California Agricultural Vision Options for Short-Term Action and Longer-Term Challenges

INTRODUCTION: THE AG VISION PROCESS TO DATE

In 2008, the State Board of Food and Agriculture inaugurated California Agricultural Vision (CAV) as a process intended to result in a strategic plan for the future of the state's agriculture and food system. Its motivation was the rapidly growing list of challenges facing agriculture, from regulations and water supplies to urbanization and climate change. After holding public listening sessions,¹ the State Board adopted a Vision to serve as the framework for the plan. The Vision focuses on three basic goals:

- Better Health and Well-being Meeting the Nutrition Needs of California's Diverse Population
- A Healthier Planet Agricultural Stewardship of the Natural Resource Base upon which California and Food Production Depend
- Thriving Communities Food Production as a Driver of Sustainable California Economic Growth²

In March 2009, the State Board commissioned American Farmland Trust (AFT), a private nonprofit organization, to manage a process to transform its Vision into a strategic plan.³ AFT assembled a coordinating committee to assist in the process⁴ and retained Ag Innovations as a professional facilitator. It commissioned the Agricultural Issues Center of the University of California to produce a series of white papers on key issues relevant to the State Board's Vision. And it recruited 90 leaders from agriculture and other stakeholder groups representing the environment, farm labor and the food system to work on the plan.⁵

This leadership group participated in three all-day work sessions in August, September and December 2009. Participants were divided into three groups corresponding to the State Board's goals, based on their interests and expertise. At the first session they were asked to propose bold actions that could be taken to achieve those goals, producing 20 options. At the second session, they were asked to elaborate on and focus those proposed options, after which the entire group was asked to rank the options in order of importance and immediacy. At the third session,

¹ The listening sessions were organized by the California Department of Food & Agriculture with assistance from Roots of Change. Funding for these sessions was generously provided by the Columbia Foundation and the Clarence E. Heller Charitable Foundation.

² The Board's complete vision can be found in Appendix A at the end of this report.

³ Funding for this phase of Ag Vision was generously provided by the S.D. Bechtel, Jr., Foundation, the California Agricultural Technology Institute and the California State University Agricultural Research Initiative.

⁴ Members of the Coordinating Committee are: Luawanna Hallstrom, State Board member and chief operating officer of Harry Singh & Son; Mike Darnell, State Board member and AFT California policy director; Josh Eddy, Executive Director of the State Board; Edward Thompson, Jr., AFT California state director; Ralph Grossi, consultant to AFT and former AFT President; and Joseph McIntyre, executive director of Ag Innovations. Luawanna serves as the State Board member principally responsible for overseeing CAV. She replaced Karen Ross, now chief of staff to USDA Secretary Tom Vilsack, whose insight and inspiration were invaluable in launching the process.

⁵ The complete list of workshop participants is in Appendix B.

participants were asked to further refine seven proposed options that emerged as the highest priorities for short-term action. At the conclusion of the final session, participants had the opportunity to indicate the extent to which they supported the final proposed options. The following table shows both the vote on priorities after the second session as well as support for proposed options that emerged from the final session.

SHORT-TERM PROPOSED ACTION OPTIONS

The seven proposed options described in the rest of this report were broadly supported (though not in all particulars) by a substantial majority of those who participated in the December work session as requiring short-term action by the State Board of Food & Agriculture. (See chart below) We recommend that the State Board obtain further public input on these proposals – and other possible options – through the CDFA Ag Vision web site.

	Consider High	Support	
Action Option	Short-Term Priority ⁶	Without Reservation	With Reservations
Regulatory Improvement	42%	52%	46%
Immigration Reform	23%	73%	21%
Water Security	40%	52%	38%
Agland/Resources Policy	27%	52%	38%
Healthy Food Access	20%	48%	32%
Invasive Species	13%	52%	40%
Environmental Stewardship	18%	48%	46%

There were many other proposals addressing a variety of equally critical issues – among them, climate change, renewable energy and local food systems – that the leadership group believes should be acted upon, but on a longer timetable. A brief discussion of these issues is included at the end of this report as the basis for soliciting further public input on them.

1. Ombudsman for Improvement of Regulatory Administration

Challenge

California agriculture is the most highly-regulated in the nation. Producers must comply with many different government regulations covering everything from environmental quality to farm labor standards. These regulations are often duplicative, conflicting, uncoordinated, inflexible, inconsistently administered or needlessly burdensome.⁷ Perhaps worse, they sometimes stifle innovation that might better achieve the stated objectives of the regulations than the actions producers are now forced to take to comply.

For example, to prevent stream bank erosion, improve riparian habitat or create off-stream ponds on their farms, producers in California must obtain permits from up to seven different federal, state and local agencies. A recent survey found that two-thirds of producers who sought to

⁶ The median percentage was 11 among the 21 proposals on which participants voted.

⁷ Hurley, S., R. Thompson, C Dicus, L. Berger and J. Noel, *Analysis of the Regulatory Effects on California Specialty Crops: An Examination of Various Issues Impacting Selected Forest Products, Tree Fruit, Nut and Vegetable Crop Industries, report for California Institute for the Study of Specialty Crops, 2006 (www.cissc.calpoly.edu/research)*

undertake these kinds of environmentally-beneficial activities cancelled or scaled back their projects because of regulatory obstacles and delays.

Another example is the difficulty dairy farmers have had in constructing and operating methane digesters that can turn cow manure into renewable energy while reducing greenhouse gases.⁸ Because of conflicting regulatory interpretations by the California Energy Commission and the San Joaquin Valley Air Pollution Control District, a number of already approved digesters have had to undergo costly retrofits to comply with clean air laws by reducing nitrous oxide emissions (NOx) from the engines used to turn methane into electricity. This has discouraged other dairies from considering this innovative technology. That said, the net environmental benefit of the tradeoff between GHG and NOx emissions is not clear. But this simply underscores the need for regulatory agencies to coordinate their activities, particularly where emerging technologies are concerned, lest they impose unfair and undue burdens on producers who desire to innovate.

