Coyote Valley Agricultural Feasibility Study – Phase II

**CASE STUDIES**

April 20, 2012

**Table of Contents:**

- Middle Green Valley Specific Plan/Green Valley Agricultural Conservancy
- The Tri-Valley Conservancy/South Livermore Specific Plan
- King County Farmland Preservation Program and Indochinese Farm Project
- Capay Valley Vision Plan/ Yolo Land Trust
- Brentwood Agricultural Land Trust
- Montgomery County Agricultural Reserve
- Baix Llobregat Agricultural Park
- Hidden Villa*
- Intervale Center*
- ALBA (Agriculture and Land Based Training Association)*
- Fully Belly Farm*

* Information taken from a Case Studies document produced by SAGE and EPS for the Santa Clara County Parks and Recreation Department in support of the Martial Cottle Park Master Plan.
Middle Green Valley Specific Plan/ Green Valley Agricultural Conservancy

Solano County, CA

<table>
<thead>
<tr>
<th>Funding sources:</th>
<th>● GVAC operations to be funded by transfer tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land ownership:</td>
<td>● Individuals</td>
</tr>
</tbody>
</table>
| Tools for agriculture and open space preservation: | ● Transfer of development rights (TDR)  
                                                      ● Density bonuses |
| Farmer tenure:   | ● Ownership                                   |
| Agricultural land conserved: | ● NA                                          |
| Number of farmers supported: | ● NA                                          |
| Open space/habitat conserved: | ● NA                                          |
| Parcelization:   | ● NA                                          |
| Crops/Products:  | ● NA                                          |

**Overview:**
Approved by Solano County in 2010, the Middle Green Valley Specific Plan created a long-term vision for Green Valley. The Plan envisions a collection of small neighborhoods clustered at the base of the foothills with the remaining 1,500+ acres preserved as open space or agricultural land, protected from future development by conservation easements. The Specific Plan proposes a mix of land uses, including up to 400 new primary residential units, agricultural tourism, local neighborhood retail, community facility uses, and agriculture and open space.

**Conservation Scheme:**
To achieve this vision, the Specific Plan utilizes a transfer of development rights (TDR) program to provide a fair and equitable incentive for landowners to relocate their development rights from areas to be preserved (sending area) to areas identified as suitable for development (receiving area). Density bonuses were also provided as incentives to landowners to participate in the voluntary TDR program. Landowners within the sending area negotiated for a significant increase to the number of units allowed per current zoning. These additional development rights can be sold to landowners of the receiving area and upon the sale of these rights, a conservation easement would be placed on the preserved sites.

**Economic Development:**
Founded in May of 2010, the Green Valley Agricultural Conservancy (GVAC) is an independent, non-profit organization set up to provide oversight of the conservation easements and support agriculture in the valley. Its approach is to promote sustainable food and agriculture systems as a means of creating a synergy between the agricultural lands, the built and natural environments, community health and natural resource stewardship. It provides mechanisms to assure the long-term preservation and management of the open lands in Green Valley and will help to manage and monitor the proposed ±1,500 acres of productive agricultural land, pastures, and natural areas.
The GVAC has three primary roles:

- **Protecting our agricultural legacy**
  The Conservancy provides assistance and oversight to the farms in Green Valley so that a comprehensive approach of supporting agricultural and growing food for the local community and regional food shed is accomplished.

- **Establishing a stewardship ethic**
  The Conservancy oversees the management, stewardship, enhancement, restoration and conservation easements for conservation lands including oak woodlands, riparian areas, pastures, rangelands, and agricultural lands.

- **Building community**
  The Conservancy provides educational and interpretive opportunities and the social glue for the evolving community.

In 2011, GVAC started “Totally Local,” a certified farmers market showcasing local agricultural and artisanal products. It was held every Saturday in July through October, and will continue again this summer.

Long-term funding for GVAC and the financial assistance it would provide to local farmers will depend on the sale of the 400 homes proposed in the Specific Plan. Upon the sale of each, 3% of the purchase price will be directed to GVAC. Each subsequent sale will generate a transfer fee of 1% in perpetuity.
The Tri-Valley Conservancy/ South Livermore Specific Plan
Livermore, CA

| Funding sources:                                      | • Development Fees placed on new homes in the area as mitigation for farmland conversion |
|                                                     | • $4.4 million largely from state funds and as local match |
|                                                     | • Full value of easements is $45 million |
| Land ownership:                                     | • Individuals |
| Tools for agriculture and open space preservation:  | • Conservation easements (held by the Conservancy) |
|                                                     | • Density bonuses |
| Farmer tenure:                                      | • Ownership |
| Agricultural land conserved:                        | • 3,700 acres (53 properties) |
| Number of farmers supported:                        | • 65 |
| Open space/habitat conserved:                       | • 925 acres |
| Parcelization:                                      | • Average acreage is 58 acres. |
| Crops/Products:                                     | • Cultivated agriculture, primarily wine-grapes. |

**Overview:**
The South Livermore Valley Agricultural Land Trust (SLVALT) was established in 1994 subsequent to the County's adoption of The South Livermore Valley Area Plan (SLVAP) to protect important agricultural and open space lands. SLVALT’s original goal was to permanently protect and steward 5,000 acres of land within the SLVAP. As of 2003, over 3,700 acres are under conservation easement. In early 2003, a strategic plan process was initiated and the land trust board recognized the need to have a greater conservation presence in the region. The SLVALT became the Tri Valley Conservancy with an expanded mission and an expanded geographic area.

The Conservancy’s mission is to permanently protect the fertile soils, rangelands, open space and biological resources and to support a viable agricultural economy in the Tri Valley area. The Conservancy accomplishes this mission by providing landowners with a flexible, voluntary alternative to subdividing or developing their property. One facet of the Conservancy's work is acquisition. Working with willing landowners, the Conservancy acquires property development rights through the legal arrangement of a conservation easement. In so doing, the Conservancy ensures that a property will be protected from future development. The Conservancy works with developers in a unique model to conserve the Valley’s important lands. Through county and city programs, developers in the region are required to mitigate their projects by fee payments and/or by replacement of agricultural acreage covered by a conservation easement. The Conservancy was established as the recipient of those mitigation fees and the custodian of the conservation easements on replacement acreage within the SLVAP.
The Conservancy will continue its original mission to preserve 5,000 acres within the SLVAP until completed. All monies received by the Conservancy for the SLAP will be restricted funds used for only that purpose.

**Conservation Scheme:**
The Conservancy operates by acquiring conservation easements from willing landowners and becomes the custodian of all or part of a property's development rights through the conservation easement. One development right equals the ability to add one buildable subdivision parcel to a property. The number of development rights on a given property depends on the property's size and zoning designation. The easement details property-specific restrictions on future development. For example, the easement may limit or prohibit future subdivision and may restrict non-agricultural improvements to defined areas. The easement need not change the current use of the property and does not limit the owners' right to lease or sell. The owner retains fee title and can continue to live on and use the property. As the custodian of the property's development rights, the Conservancy is responsible for stewardship of the easement in perpetuity.

The Conservancy acquires conservation easements through purchase or donation. The value of the easement is mutually agreed upon by the landowner and the Conservancy and is based upon the development potential and conservation value of the property. In addition to receiving possible property and estate tax benefits, landowners dedicating easements to the Conservancy play a vital role in protecting the Valley's agricultural productivity and open space character for present and future generations.

Recognizing that development pressures in the South Livermore Valley are intense, county and city planners developed the Bonus Density Program and the South Livermore Specific Plan (Specific Plan).

Through SLVAP, landowners may qualify to receive additional property development rights in exchange for planting a portion of the property in cultivated agriculture and placing that portion under conservation easement. For example, a 100-acre property zoned for agriculture normally has one development right. Under the Bonus Density Program, an additional four development rights may be placed on the property and each of the resultant 20-acre parcels granted a 2-acre building envelope. In exchange for the newly granted development rights, each parcel's 18 un-developable acres must be planted and placed under conservation easement.

