Range
- U.S. Fish & Wildlife Critical Habitat Area Mapping

All told, P&D Mapping found that the area covered by these three datasets is 687,788 acres.[3] It identified the quantity of available lands based on a series of five tiers reflecting the level of biological mapping constraints. Tier 1 is free of any biological mapping constraints, while Tier 5 represents the Red Circles of CTS Habitat Areas as well as USFW Critical Habitat Areas and CNDDB. Tiers 2 through 5 represent various combinations and subsets of the three datasets. Given NRCS criteria and environmental constraints, P&D Mapping then estimated the potential agricultural acreage for expansion or intensification, outside of existing urban and sphere of influence boundaries, to be 83,287 acres, including the 4,101 acres identified for expansion/intensification but slated for projected growth areas. Of this total, 33,883 acres fall outside of any biological mapping constraints, and 49,404 acres have some degree of environmental constraints (See Map 3 North and Map 3 South on the following pages).

The potential agricultural acreage that falls within the criteria of each tier is illustrated in Table 15. It must be emphasized that this Table simply shows a potential acreage total, and more detailed research would be necessary to determine the actual capacity of these acres to become irrigated farmland. This research might include a site analysis, identifying the slope, water availability, accessibility and climate, and the crops that could be grown in each area. It might also include an economic analysis as to the feasibility of converting this land to more intensive farming. Because pesticide regulations require farmers to maintain a setback from urban structures, research also is needed on ways to create buffers between agriculture and residential development. Urban encroachment can affect agriculture by changing the existing setting, placing new restrictions on farmers, and ultimately forcing farmers to alter their farming practices.

[1] According to the FMMP, "about 94 percent of the study area" is covered by modern USDA soil surveys and classification system that combines technical soil ratings and current land use. This is the basis for the Important Farmland Maps of these lands.

[2] According to the FMMP, any land that consists of prime or statewide soil units that is used for dry farmed grains or beans in Santa Barbara County should appear as farmland of local importance. Irrigated pasture on poor soil is also mapped as farmland of local importance but is not considered eligible for prime or statewide importance, and was not included in this calculation.

[3] This does not include the Channel Islands.

Map 3 North

Map 3 South

Table 15. Land Area Available for Agricultural Intensification		
Tier	**Description**	**Acreage**
1	Total acreage of potential agricultural lands that fall outside of any biological mapping constraints.	**33,883**
2	Total acreage of potential agricultural lands with up to two identified biological factors within the following categories: ▪ Non-specific Habitat Area (CNDDB) ▪ General Sensitive Species Location (CNDDB) ▪ California Tiger Salamander Habitat Range (CTS) Total land mass that contains up to two of the above listed categories is calculated. This tier represents non-specific areas.	**20,928**
3	Total acreage of potential agricultural lands that have three or more identified biological factors within the following categories of: ▪ Non-specific Habitat (CNDDB) ▪ General Sensitive Species Location (CNDDB) ▪ CTS Habitat Range Total land mass that contains three or more of the above listed categories is calculated. This tier also represents non-specific areas that are within a range of biological factors.	**1,261**
4	Total acreage of potential agricultural lands identified within areas designated; ▪ Specific Habitat Areas ▪ Known Sensitive Species Location ▪ USFW Critical Habitat Area ▪ Red-Circles of CTS Habitat Map[1] Total land mass containing the above listed categories. This tier represents the known accuracy of the presence of species.	**2,314**
5	Total acreage of potential agricultural lands identified within areas designated for State or Federal listed species identified within: ▪ USFW Critical Habitat Area ▪ Red-Circles of CTS Habitat Area ▪ CNDDB Total land mass containing the above known listed species.	**24,902**
	Total	**83,287**

Source: County of Santa Barbara, Planning and Development.

[1] Minus areas located outside of the designated range.