In addition to these examples, Ag Vision participants offered many other anecdotal accounts of narrowly-focused, inflexible or unresponsive agency regulators who, rather than helping producers negotiate the regulatory maze, left them to their own devices or, worse, stonewalled their attempts to find ways to comply that were less burdensome than what an agency – or, more often, multiple agencies – prescribed. The lack of accountability of regulators to the *regulated* is especially vexatious to innovative producers who are eager to cooperate in meeting the objectives of regulations.

The global competitiveness of California agriculture is increasingly at risk because of the excessive cost, wasted time and frustration that regulatory dysfunction entails. It is estimated that the annual cost of regulations to California producers is \$2.2 billion or roughly 6.5 percent of the total market value of the state's agricultural production.⁹ A recent survey found that regulatory compliance costs are increasing and now accounts for about 11 percent of capital and operating costs in the specialty crop industry.¹⁰

Without sacrificing the quality of life that regulations are intended to secure, their interpretation and administration must be improved to reduce the cost of compliance and to enable California producers to do what they do best, namely, rely on ingenuity and innovation to remain the world leaders in food production.

Desired Outcomes

- Reduced regulatory conflict, duplication, inflexibility and cost to producers in both dollars and time.
- Promote cost-effective innovation in achieving the objectives of regulations
- Greater accountability of regulators to the regulated community

⁸ It is estimated that the application of this technology to dairies in the San Joaquin Valley, where 90 percent of the state's milk is produced, could remove 450 thousand metric tons of methane annually with an environmental benefit equivalent to taking 2 million cars off California's roads. See, Weissman, S., *Recommendations to include in California Energy Commission's 2009 Integrated Energy Policy Report* (IEPR), July 31, 2009; Center for Law, Energy and the Environment, U.C. Berkeley School of Law, *Addressing Regulatory Barriers to Construction of Biomass Facilities in California*. [cited in CRAE report] ⁹ Hurlev, *et al., supra.*

• No reduction in environmental quality, labor standards or other public benefits of existing regulations, with the hope of an increase in these benefits through easier compliance.

State Board Vision Goal It Will Help Achieve

Healthy Planet – An updated regulatory system recognizes and fosters ecosystem services provided by working farms and ranches and encourages the sustainability of our food supply.

Recommended Action

It is recommended that there be established in the Office of the Governor a regulatory ombudsman function expressly for the purpose of improving the administration of regulations affecting California agriculture.

The objective of the ombudsman will be to reduce the cost and other burdens they impose on agricultural producers while assuring that the intent of the regulations, and the laws under which they have been adopted, is carried out.

State agencies and, to the extent possible, federal agencies that regulate agriculture should each be required to appoint a high-level official (reporting directly to the head of the agency) to serve on an inter-agency committee, chaired by the ombudsman, that would have the responsibility of assisting the ombudsman in carrying our his or her duties, particularly with respect to coordinating and reconciling regulations.

Within the framework of existing statutes – this is not a backdoor proposal to rewrite environmental or labor laws – the ombudsman should be given a broad mandate and effective powers. At a minimum, he or she should have the authority to:

- Conduct research and gather information on regulations, their scientific basis, administration and impact on agriculture¹¹
- Convene and chair the inter-agency committee on the improvement of regulatory administration (as recommended above)
- Propose changes in regulations, procedures and rules for consideration by the agencies responsible for implementing them
- Mediate between and among state, local and, to the extent possible, federal agencies in cases where their regulations conflict or duplicate
- Appoint and chair a committee to evaluate and recommend proposals for pilot projects through which innovative approaches to regulatory compliance may be tested (see below)
- Prepare reports, including an annual report to the Governor, on progress and obstacles to improving regulatory implementation.

A better understanding of the expansive regulatory framework within which California agriculture must function will be an essential foundation for improvement in regulatory administration. Today, regulatory agencies tend to have a "silo mentality" in which they focus only on the administration of their own regulations without regard for how other agencies do so or the cumulative impact on agricultural producers. The ombudsman function is designed to break

¹¹ This could substitute for or supplement implementation of the Cannella Environmental Farming Act of 1995. CA Food & Agric. Code §560, *et seq.*

down these barriers and to be a bridge, both between regulatory agencies and between those agencies and producers themselves. Consolidated procedures and permits ("one stop shopping") are an example of the kind of innovative changes that could emerge from a broader perspective on regulatory administration. Another would be to encourage flexibility and accountability among regulators.

The ombudsman should also promote creative, new approaches to compliance with specific regulations. While the theory behind regulation is that it will drive new technology and other ways to achieve its objectives, the administration of regulations often has the opposite effect. By prescribing specific procedures or methods of compliance to assure ease of administration or certainty of results, it stifles innovation that might achieve those objectives more cost-effectively. To create room for experimentation in regulatory compliance without compromising public health, safety or welfare, the ombudsman should be able to authorize pilot projects proposed by growers in which new approaches to compliance can be tried, and the results measured, on a limited trial basis. Producers who cooperate in these trials should be exempted from liability for unintentional failure to comply with the applicable regulations and laws under which they have been adopted, provided, of course, that they have employed due diligence in carrying out the trial. An expert panel should consider and approve specific pilot projects to assure that these experiments are legitimate and useful, and that the risks of possible failure are not unacceptable. The concurrence of any agency whose regulations would be involved in these trials should also be required.

An annual report to the Governor and the state legislature by the ombudsman will create an incentive for effective action as well as promote accountability for results. It could also elevate specific concerns about regulatory administration to prompt executive or legislative action.

The ombudsman function can probably be established by executive order of the Governor. But it would almost certainly have more standing if it were eventually sanctioned by state legislation. Regardless, the ombudsman should report directly to the Governor and have cabinet rank to assure that he or she can deal directly with the heads of state, local and federal agencies. However, to be most effective, the ombudsman and his or her staff must be above politics and be qualified by experience and education to address the issues associated with regulatory administration. One caveat is that none of this should result in simply another layer of bureaucracy.

2. California Agricultural Workforce and Immigration Reform

Challenge

California agriculture relies heavily on immigrant labor. Despite improvements in mechanized technology, its high-value fruit and vegetable crops remain labor-intensive. The remoteness of agricultural jobs, the seasonal nature of the work, its physical demands and competition from other industries like construction, all make it difficult for agriculture to recruit domestic labor. Coordinated efforts at recruiting domestic labor have largely failed, despite high unemployment in many agricultural communities. Thus, an estimated 75 percent of California's agricultural workforce is foreign-born, primarily Mexican, and about half of the workers are believed to be unauthorized under current immigration laws. The current H-2A temporary agricultural worker visa program is cumbersome and ineffective, resulting in the certification of at best only a few thousand of the hundreds of thousands of agricultural workers needed by the industry. An enforcement-only approach to immigration issues does not address the needs of agriculture or of the immigrant families who are responsibly seeking greater opportunity.