Through the Specific Plan, developers are required to carry out agriculture mitigation financing in the following ways: 1) paying the Conservancy a fee sum for every home lot developed; or 2) placing one acre of cultivated agriculture land under conservation easement for every house constructed, and placing one acre of cultivated agriculture land under conservation easement for every acre of cultivatable land developed.
### King County Farmland Preservation Program and Indochinese Farm Project

**King County, WA**

| Funding sources: | • $50 million bond issued in 1979  
|                 | • $1.8 million Arts and Natural Resources Initiative in 1995  
|                 | • $1 million Washington Futures Tax  
|                 | • $475,000 USDA grant |

| Land ownership: | • Individuals  
|                | • County (interim) ownership for a maximum of 5 years |

| Tools for agriculture and open space preservation: | • Conservation easements (held by King County)  
|                                                    | • Fee simple land purchases by the County (held for 5 years maximum) |

| Farmer tenure: | • Ownership  
|               | • Short-term lease by farmers with limited resources as part of the Indochinese Farm Project |

| Agricultural land conserved: | • 13,200 acres |

| Number of farmers supported: | • 230  
|                              | • 25 additional farmers in the Indochinese Farm Project |

| Open space/habitat conserved: | • |

| Parcelization: | • Average farm under easement is 56 acres |

| Crops/Products: | • Dairies, beef, horse, and other animal operations; nurseries, turf, hay, silage, berries, row crops, flowers, and Christmas trees  
|                 | • Market trending away from dairies towards row crops, as local and organic produce have found markets in Seattle.  
|                 | • In the case of short term leases on County owned property, crops that can realize short term bottom-line production (e.g., corn, squash) have been pursued. |

**Overview:**

**Conservation Scheme:**

Located in King County, WA (the Seattle metropolitan region), FPP involves purchase of development rights through easements, held in perpetuity by the County using proceeds from a $50 million bond issued in 1979 and subsequent funding sources.
In most cases, title to the land under the FPP is retained by the existing owner, although County title purchase is allowed in cases where an easement is not practical. In some of these land purchase cases, the County leases it short-term to the Indochinese Farm Project to provide increased land access to farmers with limited resources. The County may only own agricultural properties for up to five years, and must sell the land to a farmer or farming collaborative with the highest bid, with easements placed to ensure preservation. The discouragement of public property ownership is embedded in the bond structure that created the Program. King County administers the program and holds the easements in trust under their own management.

FPP easements are located on land throughout the King County area, surrounding metropolitan Seattle. Since the best soils are proximate to Seattle, these lands are pursued by FPP, despite higher land values nearest to the urban areas. The bond required that a threatened parcel should be prioritized, all things being equal.

_Economic Development:_
King County created the brand “Puget Found Fresh” to support local farmers and insure a close-in food supply while encouraging consumers, wholesalers, retailers and restaurants to seek out and purchase higher-quality, fresher, locally-grown products. It also maintains and makes available on its website a Community-Supported Agriculture Directory.
Capay Valley Vision Plan/ Yolo Land Trust (YLT)
Yolo County, CA

| Funding sources: |  • YLT has received funding from the Farm and Ranchland Protection Program, California Farmland Conservancy Program, Wildlife Conservation Board, City of Davis fund for open space and farmland (funded by a property tax), Yolo County Agricultural Mitigation Program (fee or place equal acreage of land under easement for every acre of land converted to urban use)  
  • Capay Valley Vision charges a membership fee to be part of the Capay Valley Grown Label and holds an annual fundraiser |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land ownership:</td>
<td>• Individuals</td>
</tr>
<tr>
<td>Tools for agriculture and open space preservation:</td>
<td>• Conservation easements by YLT</td>
</tr>
<tr>
<td>Farmer tenure:</td>
<td>• Ownership</td>
</tr>
<tr>
<td>Agricultural land conserved:</td>
<td>• 9,700 acres by YLT</td>
</tr>
<tr>
<td>Number of farmers supported:</td>
<td>• 30 farm under conservation easements</td>
</tr>
<tr>
<td>Open space/habitat conserved:</td>
<td>• NA</td>
</tr>
<tr>
<td>Parcelization:</td>
<td>• NA</td>
</tr>
<tr>
<td>Crops/Products:</td>
<td>• Wide variety of fruits, vegetables, grains, and livestock</td>
</tr>
</tbody>
</table>

Capay Valley Vision focuses on enhancing economic viability of agriculture in the valley as a way to ensure the continuation of agriculture in the future. It does not hold conservation easements or employ other planning tools for agricultural preservation. Another entity working in Yolo County is the Yolo Land Trust, which works to conserve agricultural land through conservation easements. The remainder of this case study focuses on Capay Valley Vision.

**Overview:**
Capay Valley Vision provides a forum for Capay Valley residents to examine the issues of agriculture, transportation, economic development, recreation and housing through a community-engagement process. This translates into community forums, trainings, and planning meetings by community residents and organizations that are leading to sustained projects in the community.

Capay Valley Vision was created to enhance ongoing communication within the diverse community of the Capay Valley, to reflect all opinions and to search for common ground on the vision for the Valley's future. Recognizing that change is inevitable, the organization works to manage and guide change in a way that best preserves the Valley's rural character, agriculture, history and natural environment, while supporting a vital local economy.
Goals for Agriculture and the Environment:
- Farming and ranching become more profitable in the Capay Valley preserving and enhancing the Valley’s rural character and way of life.
- Land, air and water are preserved and maintained in a manner that supports long-term agricultural viability.
- The historic knowledge base, skills and experience of those who work the land is recognized, nurtured and passed on.
- Capay Valley agricultural products increase in recognition in the greater regional marketplace for their excellent freshness, flavor, quality and diversity.

Economic Development:
Strategy 1: Education and Workshops
Host a series of educational workshops for area growers, ranchers and community members on innovative production, stewardship and marketing practices. Educational workshops engage growers in working together to improve the conditions for production and marketing of local crops and improve stewardship of natural and agricultural resources. They also offer opportunities for non-farming community members to learn about local agriculture. Workshops will be designed to support each goal and strategy in the Plan.

Strategy 2: Production, Processing, and Marketing
Investigate and develop innovative marketing, production and processing techniques for Capay Valley ranchers and farmers.

Small-scale, owner-operator, cow-calf operations dominate the hills on both sides of the Capay Valley. The preservation of these operations is key to maintaining the character of the community and the economy of the Valley. Many Capay Valley ranchers are already using innovative techniques to protect the Valley’s natural resources and maintain high quality grasslands. Some of these producers have begun to investigate possibilities for grass-fed beef marketing, mobile processing facilities and organic beef production.

Strategy 3: Farmland and Agriculture Resource Protection
Protect and maintain the affordability of farmland and agricultural resources. For agriculture to remain viable in the Capay Valley, land prices will need to reflect agricultural value rather than development potential, farm labor will require affordable housing, and new or growing farms will require access to land.

Agricultural conservation easements are a tool to keep agricultural land affordable to farmers and ranchers. Easements compensate landowners for the development rights of a parcel, helping to capitalize the farm, retire debt, lower tax liabilities and aid in estate planning – while protecting farmland over the long-term. Until four years ago little money was available for agricultural easements in California. New state bonds and federal legislation have created a narrow window of opportunity, offering easement money for the next two to three years.
Decent and affordable farm labor housing is critical to perpetuating the knowledge, skill base and culture necessary to sustain the Capay Valley agricultural economy. A comprehensive program to strengthen the economic position of farm workers in the community should include an element that would assist farm workers in acquiring land and adequate housing of their own.

Strategy 4: Regional Branding and Promotion

Form a Capay Valley brand identity to market local goods and farm products. To preserve the agricultural economy and rural character of the Capay Valley, local farmers and craftspeople must be able to capture more of the consumer dollar. Capay Valley producers in partnership with restaurants and retailers have the potential to meet market demand in the Sacramento Metro Area and beyond for high quality products that are fresh and grown locally.

In the past five years several efforts to develop regional and local food brands have been met with enthusiasm. As agriculture globalizes, food has become increasingly anonymous to the consumer. People often don’t know how their food is grown, who grows it, the land that it comes from, or how it is processed and distributed. Place-based labeling allows farmers to differentiate their product and to help consumers identify with a place. Recent consumer research confirms that the public identifies with “buying local” and “supporting their local economy”, has strong compassion for family farmers and their contributions and, given the choice, will support them with their purchases. (FoodRoutes Network 2002). The natural beauty, rural character and community values that characterize the Capay Valley position it well for a place-based labeling strategy. Helping consumers make the connection between the food they purchase and the story of the Valley and its farmers will allow a greater number of farms more options to be profitable and viable.
Brentwood Agricultural Land Trust (BALT)
Contra Costa County, CA

| Funding sources: | • Agricultural mitigation fee paid by developers for converting prime agricultural land to urban uses ($12 million collected to date)  
• California Farmland Conservancy Program |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land ownership:</td>
<td>• Individuals</td>
</tr>
</tbody>
</table>
| Tools for agriculture and open space preservation: | • Conservation easements  
• Fee simple land purchases  
• Transferable agricultural credit program (TAC) |
| Farmer tenure: | • Ownership |
| Agricultural land conserved: | • 653 acres |
| Number of farmers supported: | • 7 |
| Open space/habitat conserved: | • NA |
| Parcelization: | • NA |
| Crops/Products: | • Orchards and row crops |

Overview:
The fast-growing City of Brentwood in northwest Contra Costa County is home to high-producing orchards and row crops. The agricultural area includes more than 12,000 acres of contiguous, irrigated farmland located just fifty miles from the Bay Area. With prime soils, ample water and a year-round growing season, Brentwood farms have provided food for the Bay Area since the 1880’s. Regional agricultural production generated $51.2 million in 1998.