CONCLUSIONS AND RECOMMENDATIONS

Agriculture is a mainstay of the Santa Barbara economy and environment. In 2006, gross agricultural production surpassed $1 billion and, including food processing and farm support businesses, agriculture as a whole contributed about $2 billion to the local economy.[1] The trend toward intensification that was evident in the 1999 *Status of Agriculture* report has continued into this decade. Abundant market opportunities exist for agriculture to expand, intensify and supply more value-added products to meet growing consumer demand for fresh fruits and vegetables, quality wines, flowers and nursery products, even organic or "natural" meat and dairy products. Reflecting these trends, in the past 10 years Santa Barbara's agricultural production value almost doubled—from $534 million to $998 million. Even after adjusting for inflation, this was a 54 percent increase, led by wine grapes, which increased nearly 522 percent.

While high value crops like strawberries and wine grapes are prospering, the cattle industry is declining and dairy farming has all but disappeared. This is significant because strawberries, which command 23 percent of the County's total agricultural value, only represent about 1 percent of its harvested land. Wine grapes, the County's fastest growing agricultural sector, represent about 11 percent of agricultural production on only 3 percent of harvested land. While grazing land still comprises 81 percent of the County's total agricultural land base, in 2006 cattle fell to 2.6 percent of the County's total agricultural value. As the profitability of this sector decreases, the likelihood of rangeland conversion increases. Unless the County moves quickly to support expansion of higher value crops, this is likely to have significant impacts on environmental quality and pose considerable land use challenges in the years to come.

These trends are typical of an urbanizing county. The U.S. Office of Management and Budget categorizes Santa Barbara County as "urban influence code 2" or a small, in-metro area with fewer than 1 million people. The process of urbanization is well understood and flows from population growth, economic development, government policies, land values and other forces on the local economy. According to leading researchers, there are two kinds of growth that drive urban influence on agriculture. One is existing areas spreading out into the countryside, and the other is more isolated, large lot development—which in the case of California is often ranchette development—in traditionally rural areas.[2]

As more people move into North County, Santa Barbara appears to be experiencing both kinds of growth. Among other typical impacts, land values have escalated, housing and labor have become more expensive and in shorter supply, and there are more complaints from non-farm neighbors. Producers in all industry sectors report serious impediments to expansion and intensification, and similar threats to sustaining agriculture in the future.

[1] IMPLAN, 2006. Data available were for 2004.

[2] Ralph E. Heimlich and William D. Anderson, *Development at the Urban Fringe and Beyond: Impacts on Agriculture and Rural Land,* Economic Research Service, Agricultural Economic Report No. (AER803) 88 pp, June 2001.

Agriculture in many urban-influenced areas has responded to these challenges and gone on to prosper by changing the products and services it offers, adapting to rising land values and increasing contact with consumers. Typically, operations engage in more intensive production, convert to higher value products and employ a market (versus production) driven approach to their businesses.[3] They take advantage of proximity to urban and suburban residents who are increasingly interested in and sophisticated about local food, healthy diets and the effect of a global food system on energy demand and climate change. As the public becomes more aware of the real costs of food production and transportation, interest in local food systems has grown in importance.[4] This includes giving farmers more value-added and direct marketing options and providing consumers with more local food choices.

Local food systems are a way for producers, consumers and entrepreneurs to find common ground and a sense of connection to their own communities. "Locovore," *The New Oxford American Dictionary* 2007 word of the year, is a term coined to express consumers' desire to eat locally produced food. The idea has become mainstream enough to be featured in the March 2, 2007, issue of *Time* magazine.

In July 2007 the National Association of Counties Center for Sustainable Communities released a new publication, *Counties and Local Food Systems*, which provides case studies of four things county governments can do to support agriculture and advance local food systems. It includes Food Policy Councils, Farm-to-School programs, Infrastructure Development and Purchasing Agricultural Conservation Easements to set aside land for farming now and in the future to ensure long-term ability to grow food locally.