The farm labor crisis presents a clear and present threat to jobs and domestic food security. Over the past several years, labor instability has driven some agricultural producers to cease production of high-value crops and move some of their production out of the country. This results in the loss of additional jobs in agricultural businesses that supply and purchase from growers, as well as additional foreign competition for California producers, in effect, multiplying the negative effect on the domestic agricultural economy.

Agriculture needs reform of federal immigration and workforce laws to ensure its stability, future viability and a secure and vibrant workforce. The continued delay of Congress to address the issue has had dire consequences for producers and for local economies across the United States. The Obama Administration has announced its intention to seek a Comprehensive Immigration Reform Act, including the AgJOBS bill already introduced in the Senate, within the next six months. As the nation's leading farm state, California must exercise timely leadership to secure passage of such legislation. Meanwhile, until federal legislation is passed, there are other steps California can take to ease some of the burdens of a broken system and to serve as a model for Federal action.

Desired Outcomes

- Secure a sustainable agricultural workforce
- Decriminalize agricultural workers and employers
- Provide a better quality of life for workers, employers and the communities they serve
- Facilitate the integration of farm workers into U.S society by providing opportunities for basic skills acquisition such as English language instruction
- Establish California as a leader in partnering with the federal government on agricultural immigration reform

State Board Vision Goal It Will Help Achieve

Thriving Communities – Agriculture is a highly desirable green career of choice and will have a stable, well educated and trained workforce.

Recommended Action

Through private sector initiative, gubernatorial administrative action and, where necessary, state legislation, adopt a suite of policies and actions to secure a sustainable agricultural workforce for California agriculture. This should be framed by a specific agenda that includes actions such as:

- Support the passage of a Comprehensive Federal Immigration Reform Act, including AgJOBS (if necessary, as stand-alone legislation). Such legislation should include an earned legalization program that allows experienced agricultural workers to come out of the shadows and earn legal status by meeting strict but fair conditions.
- Pass state legislation to establish an out-of-state driver's license exemption for farm workers who rely on inter-state work, and to enable agricultural workers to obtain a California drivers license and/or identification card while working in California
- Pass state legislation that eliminates the 30-day mandatory impoundment for unlicensed drivers

- Limit inspections of agricultural workplaces and workers by state and local government authorities to public safety and criminal activities, leaving immigration issues to the Department of Homeland Security
- Establish family-first priorities within the law to avoid breaking up families through deportation measures when children are involved
- Combine the efforts of workforce agencies and educational institutions to train agricultural workers and provide opportunities for them to enter the workforce
- Recruit agricultural workers from other sectors where job skills may be transferable to agriculture
- Establish a network to connect willing workers with available seasonal and year-round agricultural jobs at all skill levels
- Increase worker access to public transportation systems that serve areas of rural employment
- Expand affordable housing options for agricultural workers by creating a network for distribution of information about available housing for all categories of workers
- Provide additional funding for, and expedite regulatory approval of, the construction of affordable agricultural worker housing
- Increase agricultural worker access to effective and compassionate public health facilities and education, including special screening, vaccination, prenatal care, treatment of chronic disease and pesticide exposure, and vision and dental care
- Promote "life skills" assistance, on-the-job training (for example, in constructing agricultural worker housing) and education in English and agricultural skills, to help agricultural workers prosper and assimilate

3. Improving Water Security for Agriculture

Challenge

Over the course of this century, climate models show California's water supply decreasing 24 to 30 percent, mostly in the second half, according to studies by the University of California, Davis.¹² However, even without supply changes, population growth and environmental goals will certainly put additional strains on already over-committed supplies. Environmental and agricultural water use varies significantly by year, depending on drought conditions. In a typical year, agriculture will irrigate about 9.6 million acres with 34 million acre-feet of water¹³ or about a third of available surface water supplies. In particularly dry years, agricultural usage has exceeded 50 percent of total usage (including stream flows for environmental benefits).

As more water is allocated to urban and environmental uses, agricultural producers have been adjusting by using less water. In many cases, water application is already relatively efficient so further reductions will be difficult. Yet field efficiency in agriculture can undoubtedly be improved, though perhaps at substantial cost, through the widespread adoption of micro-irrigation techniques and other "best management practices". The increasing cost of water, drought-related constraints, and other economic factors have already led to significant adoption of water conservation practices, especially in the San Joaquin Valley. Additional measures will very likely only be adopted with concurrent increases in financial and technical assistance.

 ¹² Reuters - FACTBOX: Water Scarcity and California Agriculture, March, 2009
<u>http://www.reuters.com/article/idUSTRE52C08M20090313</u> [Need to check this. No specific source given.]
¹³ DWR 2009, 4-10

Additionally, while generally there is a need for more water to satisfy multiple needs in California, some regions enjoy adequate, even excess supply, while others are in serious shortage. The inability to move water between farmers in different regions and/or irrigation districts has frustrated farmers and policymakers for decades For example, in 2009, farmers north of the Delta were willing to transfer water to farmers in the San Joaquin Valley, but were unable to do so.

In the longer term, "fixing" the Delta system and developing new storage and conveyance systems that are compatible with the environment will be imperative to sustain California agriculture. In addition to the physical and technical challenges associated with securing the water supply for California agriculture, there is a political challenge that stems from a lack of sophisticated public understanding of the water situation and its impact on agriculture.

Farming accounts for two percent of the state's \$1.6 trillion economy, but its demand for equipment, transport, labor and other services make it a key economic sector for the world's eighth-largest economy. The economic impact of water shortages has been acutely felt. Record unemployment in towns on the west side of the San Joaquin Valley is at least partly attributable to the current three-year drought. The Valley accounts for 60 percent of the state's prime farmland and is the world's most productive agricultural region; however, it depends mostly on snow melt from hundreds of miles away for irrigation, leaving it more vulnerable than other areas.