Local farming is being threatened, however, as Bay Area suburbs expand eastward. The City of Brentwood grew from 7,500 people in 1990 to over 56,000 people today. Between 1984 and 2004, almost 20,000 acres of Contra Costa agricultural land, including 9,100 acres of prime farmland, were converted to urban uses.

Conservation Scheme:
BALT was created, in part, to implement the farmland conservation program adopted by the City of Brentwood (the “City”) in 2001 pursuant to Ordinance No. 683. The program seeks to conserve productive agricultural farmland in the 11,000-acre County Agricultural Core (the “Agricultural Core”) to the east and the south of the City.

The Ordinance provides:
• Agricultural Mitigation Fee. Developers in the City must pay an agricultural mitigation fee of $5,500 for each acre of prime agricultural land converted to urban uses.

• Farmland Conservation. The agricultural mitigation fees collected are to be used to preserve agricultural land through the purchase conservation easements and fee title.
- **Transferable Agricultural Credit Program (TAC).** When certain valuable agricultural land in a 2,600-acre area south of the City is permanently preserved, the property owner gains two TAC credits for each acre preserved. Each credit may be used to build one unit of above mid-range density in developments within the City. The current program anticipates a private market in credits between property owners and developers.

To date, the City has collected over $12 million in agricultural mitigation fees. The City holds and controls the use of the funds, and is allowed to spend the funds to advance the economic development of agriculture in Brentwood.

**Economic Development:**
Based on the conviction that creating a vibrant agricultural economy is essential to preserving prime farmland, BALT has formed the Agricultural Enterprise Committee to bring farmers, the community and local governments together to promote local agriculture and remove regulatory restrictions to agricultural enterprise. The committee, which meets once a month, is well attended by an extraordinarily diverse group of family farmers, from large conventional wholesale marketers to small-scale organic farms. The group has worked cooperatively to identify projects that would benefit all Brentwood farmers.

Through a consensus building process, this committee has identified goals and has begun to implement several projects. Specifically, the farmers identified three goals they felt were essential to preserve and promote the economic viability of agriculture in East Contra Costa County.

- **Create a Brentwood Farmers’ Market.**
  The Brentwood Certified Farmers Market opened on June 2004. This community building accomplishment reverses three decades of opposition by local u-pick farmers who were concerned that a farmers market would bring competition from out-of-town farmers. Because BALT’s Agricultural Enterprise Committee is farmer based, the committee was able to give all Brentwood farmers a voice in how the farmers’ market was structured resulting in a unique farmers’ market that features primarily local farmers.

- **Promote local farming through Buy Fresh Buy Local.**
  Based on the philosophy that the best way to protect agricultural land is to create a vibrant agricultural economy, BALT seeks to build new markets for Brentwood farmers by creating consumer demand for local agricultural products. In 2006, BALT created the beautiful, place-specific Contra Costa/Brentwood Buy Fresh Buy Local logos that provide consumers with a simple, visual way to identify Contra Costa and Brentwood products when they purchase food.

- **Strengthen local government food and farm policies.**
  The BALT Board recognizes that the County Board of Supervisors governs agricultural land use in Contra Costa County. BALT works closely with the Supervisors to demonstrate that East Contra Costa agriculture is important to all of the citizens of Contra Costa County. In 2008, the Board of Supervisors directed
County staff to work with BALT and other community-based organizations to (i) consider a County local food purchasing policy for County institutional purchasers and (ii) explore distribution systems that connect Brentwood farmers and their urban neighbors. In February 2009, the County Board of Supervisors adopted a resolution directing County staff to study an agricultural mitigation program for the County, and consider agricultural tourism zoning. BALT is seeking funding to work with the County to accomplish these important reforms.
Montgomery County Agricultural Reserve
Montgomery County, MD

<table>
<thead>
<tr>
<th>Funding sources:</th>
<th>● NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land ownership:</td>
<td>● Individuals</td>
</tr>
</tbody>
</table>
| Tools for agriculture and open space preservation: | ● Agricultural zoning  
● Rural density transfer zone (Transfer of development rights program)  
● Right-to-farm law  
● Farmland preservation programs  
● Agri-business support |
| Farmer tenure:   | ● Ownership |
| Agricultural land conserved: | ● 93,000 acres |
| Number of farmers supported: | ● 561 farms  
● 350 horticulture enterprises |
| Open space/habitat conserved: | ● NA |
| Parcelization:   | ● Average size of farm is 130 acres  
● 13 farms over 1000 acres each |
| Crops/Products:  | ● Beef, horse, dairy, sheep, corn for grain, corn for silage, wheat, soybeans, hay, fruit, vegetables, flowers, Christmas trees, production nurseries and greenhouses, sod |

**Overview:**
Montgomery County, located northwest of the Washington, D.C. metropolitan area, has always been a suburb to the nation’s capital but farming has also been central to the region’s people and land for centuries. By using a combination of agricultural zoning, master plan development, strategic capital improvement and transportation enhancements, farmland preservation programs, and agri-business support, the County has been able to preserve 93,000 acres of land, 577 farms and 350 horticultural enterprises which together produce more than $240 million in economic contribution to the County and employ more than 10,000 residents.

In 1980, the *Functional Master Plan for the Preservation of Agriculture and Rural Open Space (Master Plan)* created what is now a 93,000 acre Agricultural Reserve that reduced the allowance of residential development from 1 unit per 5 acres to 1 unit per 25 acres. It also established the Rural Density Transfer Zone allowing landowners to sell, on the open market, one development right per five acres, and entitling landowners in a receiving area to build one more housing unit than otherwise would have been allowed. The Master Plan also established an agricultural zone that identified agriculture as the primary land use, incorporating right-to-farm provisions stating that all agricultural operations are permitted at anytime, including operation of farm machinery.

Although the Master Plan and the County’s variety of conservation tools are primarily responsible for the County’s Agricultural Reserve, some argue that there are other growth management forces at work that should be given some credit. For example, the County’s Adequate Public Facilities (APF) requirement is intended to accommodate the County’s
growth in an orderly fashion. Since 1986, the County has published an annual Growth Policy Report which defines the capacity of public facilities in various areas and provides developers with advance notice of those areas of the County in which development projects are likely to receive approval. In addition, the County’s General Plan has encouraged development to occur around the core areas of the Metrorail system. Additionally, the state of Maryland’s Priority Funding Areas (PFA) requirement has been a central component of smart growth across the state. This policy gives priority for state funding to projects located in areas already developed or designated for future growth. In order to be designated as PFA, locations must meet intended use guidelines, have available plans for water and sewer, meet a density of 3.5 units per acre, and have minimal sprawl effects.

Conservation Scheme:
The strategic combination of market-based incentives and more traditional low-density zoning for agricultural and rural uses work in tandem with the County’s farmland preservation programs. The programs represent a dynamic set of tools that reinforce each other as well as the County’s traditional regulatory growth management tools. There are seven different preservation tools currently available to landowners who wish to preserve their land. Each of these programs places an easement on the property which prevents future commercial, residential or industrial development of the land. Table 1 below shows the amount of acreage preserved by farmland preservation programs and the year that the programs began. This does not include the Legacy Open Space Program and the Conservation Reserve Enhancement Program which do not have a primary focus on farmland. The Transfer of Development Rights Program has by far, been the most popular and broadly effective program, preserving 48,584 acres at no cost to the county’s taxpayers. After the County established this program with both the Rural Density Transfer Zone and the initial receiving area which was allowed to accommodate up to 3,000 development rights, the loss of acres to developed land dropped by 93 percent over a ten year period. A recent study for the Maryland Agro-Ecology Center found less fragmentation of the agricultural land mass in Montgomery County than any urban or urbanizing county in the country.

<table>
<thead>
<tr>
<th>Table 1. Farmland Preservation in Montgomery County (as of June 30, 2005)</th>
<th>Acres Protected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland Environmental Trust (1967)</td>
<td>2,086</td>
</tr>
<tr>
<td>Maryland Agricultural Land Preservation Foundation (1977)</td>
<td>3,594</td>
</tr>
<tr>
<td>Montgomery County Transfer of Development Rights (1981)</td>
<td>48,584</td>
</tr>
<tr>
<td>Montgomery County Agricultural Easement Program (1986)</td>
<td>6,799</td>
</tr>
<tr>
<td>Rural Legacy Program (1997)</td>
<td>3,935</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>64,998</strong></td>
</tr>
</tbody>
</table>

Source: Montgomery County Agricultural Services Division of the Department of Economic Development

Economic Development:
Crucial to sustaining the viability of agricultural preservation is the County’s strong focus on maintaining agriculture’s economic viability. Economic support has come in the form of regional labeling, county-sponsored farmers markets, annual farm tour and harvest sale,
training programs and networking opportunities, an emergency drought assistance program, agricultural energy tax relief program, and liaisons working with the county government from the agricultural community. Many of these programs belong to the Agricultural Services Division of the Department of Economic Development which was created to support and promote the viability of the agricultural industry in Montgomery County. They oversee the agricultural economic assistance as well as the County’s conservation easements program.