Interest in local food systems is growing in California. For example, Roots of Change is a collaborative of diverse leaders and institutions working together to create a sustainable food system in California by 2030. A San Francisco Foodshed Project is underway to study the city's ability to feed itself from farms within 100 miles of the Golden gate—ideally from what they characterize as "sustainable" farms. The goal of the project is to get more local consumption of local production while maintaining viable commodity and export markets. As the local food movement takes off in California, so will Santa Barbara's competitive advantage.

Santa Barbara's agricultural producers are making the transition to high value and value-added agriculture if not so much to local foods. However, while further expansion is needed and possible, obstacles stand in the way. According to P&D Mapping, out of the 719,436 agricultural acres it has mapped, only 136,126 acres are classified important farmland and only 67,774 acres are prime farmland.

Prime farmland has the best soil quality, sufficient growing season and water supply needed to support high yields of intensively produced, high value crops. Much of this land is located in the Santa Maria Valley, which is under the most intense development pressure with a population increase of nearly 17 percent between 2000 and 2007, compared to the County total of less than 6 percent. Prime farmland also remains in Carpinteria, which has the County's highest land and

[3] Ibid.

[4] Edward Thompson, Jr., "U.S. Agriculture Policy: Challenges and Opportunities for Preserving Urban Edge Agriculture," at the Agriculture at the Metropolitan Edge Conference, Institute for Urban and Regional Development, University of California, Berkeley, April 5, 2007.

housing values. Other agricultural regions with significant amounts of prime farmland include the Lompoc, Los Alamos and Cuyama Valleys.

P&D Mapping also reported 583,310 acres in grazing (see Map 3 North and Map 3 South, pages 45–46). More research is needed to determine the suitability of this grazing land for expansion into more intensive agricultural production and the effect of its conversion to rural ranchettes and other development. AFT has studied the impacts of ranchette development on Central Valley agriculture and found that it takes land out of production, increases the risk of conflicts between new residents and commercial agriculture, and drives up the price of land above what commercial growers can afford.[5] Given the limited supply of prime and important farmland, and the extent to which it is under threat, the County should take immediate steps to protect its most endangered agricultural resources, provide more flexibility to encourage intensification, and support incentives and business development programs to work with farmers and ranchers to help agriculture flourish and thrive instead of restricting it or trying to preserve it simply as open space.

REVIEW OF TRENDS AND CONDITIONS

While tremendous potential exists for expansion and intensification, the success of the vegetable sector and high value crops, such as wine grapes, strawberries and flowers, masks significant challenges to the sustainability of the County's total agricultural industry and its important agricultural land and resources. While the value of agricultural production has increased, so have costs, especially for labor, labor housing and energy.[6] From 1995 to 2005, production costs, adjusted for inflation, increased $110.7 million or 17 percent. Hired and contract labor increased by $75.8 million, representing about two-thirds of those increased costs. Energy costs (gasoline, fuels and oils) increased by $11 million.[7] In the last *Census of Agriculture*, in 2002, 57 percent of Santa Barbara's farms had net losses.

Producers reported great concern over the increasing costs of labor housing. In April 2007, the County's median home price was $809,210—up from $475,000 in March 2004.[8] High land values and housing prices especially along the South Coast are pushing development pressure to the Santa Maria Valley, which threatens the entire agricultural industry as the Valley contains the largest concentration of prime soils and supports some of the County's highest value agricultural sectors. It is also of concern that the market for the best farmland in Santa Maria is tight and getting tighter with little inventory available for sale.[9]

Competition for land is a threat to agriculture throughout the County. This includes competition for water and land for salamander habitat and other environmental preservation as well as competition for land for development. The availability and affordability of agricultural land are

[5] American Farmland Trust, "The Future is Now: Central Valley Farmland at the Tipping Point," online at http://www.farmland.org/programs/states/futureisnow/ranchettes.asp; "Ranchettes the Subtle Sprawl," online at http://www.farmlandinfo.org/documents/30559/RANCHETTES_THE_SUBTLE_SPRAWL_JUNE_2000.pdf; "Ranchettes in the San Joaquin Valley," at http://www.farmland.org/programs/states/ca/documents/RanchettesintheSanJoaquinValley-AnAFTPolicyProposal.pdf.