Desired Outcomes

- Increase available supplies of irrigation water by expanding the use of best management practices for water use efficiency.
- Significantly increase available financial and technical assistance to farmers for water conservation.
- Increase voluntary transfers among farmers within and across irrigation districts.
- Develop new agricultural water supplies and conveyances that are compatible with the environment

State Board Vision Goals It Will Help Achieve

Healthy Planet – A reliable water supply and conveyance system assures adequate quality and quantity of water to meet the needs of California and to sustain agriculture's prominence as a global food producer.

Healthy Planet – Agriculture has adapted to changes in climate and maintained its competitive advantage in the global food production system.

Recommended Action

To address current and future agricultural water needs, a series of immediate, short and longerterm actions is recommended.

The State Board should convene an emergency task force to promote water conservation beneficial management practices (UCCE, DWR, commodity groups, NRCS, RCD's and irrigation districts). Among the actions it should consider are:

- Create crop-specific water conservation BMP manuals for the Central Valley
- Coordinate tools and metrics for documenting BMPs
- Develop programs such as websites, blogs and training

- Develop a communication strategy including multi-media and multi-cultural components
- Identify potential funding to encourage adoption of BMPs

To facilitate more efficient movement of available water among farmers as a partial solution to water shortages in some regions, conduct a thorough study to:

- Identify the number of emergency and permanent transfer permits issued, pending or denied.
- Identify and quantify potential water that could be transferred.
- Identify key barriers to transfers (NEPA, CEQA, ESA, etc.).
- Identify third party impacts and potential mitigation.
- Urge the use of emergency authorities (state or federal) or other equivalent mechanisms to expedite transfers.

Finally, to secure longer-term solutions to water security a broad coalition of stakeholders should be organized to promote passage of the water bond on the November 2010 ballot. This effort should include consumers, farmers, businessmen, environmentalists and other key stakeholders. It should conduct polling to understand the electorate's views on the bond as the basis for developing effective messages for media publicity. The messages should be carried by all sectors of the California population.

4. State Agricultural Land and Resources Policy

Challenge

One of the most insidious threats to California agriculture is the steady loss of agricultural land to urban development. Inextricably linked to agricultural land is the water necessary to make it productive. This resource, too, is being siphoned off for urban uses and environmental purposes. Together, these trends are narrowing the options for the production of food on which millions of people depend. Yet the state has no firm policy aimed at conserving these indispensable and irreplaceable resources for agricultural use. Indeed, we have no idea of how much land and water California agriculture will need to supply future demand for food, fiber, fuel and ecosystem services.

Since 1990, the state has lost 400,000 acres of agricultural land to urban development.¹⁴ Roughly half of this was once highly productive irrigated cropland. Urbanization tends to occur on land with relatively abundant water and better soils. If we continue to develop agricultural land at the current rate of an acre for every 9 new residents, it is estimated that by 2050 California will lose another 2 million acres, a third of it irrigated cropland.¹⁵

In the past year, about 250,000 acres of farmland have been left idle or taken out of production due to water diversions. But this response to drought and legal decisions may pale in comparison to the retirement of land caused by future competition with urban users. Today, agriculture uses about 34 million acre feet (MAF) of water annually, while California's cities use almost 9 MAF. By 2050, it is estimated that current trends will lead to a 7 MAF increase in urban and environmental demands for water and that irrigated cropland could decrease from 9.6 to 8.5

¹⁴ Department of Conservation, Farmland Mapping & Monitoring Program.

¹⁵ American Farmland Trust, *Paving Paradise: A New Perspective on California Farmland Conversion*, Nov. 2007.

million acres.¹⁶ Of course, climate change could dramatically affect these predictions, generally reducing the amount of water available for all uses.

While we know that these trends are affecting California agriculture's production capacity, we do not have a very good idea of how much land and water it will need to continue to satisfy public demand for food and other goods and services it produces. Nor do we know how the waning of the era of cheap oil, public attitudes or regulation will affect agriculture's ability to make up for the loss of land and water through further technological innovation. Unless we are prepared to leave everything to chance – and that includes the food security of the United States – we need to answer these questions to the best of our ability, and with that information in hand, formulate new land and water policies that will assure that California agriculture has the resources it needs in the future.

Despite the indispensability of land and water, and their continuing loss, the state does not now have a definitive policy on conserving agricultural land and water resources for agricultural production. The Williamson Act and CEQA both speak to the importance of these resources to agriculture, but stop short of a clear statement of policy favoring their conservation. In the absence of a clear policy, goals and strategy for achieving them, these trends continue to narrow the options for both agricultural production and the ability of farms and ranches to provide ecosystem services.

Desired Outcomes

- Supplies of land, water and other resources sufficient to sustain all sectors of an economically viable California agriculture industry through the year 2050 and beyond
- A clear state policy that leads to the establishment of measurable goals for conserving California's agricultural resources and an effective statewide strategy for achieving those goals

State Board Vision Goal It Will Help Achieve

Healthy Planet – Agricultural land resources are conserved to maintain California's thriving agricultural economy and healthy ecosystems.

Recommended Action

It is recommended that the state adopt a California Agricultural Land and Natural Resources Policy that would clearly articulate that it is the policy of the state to support and maintain California agriculture as an essential part of the state's economy and environment by assuring that there is a sufficient supply of land, water and other natural resources to sustain the necessary levels of food production and ecosystem services.

To give impetus to the policy, a high-level task force should be convened to conduct an assessment of the state agriculture's future need for land, water and other resources to sustain agriculture, to establish measurable resource conservation goals that reflect these needs and to recommend an effective strategy and policies for assuring that those goals will be met. Once these conservation goals are established, all state agencies and instrumentalities

¹⁶ Department of Water Resources, *California Water Plan Highlights*, Oct. 2009.

(including local governments) should be rewarded for cooperating in formulating and carrying out strategies to achieve them.

5. Improved Access to Healthy Food

Challenge

Consumers in the nation's leading food-producing state are not eating enough healthy food. Many cannot afford it or find it in neighborhoods lacking full service grocery stores. Others are unaware of or simply ignore dietary guidelines such as USDA's healthy food pyramid. The results are food insecurity for the one out of six Californians who live in poverty, an increase in chronic health problems associated with obesity and malnutrition, and lost market opportunities for California growers of fruits, vegetables and other healthy food products.