The Agricultural Services Division reports that the majority of Montgomery County farms are family-run operations, many reaching back several generations and employing more than 10,000 residents of whom 50 percent work full time in farming. Though many of the farms may continue to be family-run, a substantial amount of farmland is dedicated to large-scale farming. While the average farm size is 130 acres, there are 13 farms with over 1000 acres each in operation. This represents at a minimum 13,000 acres in the County that are dedicated to large-scale farming. One of the Division’s goals is to ensure continued high quality food supply for their citizens and one could argue that one way to measure this goal is through farmers’ markets, community supported agriculture and other direct marketing mechanisms. While small in scale, direct marketing from the region’s farms has grown significantly, from 63 farms with a value of $382,000 from direct marketing in 1997, to 71 farms with a value of $1,315,000 in 2002. Still, this increase only represents 3 percent of the market value of all products sold in 2002 in the County. Nonetheless, there are only ten farmers’ markets currently operating in the entire County of 800,000 in population.

<table>
<thead>
<tr>
<th>Table 2. Distribution of agricultural production in Montgomery County</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Farms</strong></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Beef</td>
</tr>
<tr>
<td>Horse</td>
</tr>
<tr>
<td>Dairy</td>
</tr>
<tr>
<td>Sheep</td>
</tr>
<tr>
<td>Corn for Grain</td>
</tr>
<tr>
<td>Corn for Silage</td>
</tr>
<tr>
<td>Wheat</td>
</tr>
<tr>
<td>Soybeans</td>
</tr>
<tr>
<td>Hay</td>
</tr>
<tr>
<td>Fruit, Vegetables, Flowers, Christmas Trees</td>
</tr>
<tr>
<td>Production Nurseries and Greenhouses</td>
</tr>
<tr>
<td>Sod</td>
</tr>
<tr>
<td>Landscape, Arborist, Lawn Care Businesses</td>
</tr>
</tbody>
</table>
**Baix Llobregat Agricultural Park**  
**Barcelona, Spain**

<table>
<thead>
<tr>
<th>Funding sources:</th>
<th>● NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land ownership:</td>
<td>● Public and private</td>
</tr>
<tr>
<td>Tools for agriculture and open space preservation:</td>
<td>● NA</td>
</tr>
<tr>
<td>Farmer tenure:</td>
<td></td>
</tr>
<tr>
<td>Agricultural land conserved:</td>
<td>● 2,938 ha</td>
</tr>
<tr>
<td>Number of farmers supported:</td>
<td>● NA</td>
</tr>
<tr>
<td>Open space/habitat conserved:</td>
<td>● NA</td>
</tr>
<tr>
<td>Parcelization:</td>
<td>● NA</td>
</tr>
<tr>
<td>Crops/Products:</td>
<td>● NA</td>
</tr>
</tbody>
</table>

**Overview:**

The Baix Llobregat Agricultural Park is located to the west of Barcelona, just ten minutes from the city centre and specifically in the low lying valley and delta of the River Llobregat. The area has a long tradition in agriculture, and has for many centuries been the main supplier of fresh fruit and vegetables to the city of Barcelona. With an agricultural surface area of 2,938 ha, the Agricultural Park represents the last corner of agricultural land in the immediate area surrounding Barcelona. The park takes in land belonging to fourteen municipalities with a total population of some 700,000.

The Agricultural Park is one of twelve linked parks which make up the Network of Natural Spaces managed by the Department of Natural Spaces of the Provincial Council of Barcelona (member of FEDENATUR). They cover a total of 100,625 ha of protected natural and agricultural areas.

**Economic Development:**

In 1998, the Provincial Council of Barcelona, the County Council of El Baix Llobregat, the Farmers Union, and fourteen municipalities founded the Agricultural Park Consortium. Together, they manage the Agricultural Park based on five strategies:

- **Efficient infrastructures and services in the agricultural land.**
- **Improvement of the production, marketing, and sales of agricultural products.**
- **Modernization of the farms.**
- **Harmony with the natural surroundings and its consolidation.**
- **Disseminating knowledge on the natural and cultural heritage found in the Agricultural Park.**

Of the strategies, the second has been developed the most. In order for agricultural land to exist and be conserved, it is necessary to count on the active presence of farmers in the area who work towards the fundamental objective of increasing their income from farming through the supply, in a competitive market, of products differentiated by their origin, quality and proximity to the market, along with the direct relationship between the producer and the consumer. To this end, the Consortium has decided:
To promote more environmentally-friendly farming methods. The Consortium works with three farmer Crop Defence Groups (ADVs) to support their technical experts who specialize in the introduction and extension of good farming practices, such as integrated or ecological production practices, through the provision of necessary infrastructures. The Consortium also helps with their proposals for experimentation and education in farming through grants and infrastructure development. The aim here is to increase the level of technical know-how in the use of fertilisers and the fight against pests and diseases.

To support initiatives around the identification (quality and origin) and promotion of the consumption of farming products. A brand for farms in the Agricultural Park, called “Producte fresc del Parc Agrari,” has been created. This label indicates that the produce has been grown in the area of the Agricultural Park, respecting natural rhythms, and resulting in tastier, more nutritional and fresh produce. Work is currently being done on promoting the brand in the stalls of local markets where farmers can sell directly to the consumer and informing the public on where they can buy fresh produce from the Agricultural Park and the restaurants where they can try them.

To disseminate the values of the landscape as a resource for the generation of income. The Special Plan for the preservation and improvement of the Agricultural Park aims to draw up, among others, two Development Guide Plans (PRD) based on the planning of rur-urban uses and the environmental and landscape quality of the Agricultural Park. The goal is to establish which activities, which are not strictly rural or agricultural, can be compatible with the economic, environmental and social functions of the Park. The goal is to introduce “criteria and recommendations in order to adapt and integrate the area of the Agricultural Park with the surrounding environment, and so creating a quality landscape, understanding that this is an added value in addition to the farming activity itself, which instead of interfering, improves the economic and territorial viability of the Agricultural Park.”
**Hidden Villa**
26870 Moody Road  
Los Altos Hills, CA 94022  
650-949-8650  
[http://www.hiddenvilla.org](http://www.hiddenvilla.org)

**Case Study Type:** Ag-Education Parks, Farms, and Agencies  
**Reason for Inclusion:** Community outreach and education  
**Owner(s):** The Trust for Hidden Villa  
**Business Type:** Nonprofit 501(c)(3)  
**Year Established:**  
1924: Duveneck family bought the land  
1945: Programming began  
1960: Nonprofit status obtained

**Total Acreage:** 1,650  
**Size of Operations:** 35-40 staff year-round, 70 more for summer camp  
**Months of Operation:** Year-round  
School visits: September – May  
Summer Camp: June – August  
International Hostel: September – May

**Types of Crops:** Vegetables, fruits, native trees and shrubs  
**Livestock:** Pigs, sheep, cows, goats, chickens, turkeys  
**Anticipated Yields:** Enough for 110-member CSA, plus 50 shares of food to community services agency  
**Distribution Methods:** CSA, farmers’ market  
**Farming Practice:** Organic, CCOF certified since 1987  
**Annual Operating Costs:** $2,837,843  
**Annual Revenues:** $3,485,514  
**Annual Number of Visitors:** 100,000 (22,000 in education program)  
**Hours of Access:** 8:00am – dusk  
**Fees:**  
Parking: $5/car  
Farm tours for small children: Sept-Nov, $8/person; Dec-Feb, $7/person; Mar-May, $10/person. One adult free for every 15 students  
Farm tours for older children (Farm and Wilderness Exploration), 5 hours: Sept-Feb, $16/person; Mar-May $18/person  
Classroom presentation, 2 hours: $125/class  
Summer day camp: $400/week  
Summer residential camp: $500/week, $1,000/two weeks

**General Description:**  
Hidden Villa was purchased in 1924 by Frank and Josephine Duveneck, and became a gathering place that supported and encouraged progressive community, environmental education, and social justice. Hidden Villa became a 501c3 in 1960. In addition to being a working organic farm,
Hidden Villa offers a variety of core recreational, environmental, and educational programs that reach into the community through collaborations with local schools and social service agencies.¹

Site Map:

Site Facilities:
- **Duveneck House**: Roughly 5,000 ft², houses main offices, living room, dining room, kitchen. Can be rented out, accommodates 35-100 for an event
- **Dana Center**: Roughly 1200 ft², rented out for events, accommodates 50
- **Wolken Education Center**: Houses offices for camp and environmental education program; strawbale building with photovoltaics.
- **International Hostel**: Accommodates 50 for an event, first hostel on the West Coast and now the oldest in the US. Private rentals also available. Used for summer camp housing.
- **Josephine’s Retreat**: One-room cabin for overnight rental
- **Historic house, three additional houses**: Housing for 22 employees
- **Picnic Areas**
- **Pavilion**
- **Historic barns, 2**
- **Shop**
- **Storage**