[6] USDA–NASS, *Census of Agriculture*, 2002.

[7] REIS data, 1995 to 2005.

[8] CAR, *Sales and Price Report*, 2007.

[9] ASFMRA, *Trends in Agricultural Land and Lease Values, Region Six*, 2007.

limited even though the County's population is growing slowly — about 0.8 percent annually.[10] Local land use policies could be adjusted to reflect that this rate of growth is significantly lower than predicted in *Santa Barbara County 2030 Land and Population – The Potential Effects of Population Growth on Urban and Rural Lands*[11] released in November 2000. Since the report was released, the DOF has revised the projected 2030 population for Santa Barbara County downward to 467,292.

With little inventory especially of prime but also of important farmland, the price of high quality agricultural land needed for vegetables, strawberries and other high value crops is expensive, increasing annually and driving up costs for all agricultural production. According to the ASFMRA, per-acre values reported for row crops were as high as $41,000 in 2006 in the Santa Maria Valley. Land for development often sells at 10 times that amount. No matter how profitable the production, it cannot keep up with these land values.

According to P&D Mapping, countywide, 11,111 acres currently in active agriculture are designated for future development within an urban area, sphere of influence or an unincorporated urban area plan. Based on a list of potential projects within rural areas of the County, P&D predicts taking another 19,304 acres out of production, including 5,879 acres for the Burton Mesa Ecological Preserve. P&D also identified 687,788 acres designated as having environmental habitat factors. As a result, countywide only 33,883 acres fall outside of any urban sphere of influence or biological constraints (see Map 3 North and Map 3 South on pages 45–46).

This is a very limited supply under the best of circumstances, and more research is needed to determine whether or not this land is even suitable for intensive agricultural production. Research also is needed to understand the potential of grazing lands to support more intensive production and to determine what steps must be taken to make it easier to convert rangeland to higher production agriculture, such as wine grapes.

To sustain agriculture in the future, growth and development must be directed away from prime agricultural soils and important farmlands, and the County must enact and enforce policies to protect and preserve these precious and finite natural resources. These include traditional tools such as purchase of agricultural conservation easements and transfer of development rights as well as creating innovative solutions that could be tailored specifically to Santa Barbara. For example, the City of Davis, California, adopted a "no net loss of farmland" policy, requiring developers to permanently protect one acre of farmland for every acre of agricultural land they convert to other uses. This was accomplished with an agricultural mitigation requirement through an article amendment to the City's "Right to Farm and Farmland Preservation" ordinance. Their ordinance also contains a buffer provision for new developments adjacent to any land designated as agricultural, which requires that a 150-foot "agricultural buffer/agricultural transition area" be situated between existing agricultural land and any new adjacent development. The purpose of the buffer is to minimize conflicts between agricultural and non-agricultural uses and protect public health.

[10] State of California, DOF, "E-4 Population Estimates for Cities, Counties and State, 2001-2007, with 2000 Benchmark."
[11] County of Santa Barbara, Planning and Development, November 2000.

In Contra Costa County, the City of Brentwood responded to current and predicted population growth by appointing an Agricultural Enterprise Committee, made up of farmers, developers and others, to advise the city on the means to protect and enhance agriculture in the area. Among the recommendations the City implemented, the centerpiece was the use of agricultural conservation easements. The program uses mitigation, in which developers have several choices. These include purchasing a conservation easement over an equivalent acreage, paying an in-lieu fee per acre, or transferring agricultural credits. The city also created a land trust to hold the easements.

Beyond the limited supply of important farmland, Santa Barbara County has abundant natural resources on privately owned and managed grazing land. As illustrated in the Literature Review (see Appendix IV), the rolling hills and expansive rangeland offer tremendous value to Santa Barbara's landscape and environment, providing habitat for endangered species and suppressing fires. These lands support and enhance biodiversity, and increase grassland species richness while minimizing the invasion of woody species. Research suggests that the grazing also maintains native plant and aquatic diversity in local vernal pools. Without grazing land management, hundreds of thousands of acres could become choked with shrubbery, changing the scenery and creating the possibility of catastrophic fires.