Poverty alone does not explain food insecurity. Lack of education also seems to play a significant role. Only half of the 4 million Californians eligible for food stamps now take advantage of the increased buying power they afford, one of the lowest rates in the nation. As a result, each year the state returns to the federal government about \$3 billion that could be used to increase access to healthy food for its poorest residents. Food assistance programs are now administered by many different federal and state agencies, with significant duplication of effort and wasted expense. Meanwhile, a significant amount of the food that comes off California farms is discarded or wasted before it can reach consumers.

The challenge of ending food insecurity is not limited to delivering calories. The diets of most Californians, especially the poor, do not meet government recommendations. Federal guidelines call for 40 to 50 percent of food dollars to be spent on fruits and vegetables, but the range for most families is only 16 to 18 percent. Not coincidentally, 37 percent of the state's population is overweight and another 24 percent is obese. If federal nutrition guidelines were fully met, fruit consumption would increase 62 percent and vegetable consumption by 113 percent, offering additional market opportunities for California growers.

As these trends demonstrate, the challenge of eliminating food insecurity and promoting healthier diets is complex and difficult. There are no simple solutions, though there are many promising ideas and programs. Ultimately, the major obstacle to success could be that all of those engaged in it addressing food security have not fully cooperated in a concerted strategy.

It is impossible to overstate the importance of good health or the role food plays in encouraging or compromising it. Many economic challenges (health care costs) and social problems (low scholastic achievement) are at least partly attributable to poor diet or inadequate access to healthy food. One of the main responsibilities of the state – and, one could argue, food producers – is to help improve public health by assuring that all people are adequately fed.

Desired Outcomes

- Educate the public about healthy food choices
- Encourage healthier balanced diets
- Reduce hunger and malnutrition
- Reduce chronic diseases and health care costs associated with poor diets
- Increase statewide participation in food assistance programs
- Increase efficiency of food assistance programs
- Expand markets for California grown fruits, vegetables and other fresh products

State Board Vision Goals It Will Help Achieve

Better Health & Well-being – All Californians have access to healthy food, understand the importance of meeting the U.S. Dietary Guidelines and have fundamental knowledge about how food is grown and prepared for the table.

Thriving Communities – California agricultural policies encourage and foster diverse agricultural production systems to meet a variety of market demands.

Recommended Action

It is recommended that the state convene a task force comprised of leading experts and practitioners from all necessary fields to devise a comprehensive, systemic strategy to promote food security and healthy diets in California. At a minimum, the task force should include representatives of growers, processors, wholesalers, retailers, government program administrators, nutritionists, low income consumers, food educators and food access practitioners.

Task force deliberations should be guided by basic principles, among them:

- Engage a broader network of experts
- Take a systems approach
- Integrate successful approaches and innovate where gaps exist
- Link food security to agricultural opportunity and job creation in low-income areas
- Reduce bureaucratic redundancy and expense
- Strengthen regional food systems to build resiliency

Among the specific ideas that the task force should considered are:

- Reinvest health care cost savings in improved food access
- Create food access enterprise zones
- Build agricultural literacy and improve food access through urban agriculture, food preservation and farmers markets
- Consolidate and coordinate existing feeding programs
- Create an office with CDFA to concentrate on improving food access while increasing agricultural economic opportunity
- Link farmers with consumers of same ethnicity to increase access to culturally appropriate food
- Expand grocery outlets in low-income neighborhoods by adapting Pennsylvania's Fresh Food Financing Initiative
- Provide tax incentives for producers to expand gleaning, full harvest and distribution of non-marketable produce
- Access to Excess program

6. Protection of Agriculture and Ecosystems from Invasive Species

Challenge

Invasive species are non-native pests and diseases that cause damage to agricultural and native plants and animals. They pose a threat to our food supply as well as to the state's ecosystem. They now affect more than 20 million acres of California agricultural, forest and wild lands. This

year, CDFA has confronted 15 new infestations of fruit flies, moths and other insects and is engaged in the control of invasive species in 25 different locales totaling more than 2.6 million acres.

Invasives are costly to exclude, detect, contain and, where necessary, to eradicate. Each first-time pest invasion (e.g., Light Brown Apple Moth, Asian Citrus Psyllid) requires expensive new strategies for control and eradication. In 2003, \$450 million was spent to control invasive agricultural pests and diseases in California, \$128 million of which came from the state and the rest from the federal government. However, the potential cost of not dealing with invasives, in terms of decreased productivity and the loss of crops, and in human health, would be far greater. Sumner (2006) estimated that the economic benefit of invasive pest exclusion and eradication in California is three to five times its cost.

A policy of pre-emptive surveillance and exclusion would minimize the need for sometimes controversial control measures, the damage done by invasive species and their costs. But while the number of invasive species is growing as global trade expands, funding and other support for all of the activities needed to address the invasive species challenge are declining. CDFA's emergency response budget for invasives is being exhausted nearly every year. There are now vacancies in agricultural inspection positions at all major ports of entry into California. And the federal Customs and Border Protection function, transferred from USDA to the Department of Homeland Security in 2003, is now concentrating on interdicting terrorists and drug traffic rather than invasive pests and diseases.

Desired Outcomes

- Increased detection, exclusion, control and eradication of invasive species through a comprehensive strategy
- Sufficient financial and other resources for all these approaches plus research on new low-impact solutions
- Federal interagency coordination led by USDA and including Homeland Security, Department of Defense and EPA
- Understanding and support from public and environmental organizations for control measures

State Board Vision Goal It Will Help Achieve

Healthier Planet – Natural and agricultural resources are protected from plant and animal diseases by preventing the entry and establishment of invasive species and disease.