Facility Infrastructure:
- City water and well for drinking
- Well and creek water rights for irrigation: water is still in short supply
- Septic system
- Road through ranch, gravel surface

Land uses:

¹ [http://www.hiddenvilla.org/about.php](http://www.hiddenvilla.org/about.php)
1650 acres
- 30 acres ranch – cows, chickens, goats, sheep, turkeys, pigs
  - 7 acres vegetables
  - 6 acres pasture
  - 10-15 of these produce for CSA program & Los Altos farmers’ market
- 1620 acres wilderness, very steep oak, bay, chapparal: outdoor classroom
- Parking for 150 cars

Programming:
- Working organic farm
- Environmental Education Program: Teaches concepts of ecology and environmental stewardship through farm and wilderness experiences for elementary school children
- Community Supported Agriculture: Members commit for full season
- Multiracial and Multicultural Summer Camp: Builds relationships among youth of diverse backgrounds, using Hidden Villa’s natural environment as the classroom.
  Established in 1945 to combat post-WWII prejudice; first multicultural summer camp in the country. Scholarships available for low-income participants, funded by grants and donations.
- Community programs and performances: Multicultural events include workshops and lectures on sustainable living, environmental and social issues; dance and music performances; family activities (campfire stories, overnight wilderness adventures, etc.); environmental activities (nature hikes, stargazing parties, etc.); tours of the farm and garden
- Hostel: Travelers stay at the hostel; local businesses or nonprofits rent facility space for meetings and retreats.
- Resident Intern program: Trains youth interested in environmental education, social justice, organic farming, or animal husbandry
- Hidden Villa Online Curriculum: Available to teachers for environmental education programs; working with schools to develop curriculum to meet requirements for science-based learning
- Grants to place teachers in schools 4 days/week: Teachers bring science-based lessons and community gardens to area schools, and bring school children to the farm several times per year.
- Volunteer Program: 600-1000 volunteers each year help with farm tours, harvesting, and construction projects. Volunteers include individuals, corporate groups, clubs, and school groups.

Products:
Pork, eggs, vegetables, some fruit, some flowers

2 http://www.hiddenvilla.org/about.php
3 http://www.hiddenvilla.org/about.php
4 http://www.hiddenvilla.org/about.php
5 http://www.hiddenvilla.org/about.php
Staffing/Organizational Resources:
- Executive Director
- Executive Assistant
- Director of Finance
- Bookkeeper/Human Resources
- Development Officer
- Grants and Communications Manager
- Development Assistant
- Program Coordinator, Residential Camps
- Program Coordinator, Non-Residential Camps
- Assistant Program Coordinator
- Environmental Education: Director
- Environmental Education: Teachers (3-4, plus 2 off-site)
- Environmental Education: Administrative Assistant
- Animal Husbandry Manager
- Animal Intern
- Agriculture Manager
- Agriculture Interns (3, 2 first-year, one second-year)
- Hostel Manager
- Hostel Assistant Manager
- Hostel Assistant
- Community Program Manager
- Community Program Intern
- Horticulturist (care for ornamentals, teaching)
- Facilities Manager
- Assistant Facilities Manager
- Volunteer Coordinator

Management Structure:
Nonprofit trust with Board of Directors. Executive committee of the staff makes initial decisions. Managers meet every other week, staff meets once per month. Committed to collaboration.

Mission/Vision:
Hidden Villa’s mission is to “inspire a just and sustainable future through our programs, land and legacy.”

Sources:
3. Personal communication with Andrew Scott, Assistant Property Manager
4. Personal communication with Nikki Bryant, Camp Director
5. Hidden Villa Environmental Education department

http://www.hiddenvilla.org/
Intervale Center
180 Intervale Road
Burlington, VT 05401
802-660-0440
http://www.intervale.org

Case Study Type: Agriculture Business Training and Incubation
Reason for Inclusion: Farmer education programs; different region, but useful model
Owner(s): Intervale Center
Business Type: Nonprofit
Year Established: 1990
Total Acreage: 354
Size of Operations: 20 employees
Months of Operation: Year-round; agricultural activity concentrated May-October
Types of Crops: Fruits, vegetables, greens, berries, flowers, herbs, eggs, honey
Livestock: Chickens
Anticipated Yields: 13 farms on site; varies by individual farm
Distribution Methods: Wholesale, farmers’ markets, CSA, retail stores
Farming Practice: Organic
Annual Operating Costs: $1,389,590
Annual Revenues: $1,399,394
Annual Number of Visitors: 1,000 for compost program (80% are students, preschool to grad school)
Hours of Access: By appointment, 9:00am – 5:00am
Fees: Tours: sliding scale, $30-60/hour
Farm land rental: $157-168/acre annually

General Description:
According to the Intervale Center website, Intervale “supports financially viable and environmentally sustainable agriculture. [They] manage 354 acres of farmland, nursery, trails, wildlife corridors and compost production along the Winooski River in Burlington, Vermont, and [they] share what we do and what we learn with others around the state and throughout the world.” The Intervale Center is supported by grants, donations, and revenues from their enterprises. Their programs are designed to fulfill the following goals: “to grow viable farms, preserve productive agricultural land, increase access to local, organic food, compost and other soil amendments, and protect water quality through organic waste management and stream bank restoration.” The Intervale Center includes 13 individual farms, several of which are supported by their incubator program, a conservation nursery, and a compost operation.

---

7 http://www.intervale.org/index.shtml
Site Map:

Image source: Intervale Center 2005 Annual Report Brochure
Site Facilities:
- **The Calkins Farmhouse**: 1860's Italianate building; serves as headquarters. In the future, a Community Kitchen will be added.
- **The Community Barn**: Renovated three-season 1860s barn; houses community events, educational programs, conferences, workshops, and private functions.
- **The Dairy Barn**: under restoration, for storage
- **The English Barn**: Storage, including cold storage for nursery
- **The Corn Crib**: Storage of older farming equipment
- **Milk Parlor**: Healthy City CSA pickup
- **Public restrooms and informational kiosk**: approved, funded; to be constructed

Facility Infrastructure:
- City water
- Irrigation: drip, spray, sprinklers (stubbed out to edge of each field)
- Sewer at farmhouse; septic at compost building; some port-a-potties
- Roadway: asphalt
- Parking: 25 formal spaces, plus overflow

Land uses:
250 acres owned and another 100 acres leased
- 300 acres: Organic agriculture
- 17 acres: Compost operation
- 10 acres: Nursery
- 25 acres, approx: Concert barn, office building, greenhouse, kiva (classroom), shade structure, packing facility, barn with 4 walk-in coolers

Programming:
Agricultural Development Services
- **The Intervale Farms Program**, founded in 1990, is a business incubator to teach, nurture and launch farm enterprises on Intervale land and elsewhere.
  - “Incubator Farms” are new farms that join a three-year program in which they receive technical and mechanical support, learn marketing and business planning, and are able to lease land, equipment, greenhouses, irrigation and storage facilities to allow them to farm organically on Intervale land. **Current Incubator Farms**: Open Heart Farm, Pitchfork Farm, Sugarsnap.
  - Graduates become “Enterprise Farms” entitled to extended leases on the land; they have the option of continuing to farm in the Intervale or reestablishing businesses elsewhere. **Current Enterprise Farms**: Adam’s Berry Farm, Arethusa Collective Farm, Half Pint Farm.
  - After five years of operation at the Intervale, farmers become “Mentor Farms”, and mentor the Incubator Farms. **Current Mentor Farms**: Digger’s Mirth Collective Farm, Full Moon Farm, Intervale Community Farm, Stray Cat Flower Farm.
  - Other farms on site: Healthy City Youth Farm, Franklin Heyburn’s Bees, Lucky Lady Organic Egg Farm

---

9 [www.intervale.org/programs/calkins_farmstead](http://www.intervale.org/programs/calkins_farmstead)
• **Success on Farms** works with farmers throughout Vermont to help them increase revenues, market their products more effectively, consider value-added processing, and other services.

• **Intervale Consulting Services** provides technical assistance and resources help individuals and organizations develop community food and waste recycling systems.

**Intervale Conservation Nursery**
- Grows native tree and shrub seedlings and plants used for riparian restoration throughout Vermont, and serves as a statewide development and education organization to promote such restoration.

**Healthy City**
- Manages a hands-on youth entrepreneurship farm at the Intervale and a food gleaning and distribution network

**Intervale Compost Products**
- Intervale's first venture, created in 1987 to help restore the depleted agricultural lands of the Intervale. It is now Vermont's leading compost operation, recycling 20,000 tons of waste each year that produce a wide range of compost-based agricultural and horticultural products.