Yet the cattle industry that manages the majority of this countryside is declining in the number of farms, total acres in pastureland and value of production. The infrastructure needed to support small- and medium-scale producers has disappeared. Land values are rising while cattle prices are falling. Over the past 25 years, cattle prices per unit dropped by 30 percent. To keep this land in agriculture, the County must support policies and create a regulatory framework to promote adaptation of these lands to more intensive agriculture.

Potential exists to add value to livestock industries by taking advantage of the public's desire for natural and organic meat, alternative energy sources, and by capitalizing on the environmental services provided by rangeland, such as water filtration, carbon sequestration, fire suppression and nontraditional energy sources. This could be supported by green payments, which are government expenditures to farmers and ranchers for the provision of environmental services, and are gaining supporters at the federal level both in addition to, and as a substitute for, income support programs.

Finally, ranching is compatible with recreation and tourism, which would be other ways to add value. According to ERS, "Rural counties with varied topography, relatively large lakes or coastal areas, warm and sunny winters, and temperate summers have tended to reap huge benefits from tourism and recreation, one of the fastest growing rural industries."[12] Agricultural and on-farm nature tourism have increased in popularity in California and hold great promise to increase profitability by allowing producers to capitalize on agriculture's amenity values.[13]

[12] Leslie A. Whitener, "Policy Options for a Changing Rural America," *Amber Waves*, ERS, April 2005.

[13] Desmond A. Jolly and Kristin A. Reynolds, "Consumer Demand for Agricultural and On-Farm Nature Tourism," University of California – Davis, Small Farm Center Research Brief, 2005, online at http://www.sfc.ucdavis.edu/agritourism/agtourbrief0601.pdf.

SANTA BARBARA AGRICULTURE IS AT A CROSSROAD

Santa Barbara's ability to adapt to urban influences depends on two major factors: producers' willingness to change and their ability to change, which is mostly influenced by land use and environmental policies. A key part of AFT's research process was to hold a series of focus groups with about 50 representative farmers, ranchers and industry leaders in key commodity sectors to ground truth data gathered in other parts of the project, to find out how producers in leading commodity sectors perceive the current state of County agriculture, and to understand threats and challenges that affect its future sustainability. For more information on individual sectors, see the Commodity Briefs included in Appendix VI.

The focus groups were an important component of the research process. Because the sessions were confidential, producers were candid and forthcoming, and provided valuable local perspective and wisdom. In terms of willingness to change, all the producers and industry leaders who participated in the focus groups indicated that they want and need agricultural intensification and expansion. However, the single overarching issue raised in the focus groups was that producers believe they are overly restricted by the County staff interpretation of key policies including the Endangered Species Act, the Grading and Oak Tree ordinances, and the Uniform Rules.

It did not appear that producers opposed these policies per se, but rather the way they are administered. Regardless of factors such as commodity sector, size of farm, location, age of producer and so on, farmers unanimously expressed frustration with the County's business process, which they report leads to excessive time and expense in permitting and inconsistent interpretation of the Uniform Rules. For example, one vegetable producer described "doing it by the book" to acquire permits for a cooling system. He said, "We did it right, two years later we don't have the permits yet, but Driscoll came in after and in 18 months theirs is up and another guy expanded his without permits and it's all done …." Such comments were not confined to vegetable growers. Comments from all sectors can be summed up by a cattle producer who said that the County's land use permitting process has become "tantamount to a conditional use permit." Or as a nursery operator explained, "It's as if the policy makers are operating under a political environment that's completely disconnected from the business environment. They're using agribusiness to accomplish open space goals."