Recommended Action

It is recommended that a group should be convened to design the optimal, comprehensive strategy for invasive species detection, exclusion, control and eradication in California, specifically including a stable source of adequate funding for these activities. The strategy should:

- Evaluate the possibility of dedicating a percentage of the state's general fund to invasive species
- Place the highest priority on rapid detection and exclusion of pests to minimize the need for, and costs of, control and eradication

- Include collection of baseline data on the economic impacts of invasives and a catalogue of existing and prospective pests and diseases
- Provide a template for interagency coordination of all response functions
- Specifically address public outreach and education to assure that effective controls that pose little or no threat to public health or safety are not delayed or eliminated from consideration

7. Promote Agricultural Stewardship a Feature of the California Brand

Challenge

The environmental impact of agriculture has been a bone of contention for more than three decades. Nowhere is it more intense than in California, where public concern about the environment is high and environmentalists, food safety and agricultural interests have squared off over everything from water storage and wildlife to pesticides and air pollution. But it can also be considered an opportunity to make environmental quality a key feature of the California grown brand and, thereby, to increase the market value of everything the state's farmers and ranchers produce.

The potential for California agriculture to capitalize on environmental stewardship seems to be huge. Over the past several decades, California producers have made enormous strides in improving agricultural practices, reducing their environmental impact even as yields have been increased. Integrated pest management, rotational grazing, more efficient irrigation and habitat restoration are among the specific practices that have become commonplace among California farmers and ranchers. Driving this innovation have been technological improvements, the increasing cost of inputs, new federal conservation programs and funding, environmental curricula in the agriculture schools and, not least, consumer preferences. Indeed, consumer interest in healthy food produced with environmentally healthy practices has never been higher.

One response to this market trend has been the organic and "sustainable" agriculture movement. There are now about 600,000 acres in organic production in California and this segment of the market has grown 300 percent over just the past five years. While most organic producers remain relatively small, industries such as wine grapes and salad greens are now producing commercially significant quantities of organic products and advertising them as such. But the impact of all of this on the industry as a whole may be dwarfed by the response of major food purchasers and distributors such as Wal-Mart and Sysco that are beginning to establish standards for produce grown in an environmentally healthy manner. "Green" appears to be the wave of the future in the food system, and those who embrace it are likely to enjoy advantages in the marketplace.

In addition to marketing opportunities, improved environmental stewardship is likely to have additional economic benefits for agricultural producers. The cost of major inputs such as energy, agrichemicals and water – the use of which often has environmental implications – continues to increase with no relief in sight. On top of these hard costs are both the financial and time costs of complying with environmental laws and regulations, which arguably could be eased if more growers were to be pro-active in adopting good stewardship practices.

Desired Outcomes

- Widespread adoption of agricultural practices that improve the farm viability and the agricultural economy as well as the environment
- Markets that economically reward and promote good stewardship

- Adequate public financing of stewardship practices and ecosystem benefits that do not result in economic returns in the marketplace
- Agreement on principles and standard metrics so producers and others in the food supply chain will have a practical way of measuring environmental benefits of stewardship
- Avoidance of duplicative, multiple systems for evaluating environmental performance by producers

State Board Vision Goals It Will Help Achieve

Better Health & Well-being – Consumers have a California food supply at the highest possible level of safety using best management practices that protect California's unique natural resources.

Thriving Communities – Consumers worldwide view California as the supplier of the highest quality and most nutritious food products using the most sustainable practices.

Recommended Action

It is recommended that the state Department of Food and Agriculture and the California agricultural industry affirmatively pursue the goal of making environmental stewardship an integral and prominent feature of the California "brand."

At least three strategies suggest themselves as part of such an effort.

- Encourage the establishment of a standardized, voluntary self-assessment tool that growers can use to measure their environmental performance and to document improvements. This would include efforts to avoid a multiplicity of competing measurements that could complicate, confuse and hinder the adoption of stewardship practices.
- Research the market potential of environmental quality as a method of branding of California agricultural products and help design a campaign to enable producers to take advantage of it. This should include a means of aggregating data on California agriculture's overall environmental performance to authenticate the qualities that consumers desire.
- Aggressively seek financing and other incentives through federal conservation programs and other means to support the efforts of producers to adopt environmental stewardship practices. To support his effort, the needs of California producers for stewardship incentives should be documented.

LONGER-TERM CHALLENGES THAT NEED ATTENTION

Though the workshop process, Ag Vision participants identified a number of other key challenges that are critical to the continued success of California agriculture. Because of time limitations, they did not have an opportunity to develop specific proposals to address these challenges. A brief summary of each appears below. We invite additional public comment on these challenges and welcome ideas for specific actions that could become part of broader strategies to address them.

Climate Change Mitigation and Adaptation

Few sectors of the California economy will be as affected by climate change as agriculture. Among the potential climate-related phenomena that could threaten agricultural production are further reductions in water supplies, increases in plant heat stress, decreases in nighttime cooling (needed to break dormancy in fruit crops) and shifts in pollinator life cycles. Agriculture can play a role in mitigating climate change by reducing greenhouse gas emissions and by sequestering carbon. It must also begin now to take steps to adapt to changes that will occur.

Energy Security and Renewables

California agriculture relies heavily on fossil sources of energy for everything from powering farm equipment and irrigation systems to fertilization and pest control. Future supply and cost of fossil-based energy sources are problematic in light of both diminishing reserves and climatealtering emissions. At the same time, agriculture holds significant potential as a producer of renewable energy from biomass, animal waste and other byproducts.

Regional and Local Food System Opportunities

Consumer demand for locally-grown food has been rapidly expanding and both direct-toconsumer sales and organic production are among the fastest-growing sectors of California agriculture. However, these sectors are still niche markets that represent a tiny fraction of total state agricultural production. There appears to be significant potential for the expansion of regional and local markets that all California producers could take advantage of, either to expand their existing local growing operations or to diversify their income stream as a hedge against fluctuations in larger global markets.

Food Safety

Food products from California are among the safest in the world. Yet, rare contamination incidents can undermine public confidence in the food supply and have significant economic impacts on entire sectors of the state's agriculture industry. Measures to assure food safety can also be costly to producers and have negative impacts on the environment. Finding the appropriate balance between a food supply that is safe, abundant and affordable, the economic viability of producers and a healthy environment is one of the biggest challenges facing California agriculture today.

K-12 Agricultural Education

California is an overwhelmingly urban state in which the general public and most of its elected representative have little contact with, or knowledge about, the practical realities of farming and ranching. This is not a desirable situation when it comes to formulating public policies that could,

as many polices do, affect something as fundamental as food production. Public education about agriculture and food systems in primary and secondary schools could lay a foundation for better decision making about agriculture.