**Community Supported Agriculture**
- Intervale CSAs offer vegetables, chickens, honey, tomatoes, flowers, and herbs. They also contract with local artisan producers who deliver organic bread, cheeses, meats and eggs for purchase with each share.

**The Intervale Center for Farm Innovation**
- Strengthens the farm economy by creating new revenue streams and market niches for farmers. Presently, the Center is exploring renewable energy systems and large-scale composting to reduce waste and increase farm profitability.

**Products:**
Varies by farm; includes berries, fruits, vegetables, greens, herbs, flowers, eggs, and honey.

**Staffing/Organizational Resources:**
20 employees:
- Bookkeeper
- Agricultural Development Specialist (2)
- Agricultural Development Associate
- Community Connections Coordinator/Americorps*VISTA
- Farm Program and Facilities Manager
- Healthy City Program Coordinator
- Agricultural Development Services Director

**Healthy City Director**
- Financial Officer
- **Executive Director**
- Development Coordinator
- Conservation Nursery Director
- Conservation Nursery Manager
- General Manager/Compost Maven
- Senior Equipment Operator
- Systems, Operations, Production
- Equipment Steward Consultant
- Sales and Education Coordinator

Management Structure:
Nonprofit with Board of Directors. Independent farmers lease land from the Intervale Center at a per acre lease rate; incubator farmers have a 20% cost share for land, equipment, and facilities.

Mission/Vision:
According to the Intervale Center website, their mission is “to develop farm- and land-based enterprises that generate economic and social opportunity while protecting natural resources.”\(^\text{10}\) In addition, their goals “are to grow viable farms, preserve productive agricultural land, increase access to local, organic food, compost and other soil amendments, and protect water quality through organic waste management and stream bank restoration.”\(^\text{11}\)

Sources:
1. Intervale Center website \(\text{http://www.intervale.org/index.shtml}\)
3. Personal communication with Kit Perkins, Executive Director.

\(^{10}\) \text{http://www.intervale.org/index.shtml} \\
\(^{11}\) \text{http://www.intervale.org/index.shtml}
Intervale Center Financial Evaluation:
The Intervale Center is a 501(c)(3) Public Charity funded through public and private grants as well as revenues from program services and enterprises. It manages about 350 acres of land used for farming, trails, wildlife corridors, a native plant nursery, compost production, and other programs, as described further below. The land is part-owned and part-leased from Burlington Electric and the City of Burlington Parks and Recreation Department (15 and 20 year leases, respectively). Owning the land and financial self-sufficiency are part of the organization’s long-term strategic plan but it currently relies on public and private contributions for almost 60 percent of its expenses. The organization’s Fiscal Year 2004 budget is summarized in the table below, with further information of specific programs provided below.

- **Intervale Farm Program:** This program consists of twelve independent active farms on the Intervale property as well as about sixty apprentices. Each farm has a one to five year lease with an average stay of five years. For the first three years the participants pay 80% of the land’s lease price. During the last two years, they pay the lease in full. The farmers receive land and greenhouse equipment as well as mentoring from senior farmers in technical and business advice. Intervale farmers sell their produce through a variety of markets — wholesale, farmers’ markets, retail stores, and Community Supported Agriculture (CSA).

- **Intervale Compost Program:** Created in 1987, Intervale Compost Products recycles about 20,000 tons of waste each year, producing a wide range of compost-based agricultural and horticultural products. This profitable venture helps to cover the Intervale Center’s annual operating expenses. In 1999, it generated about $450,000 in revenue against $375,000 in expenses. The compost is purchased in bulk by farmers, landscapers, and golf courses, and in 5-gallon bags by backyard gardeners.

- **Historic Calkins Farmstead:** The Calkins Farmstead is the gateway to the Intervale Center, land, and enterprises and hosts over 1,000 visitors per year. The facilities are also available for rent for special events.

- **Intervale Consulting:** Founded in August 2005, Intervale Consulting provides customized technical assistance and resources to individuals and organizations that want to develop innovative and effective community food and recycling (waste) systems.

- **Intervale Conservation Nursery:** Provides a local source of native trees and shrubs for stream bank restoration and conservation projects in Vermont. In 2006, it offered 13 different species of native trees and shrubs for sale.

---

12 A CSA is a farm supported by community members who pay the farmer in advance of the growing season for a "share" of the farm’s harvest. Some CSA’s have pick-up days once or twice a week at the farm.
Table 6. Intervale Center Budget Overview

<table>
<thead>
<tr>
<th>Budget Item</th>
<th>Description</th>
<th>Amount</th>
<th>% of Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Services</td>
<td></td>
<td>$1,070,977</td>
<td>77%</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td>$216,377</td>
<td>16%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>$102,236</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td>$1,389,590</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Operating Revenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributions</td>
<td></td>
<td>$419,255</td>
<td>30%</td>
</tr>
<tr>
<td>Government Grants</td>
<td></td>
<td>$388,280</td>
<td>28%</td>
</tr>
<tr>
<td>Farmer Lease Payments</td>
<td>for land &amp; facilities</td>
<td>$51,846</td>
<td>4%</td>
</tr>
<tr>
<td>Nursery Product Sales</td>
<td>flowers, vegetables, etc.</td>
<td>$8,198</td>
<td>1%</td>
</tr>
<tr>
<td>Recycling fees</td>
<td>food waste disposal fees</td>
<td>$184,701</td>
<td>13%</td>
</tr>
<tr>
<td>Investments</td>
<td></td>
<td>$1,064</td>
<td>0%</td>
</tr>
<tr>
<td>Special Events</td>
<td></td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td>Compost / Soil Sales</td>
<td>from recycling program</td>
<td>$346,050</td>
<td>25%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td>$1,399,394</td>
<td>101%</td>
</tr>
<tr>
<td><strong>Net Operating Expenses</strong></td>
<td></td>
<td>$9,804</td>
<td></td>
</tr>
</tbody>
</table>

**Staffing**

- Board Members: 14
- Full-Time Staff: 6 - 10
- Part-Time Staff: 1 - 5
- Volunteers: 21 - 100

(1) Based on FY 2004 data.
ALBA (Agriculture and Land Based Training Association)
P.O. Box 6264
Salinas, CA 93912
831-758-1469
http://www.albafarmers.org

Case Study Type: Agriculture Business Training and Incubation
Reason for Inclusion: Farmer education program in Northern California
Owner(s): Farm Training and Research Center (FT&RC) at the Triple M Ranch: ALBA owns the property, and the Elkhorn Slough Foundation, a local land trust, holds a Natural Resource and Agricultural Easement
Rural Development Center (RDC): owned by ALBA
Business Type: 501(c)(3) non-profit corporation
Year Established: 2001
Total Acreage: 305 acres (165 cultivatable acres)
Size of Operations: 16 full time, 4 part time/interns
Months of Operation: Year-round
Types of Crops: Fruits and vegetables
Livestock: None
Anticipated Yields: Different for each tenant farmer
Distribution Methods: ALBA Organics (wholesale, restaurants, schools, retails, hospitals, corporations)
Farming Practice: Organic, some certified
Annual Operating Costs: $2.2 million annual budget
Annual Revenues: Not available at this time
Annual Number of Visitors: FT&RC: 1,000
RDC: 1,500
Hours of Access: By appointment
Fees: FT&RC rent for tenant farmers: $700-800/acre
RDC rent for tenant farmers: $200-1000/acre

General Description:
ALBA leverages farm workers’ field experience with agronomic and marketing skills in order to incubate small-scale organic farming businesses. ALBA is recognized nationwide as a model for economic development that links economic opportunity with conservation goals and diverse community-based food initiatives. ALBA provides access to organic farmland on one of two farms in Monterey County: the Rural Development Center and the Triple M Ranch. ALBA is located in the intensively farmed Central Coast region of California, bordering the Monterey Bay National Marine Sanctuary. ALBA is expanding the awareness and practice of sustainable agriculture, advancing community food systems and developing community leadership among beginning and minority farmers. Numerous groups both in California and nationwide look to ALBA as a model for farming business incubation.
Site Maps:

Farm Training and Resource Center at the Triple M Ranch

Image source: Provided by Brett Melone, ALBA Executive Director

Rural Development Center

Image source: http://www.albafarmers.org/images/RDC%20-%20Aerial%20View%20JPG
Site Facilities:
Farm Training and Resource Center (FT&RC) at the Triple M Ranch
- Barn for storage
- Offices
- Meeting space in farm house
- Kitchen for event use in farm house
- Tractors

Rural Development Center
- Office infrastructure for farmer use
- Meeting space
- Kitchen for event use
- Shop for repair and storage of equipment; shop
- Post harvest equipment, cooler and storage access
- Tractors and other agricultural equipment

Facility Infrastructure:
Farm Training and Resource Center (FT&RC) at the Triple M Ranch
- Water
- Irrigation