One way to resolve this would be to streamline the permitting process to balance the County's agricultural and environmental priorities. For example, a San Francisco-based nonprofit organization called Sustainable Conservation helped establish a permit streamlining "one-stop-shopping" application process to provide an incentive for local farmers to implement NRCS and Monterey County Resource Conservation District plans for the Elk Horn Slough Watershed Project. The process allows farmers to comply with all permits required for erosion control and natural habitat improvements by working through a single agency (in this case, NRCS), in return for implementing best management plans. Recently, Sustainable Conservation secured funding for a pilot project called the Northwest San Diego County Permit Coordination Program. The focus of this project is to streamline permit coordination by the RCD for nine NRCS practices that promote water quality and habitat enhancement.

Santa Barbara agriculture is at a crossroads. Its future depends, at least in part, on how well the County manages the rural-urban interface. Based on input from focus groups, individual interviews and meetings with the AAC and County staff, AFT has concluded that there is

considerable misunderstanding and miscommunication between County planning staff and the agricultural community. As one focus group participant admitted, because farmers tend to mind their own business, they have not been sufficiently involved in public policy and planning processes, which now are dominated by urban interests. According to producers, the result is legislation created by "people who've never set a foot on a ranch and think they're doing the right thing but actually are working in the wrong direction."

In general, producers reported that, except for the tight land market, agronomic conditions are adequate for intensification and expansion. However, necessary agricultural support infrastructure is absent or lacking. Since they report that neighboring counties have more favorable policies and provide more support to agriculture, farmers and ranchers truck their products north or south to take advantage of infrastructure for packing, processing and adding value. As transportation costs go up, this will become an increasing threat to the sustainability of Santa Barbara agriculture.

Based on the consistency of producer comments, it appears that the County has begun to employ an urban planning process to agriculture, treating agricultural improvements as new developments, regardless of scale. In every focus group, growers reported occurrences where obtaining permits even for small improvements took months or years, involved excessive permitting costs, or required them to bear the financial burden of creating buffers and other installations to mediate conflicts with new non-farm neighbors. While each of their stories is anecdotal, the weight and unanimity of the evidence is impossible to ignore.

To better understand these issues and determine what changes could be made to improve the outlook for agriculture, the County could hold facilitated listening sessions with producers to get the feedback AFT got from the focus groups. This would help County planners and officials gain a deeper understanding and appreciation of the complexities of commercial agriculture and help them determine what changes need to be made to improve specific policies to make them more supportive of agricultural intensification and expansion. They could use this input as the basis of an audit of specific policies and of their business process generally.

RECOMMENDATIONS FOR CONTINUED SUCCESS

As Santa Barbara continues to transition from a traditional agricultural economy to one that is urban-influenced, producers must further intensify production, continue the trend toward higher value crops and value-added, and improve public relations. To position the industry for future success, the County should analyze its business process to identify whether or not policies are being interpreted consistently and whether or not they support agricultural intensification and expansion. Permitting should be streamlined, and policies be created to encourage the creation and improvement of necessary infrastructure to add value, for example, by cooling, storing, packing and processing vegetables; expanding greenhouses; or building tasting rooms. It does not serve the County economy any better than it serves agriculture to have farmers and ranchers ship their products to neighboring facilities to add value to their products.

In addition, the County should explore economic development strategies for agriculture. The County could take the lead in developing local food systems and support direct marketing to supply the burgeoning demand of Locovores, support the development of specialty products and ways to bolster cattle producers by allowing them to diversify into higher value enterprises such as wine grapes, horses and nature-based agritourism, Furthermore, as consumer preferences change

toward more convenience foods, Santa Barbara producers need additional cooling and processing plants and facilities to package ready-to-eat produce to meet market demand. An economic development strategy would help the County re-engineer its business process to be flexible enough to allow for this kind of diversification, which might require changing the definition of agricultural commodities to allow horses or the introduction of recreation or guest ranches. For agriculture to survive in a context of urban land values and housing costs, the County must reinterpret existing policies and develop new ones to support retail and value-added agriculture as well as commodity-based wholesale agriculture.