Updated Agricultural Infrastructure

Like all industries, agriculture depends on infrastructure to obtain inputs, and to transport and distribute its products. In California, this includes everything from water storage and conveyance systems and seaports to regional distribution centers and farmers markets. As agriculture evolves, infrastructure must keep pace. But in our state, a lack of investment in agricultural infrastructure has led to a situation in which it is increasingly inadequate to serve both global and regional markets.

Intergenerational Succession and Beginning Farmers

The overwhelming majority of California farms and ranches are family owned and operated. Their continued success depends on the ability to transfer property and management responsibilities from one generation to the next. Some families are challenged by complicated inheritance laws and taxes, others by the lack of children who want to remain in agriculture. At the same time, an increasing number of young people, including many graduates of California's excellent agricultural college system, want to start their own operations or enter agriculture for the first time, but lack the resources to do so.

THE PROCESS GOING FORWARD

American Farmland Trust is now forming an advisory committee composed of a smaller number of agricultural and other leaders. It will consider feedback from the public on the foregoing options and issues in formulating final recommendations to the State Board of Food & Agriculture. AFT intends to release a final report containing those recommendations and background material in the fall of 2010, upon with the State Board is expected to take action to implement a plan for fulfilling its vision of a healthy and prosperous future for California agriculture and everyone who depends on it.

Questions for Public Input

We solicit public input on the following questions as they relate to each of the short-term action options:

Do you support the basic concept? Are there any features of what is proposed that are troublesome and, if so, why? Are there alternatives that could better achieve the desired objective? Are there other issues and challenges that should be higher priorities for short-term action?

We would also like public input on the longer-term challenges identified by the Ag Vision process:

Which of these challenges should receive the highest priority for action? What specific measures would you recommend to address these challenges? What are likely to be the biggest obstacles and pitfalls of taking those specific measures? Are there other long-term challenges that should also be addressed and, if so, how?

Appendix A

CALIFORNIA AGRICULTURAL VISION FOR 2030

Better Health and Well-being: Meeting the Nutrition Needs of California's Diverse Population

Consumers have a California food supply at the highest possible level of safety using best management practices that protect California's unique natural resources.

All Californians have access to healthy food, understand the importance of meeting the U.S. Dietary Guidelines and have fundamental knowledge about how food is grown and prepared for the table.

A Healthier Planet: Agricultural Stewardship of the Natural Resource Base upon which California and Food Production Depends

A reliable water supply and conveyance system assures adequate quality and quantity of water to meet the needs of California and to sustain agriculture's prominence as a global food producer.

Agricultural land resources are conserved to maintain California's thriving agricultural economy and healthy ecosystems.

An updated regulatory system recognizes and fosters ecosystem services provided by working farms and ranches and encourages the sustainability of our food supply.

Natural and agricultural resources are protected from plant and animal diseases by preventing the entry and establishment of invasive species and disease.

Agriculture will help meet California's climate change goals through innovative management practices and technologies that recognize the unique opportunities in agriculture to reduce green house gas emissions.

Agriculture has adapted to changes in climate and maintained its competitive advantage in the global food production system.

California agriculture is a leader in providing renewable energy resources for California.

California agriculture is a leader in applying innovation to improve air quality conditions in California.

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Thriving Communities: Food Production is a Driver of Sustainable California Economic Growth

California's economy is strengthened through growth of a vibrant agricultural sector by promoting healthy consumption, export market expansion for a growing world population and job creation.

Consumers worldwide view California as the supplier of the highest quality and most nutritious food products using the most sustainable practices.

California agricultural policies encourage and foster diverse agricultural production systems to meet a variety of market demands.

Agriculture is a highly desirable green career of choice and will have a stable, well educated and trained workforce.

Research and extension of research stimulates innovation and adaptability to keep California's agri-food system the world's most productive, profitable and environmentally sound.

Appendix B

Roster of California Agricultural Vision Workshop Participants

Julie	Adams	Vice President of Global, Technical &	Almond Board of California
Chuck	Ahlem	Regulatory Affairs Co-Owner	Hilmar Cheese
Misti	Arias	Conservation Program Manager	Sonoma County Agricultural Preservation and Open Space District
Barry	Bedwell	President	California Grape and Tree Fruit League
Lori	Berger	Executive Director	California Specialty Crops Council
Dan	Best	General Counsel	California Federation of Certified Farmers' Markets
Peggy	Biltz	Chief Executive Officer	Dairy Council of California
Bob	Blakely		California Citrus Mutual
Bruce	Blodgett	Executive Director	San Joaquin County Farm Bureau
Ashley	Boren	Executive Director	Sustainable Conservation
Paul	Buttner	Manager of Environmental Affairs	California Rice Commission
Tim	Byrd	Board Member	Central Valley Farmland
	2		Trust/Gallo
Matt	Byrne	Executive Vice President	California Cattlemen's Association
Karen	Caplan	President	Frieda's, Inc.
Eric	Cardenas	Manager	s'Cool Food Initiative/Orfalea Foundation
Lesa	Carlton	Executive Director	California Wool Growers Association
Kumar	Chandran	Nutrition Policy Advocate	California Food Policy Advocates
Mike	Chrisman	Secretary	California Natural Resources
			Agency
Juliet	Christian-Smith	Senior Research Associate	Pacific Institute
Jim	Cochran	President	Swanton Berry Farm
Judy	Culbertson	Executive Director	California Foundation – Agriculture in Classroom
Manuel	Cunha, Jr.	President	Nisei Farmers League
Тасу	Currey	Executive Director	California Association of Resource Conservation Districts
Michael	Darnell	California Policy Director	American Farmland Trust
Kimberly	Delfino	California Program Director	Defenders of Wildlife
Doug	Dickson	Vice President, Ag Products	Pacific Ethanol
Leonard	Diggs	Manager, Shone Farm	Santa Rosa Jr. College
Michael	Dimock	President	Roots of Change
Daniel M.	Dooley	Senior Vice President	University of California
John	Duarte	President	Duarte Nurseries, Inc.
Allen	Dusault	Program Director	Sustainable Conservation
Joshua	Eddy	Executive Director	State Board of Food and Agriculture
Cornelius	Gallagher	Senior Vice President & Agribusiness Executive	Bank of America
Bob	Gallo	Co-Chairman	E. & J. Gallo Winery
Hank	Giclas	Vice President, Strategic Planning, Science & Technology	Western Growers Association
Denise	Godfrey	Sales	Olive Hill Greenhouses
Harold	Goldstein	Executive Director	California Center for Public Health Advocacy
Bob	Gore	Senior Deputy Cabinet Secretary	Office of the Governor