Rural Development Center
- Water
- Irrigation

Land Uses:
Farm Training and Resource Center (FT&RC) at the Triple M Ranch
- 195 acres of sensitive riparian wetland, upland grassland, Maritime Chaparral, and cultivated cropland ranging from 10’-320’ elevation.
  - 67 acres in cultivation
  - 10 tenant farmers on parcels ranging from 1-10 acres

Rural Development Center
- 110 acres, of which approximately 100 are cultivable.
  - Approximately 25 aspiring and limited-resource farmers farm on parcels from ½ to 10 acres of land for up to three years

Programming:
Farm Training and Resource Center (FT&RC) at the Triple M Ranch
- An incubator for established small growers (mostly Latino) within the Elkhorn Slough Watershed that are seeking to experiment with alternative crops and conservation practices that are both economically viable and protect the environment
- Course Offerings include:
  - Farm Water Quality
  - Direct Marketing
  - Drip Irrigation
  - Integrated Pest Management
- Technical and marketing assistance
Rural Development Center
- An incubator environment for the development of small family run agricultural enterprises that are economically viable and environmentally sound, especially, although not exclusively, among Latino farmworkers seeking to establish themselves as independent farmers
- Farmer Education Program: Six-month training course for beginning farmers
  - Practical, hands-on learning opportunities
  - Technical and marketing assistance
  - Access to land
  - Agriculture and land management research opportunities
  - Organic production is the focus
- On-farm technical assistance
- Demonstration of production methods and crop research in the field
- Agricultural Tourism opportunities
- Sales education and “ALBA Organics” distribution and marketing assistance

Farm Incubator Program
- Farmland and equipment access starting at 20% of market rate, with gradual increases to 80% of market rate over six years.
- With access to tractors, equipment and irrigation on a fee basis
- 17 beginning farmers operate small farm businesses at the RDC
- 9 farmers operate diverse farm businesses at the FT&RC

Ag Matters Education Program
- Water quality, soil conservation, marketing, business and financial assistance for hundreds of Latino farmers
- Educational field days and one-on-one technical assistance to help them achieve business success while managing their farms in ways that minimize impact to local waterways and the Monterey Bay National Marine Sanctuary

ALBA Organics
- In-house produce sales and distribution for ALBA-affiliated farmers, especially beginners. Customers include Alisal Union School District (where 86.9% of children qualify for free or reduced-price meals), Asilomar Conference Center, Sutter Maternity and Surgery Center, Dominican Hospital, Stanford University Dining Services, UC Santa Cruz Dining Services, and regional wholesalers and restaurants.

Community Food Systems
- ALBA fosters opportunities to connect people with the sources of their food, creating tangible experiences that can lead to greater consumption of fresh fruits and vegetables
- Initiatives include conducting a Community Food Assessment to assess markets among regional farm worker communities, developing farmers’ markets, church-based farm stands and collaboration between ALBA farmers and immigrant food entrepreneurs in the Bay Area

Leadership Development and Civic Engagement
- ALBA works to connect limited-resource farmers with opportunities to develop leadership skills, provides basic civics and policy education, facilitates broader networking, and encourages farmers to engage their elected officials and provide comments and testimony on specific issues and legislation, where possible.
- Furthers the tradition of small business owners being active members of their communities, and advances farmers’ understanding of the relevance of public policy to their business and family concerns
Products:
Farm Training and Resource Center (FT&RC) at the Triple M Ranch
- Strawberries, raspberries, zucchini, cucumbers, cut flowers, chilacayota (zebra squash), corn, beans, mixed vegetables and artichokes.
Rural Development Center
- Strawberries and numerous cool weather crops such as greens, lettuces, brassicas, corn, and beans, in addition to herbs, flowers, and ornamental plants

Staffing/Organizational Resources: 14
- Executive Director
- Administrative Director: maintains financial records and tracks grant activities and expenses
- Director of Programs: manages the Rural Development Center and the Farm Training & Research Center at ALBA's Triple M Ranch
- Agriculture Education Coordinator: leads the Small Farmer Education Program (PEPA) and other educational programs with farmers in the region
- Business Education Coordinator/Administrative Assistant: helps create and sustain economically viable farm and food processing businesses that generate opportunities for wealth creation, and contribute to local economic development and community empowerment
- Rural Development Center (RDC) Farm Manager
- Conservation Program Coordinator
- Farm Training and Research (FTRC) Farm Manager
- Food Systems & Communications Coordinator: works to develop community food security approaches to achieving a healthier food system on the Central Coast, through marketing, research, outreach, and education
- Marketing Coordinator: manages ALBA's produce distribution company, ALBA Organics, and the marketing education program geared for the success of small farmers.
- Communications and Development Director: works to diversify sources of support, build new partnerships and programs, and broaden public recognition for ALBA’s work
- CSA Production and Marketing Apprentice: coordinates ALBA’s Community Supported Agriculture (CSA) Program while supporting the vegetable production of ALBA’s 1.5 acre Demonstration Field
- Warehouse Manager
- Delivery Driver

Management Structure:
Local Board of Directors, representing agriculture, community development, legal aid, higher education, small business lending; Farmer Assembly and Advisory Council. Land owned by ALBA and land leased to tenant farmers at discounted rates.

Mission/Vision:
The mission of the Agriculture and Land-Based Training Association (ALBA) is to advance economic viability, social equity and ecological land management among limited-resource and aspiring farmers.

Sources:
1. ALBA website: http://www.albafarmers.org/
3. Personal communication with Brett Melone, Executive Director
Full Belly Farm
PO Box 251
Guinda, California 95637
530-796-2214
http://www.fullbellyfarm.com

Case Study Type: Small and Medium Specialty Farms
Reason for Inclusion: Diversified farm serving markets in the Bay Area; also maintains excellent community outreach programs and educational opportunities
Owner(s): Andrew Brait, Paul Muller, Judith Redmond, Dru Rivers
Business Type: Privately-owned partnership
Year Established: 1985
Total Acreage: 250 (180 owned, 70 leased)
Size of Operations: 45-50 employees
Months of Operation: Year-round; visits concentrated spring through fall
Types of Crops: Orchard crops, hay, table grapes, citrus, greens, row crops
Livestock: Poultry, sheep, milk cows
Anticipated Yields: 80 different crops; yields not tracked individually. Harvests take place six days per week throughout season. See financial evaluation for crop revenues.

Distribution Methods: Wholesale to produce houses in the San Francisco and Sacramento areas; wholesale to Whole Foods stores and to food co-ops in Sacramento and Davis; retail to stores and restaurants; three Farmers’ Markets each week, in Berkeley (Tuesday), Marin (Thursday), and Palo Alto (Saturday); CSA weekly direct delivery of family-sized boxes, 1100-1200 members; direct on-farm sales

Farming Practice: Organic
Annual Operating Costs: $2.0-2.5 million
Annual Revenues: 105-106% of operating costs
Annual Number of Visitors: Annual festival (Hoes Down): 5,000 – 6,000
Annual farm day: 400
Organized farm tours: 1,500 – 2,000
School visits: 350, children and adults; spring and fall
Summer camp: 3 camps per year, 60 children total
Informal visitors: 300 (too many)
Hours of Access: By appointment only
Fees: Hoes Down: benefit for nonprofits; $20/adult, $5/child (2-12), $20/car camping fee
Organized farm tours: $100 per group suggested donation
School visits: $40/child for one night; $65/child for two nights; $80/child for three nights
Summer camp: $425/child, age 7-12; $500/child age 13-15

General Description:
Full Belly Farm is a 250-acre certified organic farm located in the Capay Valley of Northern California, an hour northwest of Sacramento. Full Belly has been farmed using organic practices since 1985 and is certified by California Certified Organic Farmers. Full Belly's system includes: growing and marketing
over 80 different crops year-round; providing year-round employment for farm labor; using cover crops that fix nitrogen and provide organic matter for the soil; developing innovative marketing strategies; and planting habitat areas for beneficial insects and wildlife. This set of strategies allows the farm to integrate farm production with longer-term environmental goals. The farm also has a poultry flock, 200 sheep and a group of milk cows. Full Belly products are marketed both wholesale and retail. They sell to restaurants, at farmers’ markets, and through a Community Supported Agriculture project, or CSA.

The table below summarizes Full Belly Farm’s financial operations. Full Belly Farm, which is a for-profit enterprise, generates sufficient revenues to cover operating costs. In Fiscal Year 2006, direct operating costs sum to approximately $2.5 million, the majority of which covers payroll expenses. Operating revenues, which were about $2.65 million, cover the business’s operating costs. The majority of revenue is generated through produce sales, both wholesale and retail. Fully Belly Farm sells its produce to restaurants, at farmers markets, and through its Community Supported Agriculture (CSA) program.