County regulations that inhibit agricultural expansion or unnecessarily limit intensification threaten the viability of the entire agricultural industry. This is especially true of grazing land. If it is no longer affordable to manage the land for agriculture, it is likely to be converted to rural sprawl and ranchette development. Without opportunities for grazing operations to diversify and adapt their agricultural production to compete with urbanization, it is likely they will be abandoned, shifting the responsibility of maintaining biodiversity, wildlife habitat and fire suppression to local, state or federal government agencies.

Another way to position agriculture for success would be to simultaneously steer development away from important farmland and to create policies to keep those lands in agricultural production. Policies could include purchase and transfer of development rights programs, mitigation, creating agricultural enterprise zones or requiring developers to pay for buffers between new homes and active farms. Toward that end, important farmlands should be considered environmental resources when interpreting environmental conditions for agricultural expansion or intensification and encourage wine grape and other crop expansion onto grazing lands.

Given agriculture's importance to both the economic and environmental health of the County, it makes sense to support it with policies, programs and a regulatory process that help balance agricultural development with competing resource needs for urbanization and environmental preservation. Before this can occur, it is clear that communication must be improved, trust rebuilt and policies created that not only support agricultural land protection, but also the business climate and infrastructure required to sustain agriculture in the future.

Understanding agriculture's economic and environmental importance is the first step. It is hoped that the information provided in this report will help improve the dialogue between the County and the agricultural community so that progress can be made not only to preserve the land base but also to support this vital economic sector. Further research is suggested to help answer some questions that were beyond the scope of this project and lay the groundwork for the planning and policy work that remains to be done.

This is a critical time for Santa Barbara agriculture. It faces both great opportunities and threats. To realize the opportunities and mitigate the threats, the County and the agricultural community must start working together. The data presented in this report will not solve the problems. The County must listen to the issues raised by farmers and ranchers and take positive steps to improve the business climate. With better communication and trust, the County, the agricultural community and other stakeholders can work together to plan *for* agriculture, not just around it.

RECOMMENDATIONS

1. Create policies and programs to protect important agricultural resources, especially lands classified as important farmlands. Programs could include a purchase of agricultural conservation easement program, a transfer of development rights program, greenpayments and/or a mitigation program, as well as steering growth away from important agricultural lands and limiting the extension of public infrastructure to important agricultural regions.
2. Streamline the permit approval process, educate County staff about agriculture and provide guidelines to expedite interpretation of standard rules. Develop protocols for automatic approval of some kinds of projects.
3. Update projections on the rate and location of growth in the County and map them to show how much of the growth will occur on important agricultural lands, and at the same time analyze water availability and costs, especially in areas identified as potential for agricultural expansion.
4. Conduct further analysis on the agricultural suitability of the land that has been identified as available for agricultural intensification and expansion and create a strategic farmland map that shows water resources and development pressure to focus attention on what agricultural resources to protect.
5. Create a plan for agricultural intensification and expansion that builds off the natural resource and development pressure factors identified in the strategic map and that includes land use, economic development and environmental components.
6. Conduct further studies of key factors affecting County agriculture, such as:
    - Emerging markets, the potential to develop a regional food system and case studies of how other areas are taking advantage of Locovores and other new market opportunities.
    - Agricultural input and output costs (after the 2007 *Census of Agriculture* is published).
    - Labor housing availability, where agricultural labor actually lives, affect on traffic of labor commutes, and what could be done to alleviate costs.
    - The effect of global markets on key commodities, such as avocados, flowers and wine grapes.
7. Analyze the County business process for regulating agricultural operations to identify where governmental regulations impede intensification and expansion, or make it uneconomical. As part of this study, analyze comparable agricultural policies and the costs of doing business in neighboring counties such as San Luis Obispo and Ventura, and analyze specific policies that have been deemed onerous to agricultural expansion and intensification in Santa Barbara including:
    - Grading Ordinance
    - Uniform Rules
    - Greenhouse Ordinance
    - Permitting process for labor housing