Ralph	Grossi	Consultant	American Farmland Trust
Martha	Guzman-Aceves	Legislative Advocate	California Rural Legal Assistance
		C	Foundation
Luawanna	Hallstrom	Chief Operating Officer & General Manager	Harry Singh and Sons
Karri	Hammerstrom		Fresno, farmer, Cal Women in Ag
Cesar	Hernandez	Director of Community Organizing	Central Coast Alliance United for a Sustainable Economy
Eric	Holst	Managing Director	Environmental Defense Fund
David	Hosley	President	Great Valley Center
Scott	Hudson	California Agricultural Commissioner	San Joaquin County
Jeana	Hultquist	Vice President, Legislative Affairs	U.S. AgBank, FCB
Glenda	Humiston		Public Policy
Edie	Jessup	Hunger & Nutrition Project Coordinator	Fresno Metro Ministries
Tim	Johnson	President	California Rice Commission
Thomas	Jones	Assistant Lab Director & Senior Microbiologist	American Council for Food Safety & Quality
Allison	Jordan		Sustainable Winegrowing
Jonathan	Kaplan	Senior Policy Specialist	Natural Resources Defense Council
John	Kautz	Owner	Ironstone Vineyards
A.G.	Kawamura	Secretary	California Department of Food
Luana	Kiger	Special Assistant to STC	and Agriculture USCA NRCS
Mary	Kimball	Director	Center for Land-Based Learning
Holly	King	Partner	Castle Rock Farms, LLC
Karen	Klonsky	Cooperative Extension Specialist	UCD Farm Business Management
Mark	Kramer	Associate Director, Federal Government	The Nature Conservancy
Sibella	Kraus	President	Sustainable Agriculture Education
Eric	Lauritzen	California Agricultural Commissioner/Sealer	Monterey County
Brian	Leahy	Assistant Director	California Department of
~ .			Conservation
Craig	Ledbetter	Vice President	Vino Farms
Jenny	Lester Moffitt		Dixon Ridge Farms
Mark	Lowry	Director	Orange County Food Bank
Bridget	Luther	Director	California Department of Conservation
Dan	Macon	Owner	Flying Mule Farm
Jeremy	Madsen	Executive Director	Greenbelt Alliance
Michael	Marsh	Chief Executive Officer	Western United Dairymen
Paul	Martin	Director of Environmental Services	Western United Dairymen
Larry	Martin	VP Govt Affairs and General Counsel	E. & J. Gallo Winery
Joseph	McIntyre	President	Ag Innovations Network
Sharon	McNerney	Executive Vice President	Nuffer, Smith, Tucker, Inc.
Jeanne	Merrill	Policy Director	California Climate and Agriculture Network
Alfred G.	Montna	Owner	Montna Farms
Mike	Montna	President & Chief Executive Officer	California Tomato Growers
Sopac	Mulholland	Executive Director	Association Sequoia Riverlands Trust
John	Muller	Mayor	City of Half Moon Bay
Paul	Muller	Owner	Full Belly Farm
Tom	Nassif	President	Western Growers Association
Steve	Nation	ANR Governmental Relations	University of California
Joel	Nelsen		California Citrus Mutual
Stephen	Ottemoeller	Water Resources Manager	Friant Water Authority
Jovita	Pajarillo	Assistant Director for Water Division	U.S. Environmental Protection
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			Agency
Michael	Payne, DVM	Executive Director	California Dairy Quality Assurance
Gloria	Pecina	Board Member	California WIC Association
Jason	Peltier	Chief Deputy General Manager	Westlands Water District
Jim	Poett	Ranch Manager	Rancho San Julian
Pete	Price	Owner	Price Consulting
Dave	Puglia	Senior VP Govt Affairs & Communications	Western Growers
Claudia	Reid	Policy Director	California Certified Organic Farmers
Brian	Rianda	Managing Director	Agland Trust (Monterey County)
James	Rickert	Owner	Prather Ranch
Emily	Robidart Rooney	Vice President	California Agricultural Council
Richard	Rominger	Principal	Rominger Brothers Farms
Karen	Ross	President	California Association of
			Winegrape Growers
William	Scott	Vice President	Agland Investment Services
Steve	Shaffer		American Farmland Trust
Sue	Sigler	Executive Director	California Association of Food Banks
George	Soares		Kahn, Soares & Conway, LLP
Scott	Spear	President	Sequoia Riverlands Trust
Rebecca	Spector	West Coast Director	Center for Food Safety
Dan	Sumner	Director	Agricultural Issues Center University of California
Frank	Tamborello	Director	Hunger Action Los Angeles
Edward	Thompson, Jr.	California Director	American Farmland Trust
Andrew	Thulin	Department Head	Animal Science Department - Cal Poly
Tom	Tomich	Director	UC Sustainability Institute
Robert	Tse	Deputy Secretary of Trade Development	California Department of Food and Agriculture
Nita	Vail	Executive Director	California Rangeland Trust
Christopher	r Valadez	Director of Environmental & Regulatory Affairs	California Grape and Tree Fruit League
Bill	Van Dam	Chief Executive Officer	Alliance of Western Milk Producers
Arlan	Van Leeuwen	Owner	New Hope Dairy
-	Warmerdam	Director	California Department of Pesticide Regulation
Paul	Wenger	First Vice President	California Farm Bureau Federation
Diana	Westmoreland- Pedrozo	State President	California Women for Agriculture
Annette	Whiteford, DVM	Director, Animal Health and Food Safety Services	California Department of Food and Agriculture
Dave	Whitmer	California Agricultural Commissioner/Sealer	Napa County
John	Wright	Planner	City of Clovis
Joe	Zanger	Principal	Casa de Fruta
Chris	Zanobini	Chairman	Buy California Marketing Agreement