The Full Belly Farm property covers about 250 acres. Of this total acreage, 180 acres are purchased in two separate market rate transactions (one in 1989 and another in 2003) and 70 are leased. The average annual lease payments on the portion of the property that is not owned are about $680 per acre. These lease payments cost about $48,000 annually.
### Table 1. Fully Belly Financial Description

<table>
<thead>
<tr>
<th>Budget Item</th>
<th>Description</th>
<th>Percent of Total Operating Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facility Revenues (1)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Account sales</td>
<td></td>
<td>60.6%</td>
</tr>
<tr>
<td>CSA (2)</td>
<td>250 acres</td>
<td>25.8%</td>
</tr>
<tr>
<td>Market sales</td>
<td></td>
<td>16.9%</td>
</tr>
<tr>
<td>Camp Full Belly (3)</td>
<td></td>
<td>1.0%</td>
</tr>
<tr>
<td>Animals</td>
<td></td>
<td>1.0%</td>
</tr>
<tr>
<td>Classes/Tours</td>
<td></td>
<td>0.4%</td>
</tr>
<tr>
<td>Facility and Equip. Rental</td>
<td></td>
<td>0.2%</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td>0.1%</td>
</tr>
<tr>
<td><strong>Total Facility Revenues:</strong> $2.1 - $2.6 million</td>
<td></td>
<td>106.0%</td>
</tr>
<tr>
<td><strong>Direct Operating Costs (4)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payroll</td>
<td>25-30 Employees</td>
<td>41.4%</td>
</tr>
<tr>
<td>Depreciation Expense</td>
<td></td>
<td>7.1%</td>
</tr>
<tr>
<td>Boxes</td>
<td></td>
<td>4.4%</td>
</tr>
<tr>
<td>Fuel</td>
<td></td>
<td>4.1%</td>
</tr>
<tr>
<td>Payroll Taxes</td>
<td></td>
<td>3.8%</td>
</tr>
<tr>
<td>Guaranteed Payments</td>
<td></td>
<td>3.6%</td>
</tr>
<tr>
<td>Workers Compensation</td>
<td></td>
<td>3.3%</td>
</tr>
<tr>
<td>Repairs and Maintenance</td>
<td></td>
<td>2.5%</td>
</tr>
<tr>
<td>Compost</td>
<td></td>
<td>2.4%</td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
<td>2.3%</td>
</tr>
<tr>
<td>Seeds</td>
<td></td>
<td>2.2%</td>
</tr>
<tr>
<td>Other Supplies</td>
<td></td>
<td>2.1%</td>
</tr>
<tr>
<td>Contract Labor</td>
<td></td>
<td>1.9%</td>
</tr>
<tr>
<td>Rent - Land (5)</td>
<td>70 acres</td>
<td>1.9%</td>
</tr>
<tr>
<td>Other Fertilizer</td>
<td></td>
<td>1.3%</td>
</tr>
<tr>
<td>Health Insurance (Net Cost)</td>
<td>15 Employees</td>
<td>1.2%</td>
</tr>
<tr>
<td><strong>Total Operating Costs:</strong> $2.0 - 2.5 million</td>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>

*2006 Fiscal Year

(1) Includes revenues from the eight highest revenue generating activities.
(2) Community Supported Agriculture. An order of produce costs $15 per week.
(3) Full Belly Camp fees vary by age of camper:
   - Age 7 - 12: $425 per session
   - Age 13 - 15: $500 per session
(4) Includes expense items comprising about 85 percent of total direct operating costs.
(5) The average annual rental rate is approximately $680 per acre. But, Full Belly Farm reports that most of the land is leased at $200 per acre.
Site Map:
Organization of Full Belly Farm during a typical late summer and early fall; at any one time, about 1/3 of the area is being actively harvested and nearing harvest, 1/3 is being turned over and planted to more crops or cover crops, and 1/3 is in cover crops.

Site Facilities:
- Office and employee kitchen: 9,900 ft² (Converted milk parlor)
- Two barns: approx. 10,000 ft²
- Parking area with refrigeration, washing area, and packing area: approx. 3,000 ft² ( Converted huller shed and shop)
- Residence for Owners’ Family 1: 1,400 ft²
• Residence for Owners’ Family 2: 1,400 ft²
• Residence for Owners’ Family 3: 1,400 ft²
• Housing for five employees: 2,000 ft²
• Cooling space: 1200 ft²
• Solar shop: 3000 ft², used for equipment maintenance, repairs and storage, as well as generation of 17 kw annually to offset power usage on the farm, built 2004
• Coops and sheds for animals
• Storage of equipment and irrigation pipe; fruit drying, shipping and receiving: in parking area

Facility Infrastructure:
• Domestic well
• Irrigation system that allows the efficient delivery of water from a number of sources to all parts of the farm.
• Septic system
• Roads: some dirt and some all weather gravel
• Parking along farm road

Land uses:
Note: the figures below add up to more than 250 acres because the land is multiuse, crops are multicropped, and pasture, hedgerow, and cover crops are rotated seasonally.

• 50 acres in orchard crops—a longer term rotation that includes walnuts, apricots peaches, almonds, pomegranates, apples, and pears.
• 50 acres in a pasture/ hay rotation to provide forage for the sheep and cows
• 25 acres in hedgerow and riparian area for insectary and beneficial insect forage
• 1 acre in table grapes
• 3 acres in citrus
• 150 acres in a rotation of crops and cover crops

Programming:
• Community Supported Agriculture project (CSA): Members support the farm by paying in advance for produce, and in turn receive a weekly box of seasonal fruits and vegetables, delivered to a neighborhood drop-off location, or directly to their home in some parts of the East Bay. Membership costs $15 per week.
• Weekly newsletter: Delivered to CSA members with their box, it contains news from the farm, a recipe, information about the CSA program, and directions for using and storing the products in the box.
• Apprentice Program: Up to five apprentices are provided with room, board, and a stipend. Apprentices are encouraged to stay for at least one year, and are responsible for a variety of tasks including helping with farmers’ market stands, making deliveries, weeding, animal care, writing the weekly CSA note, cooking lunch once a week, and field work.
• Hoes Down Harvest Festival: An annual October celebration of the harvest season and rural life including tours, workshops, hayrides, food, music, arts and crafts, nature walks, storytelling, games, a petting zoo, and dancing. This festival educates the public about growing food in a sustainable manner. The children’s area has been called “the best in the state.” This event is a benefit for nonprofit organizations such as the County land trust, statewide sustainable agriculture organizations, and local service organizations, and scholarship funds for local students, and is not a revenue-generator for Full Belly Farm.
• **Farm Day:** Annual June visit to the farm for CSA members
• **Farm tours:** Tour groups ranging from 10 to 80 hosted upon request. The farm receives more requests than it can accept; self-guided tours are also offered.
• **School visits:** Tours of the farm provided by tractor-drawn trailer; lessons focus on animals, fields and crops; groups bring their own tents.
• **Summer camp:** Weeklong overnight camp for ages 7-15, organized by one of the partners’ college-age children. Tents are set up in the orchard, and activities consist of hands-on learning about the farm, crafts, games, and swimming. Children learn about all aspects of farming and farm life, and prepare a farm stand for their parents on the last day of camp. Two weeklong sessions offered for ages 7-12, and one session for ages 13-15.

**Products:**
- Orchard crops, hay, table grapes, citrus, greens, row crops
  - Cauliflower, celery, cabbage, daikon, celery root, broccoli, carrots, asparagus, fresh garlic, fennel, lettuces, spinach, stir fry mix, turnips, beets, greens, salad mix, walnuts, leeks, potatoes, garlic, onions, green beans, summer squash, flowers, peaches, corn, cucumbers, melons, asian pears, okra, basil, eggplant, tomatoes, sweet peppers, hot peppers, winter squash
- Fruit and nut crops, designed to provide a marketable supply June through October. Nuts, dried fruit and citrus sold through winter.
- Small grains, planted in the fall; irrigated with winter rainfall, and harvested in the springtime.
- Poultry, sheep (wool, sheepskins and lambs), milk cows
  - 120 lambs harvested and marketed annually

**Staffing/Organizational Resources:**
- 45-50 year-round employees, including:
  - 4 owner/partners
  - 2 manager trainees
  - 2 office staff
  - 1 CSA coordinator
  - 30-35 farm staff
  - 5-6 live-in apprentices

**Management Structure:**
Privately owned partnership. The four partners derive nearly all of their annual income from the farm, share equally in decision-making, have varied areas of responsibility, and have equal capital accounts in the business.

**Mission/Vision:**
Full Belly seeks to create awareness of farm realities and to stress the importance of farms in the fabric of our society.\(^\text{13}\)

**Sources:**
Full Belly Farm website: [http://www.fullbellyfarm.com](http://www.fullbellyfarm.com)
Personal communication with Paul Muller, owner/partner
Personal communication with Judith Redmond, owner/partner

\(^{13}\) [http://www.fullbellyfarm.com/about.html](http://www.fullbellyfarm.com/about.html)