Appendix 14B **Delta Agricultural Stewardship Strategies**

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Delta Agricultural Stewardship Strategies

I. Introduction

This appendix describes issues and opportunities related to BDCP and its relationship to agriculture in the Delta. As an optional alternative to the conventional strategy for mitigating environmental effects on agricultural resources (see Chapter 14, Agricultural Resources, Section 14.3.3.2, under Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan [ALSP] to preserve agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones), this framework offers a more integrated and collaborative approach using a variety of agricultural stewardship strategies for addressing the conversion of agricultural land to uses different from those in place at the time the project commences. This optional approach explores a voluntary framework that provides, at a minimum, a neutral agricultural economic effect on affected lands in the Delta as a result of the BDCP, taking into consideration the desire of individual Delta farmers to continue working on their land, the long-term viability of regional agricultural economies, the economic health of local governments and special districts, and the Delta as an evolving place. This approach also recognizes that local interests,

The approach encourages farmers to stay in the Delta and potentially benefits agriculture by providing strategies that help provide:

- economic choices to manage land in a way that contributes to maintaining and improving the ecological health of the Bay-Delta system
- ways to reverse subsidence
- flood protection
- groundwater seepage protection
- improved water quality

The approach supports local government and special districts planning and helps them stay fiscally sound by providing strategies that help provide:

- opportunities to keep county revenue neutral or positive.
- ways to minimize potential land use conflicts with local plans, agricultural preserves, and Williamson Act contracted land.

including Delta farmers have unique specialized knowledge and seeks to involve these interests in the process.

Depending on the selected alternative, the permanent footprint of the conveyance facility component of the BDCP (CM1) may include between 2,000 and 19,000 acres of farmland; additional acres of cultivated land would be affected temporarily during construction. Habitat restoration and enhancement components of the BDCP action alternatives (CM4–CM10) include, in most cases, more than 80,000 acres of restored habitat; a good percentage of which may occur on currently cultivated land. Some of this cultivated land provides habitat for terrestrial species of concern. A separate conservation strategy (the cultivated lands conservation strategy under CM3) addresses habitat effects to species affected by the conversion of agricultural lands for project purposes. This strategy calls for the permanent protection (through easements or other means) of other cultivated lands for terrestrial species that depended on the converted lands for habitat. It is not known, at this time, what percentage of agricultural land conversions for the BDCP provide benefits for terrestrial species that would be covered under the BDCP conservation strategy, but it is expected to be more than half.

Any agricultural stewardship strategy adopted as mitigation for BDCP impacts to agricultural resources would be consistent with the BDCP conservation strategy and would not conflict with the biological goals and objectives identified in the BDCP conservation strategy.

The approach is designed to encourage planning that will foster multiple-benefits and long-term partnerships with local interests in a way that results in the sustainability of the projects in the long run for both for the environmental and social community in the Delta. As a first step the approach suggests that the parties think about the extent to which BDCP can be part of or complement existing or planned uses for the Delta. This means thinking about ways to prevent or avoid farmland loss. To the extent that impacts to agriculture cannot be avoided, consideration should be given to developing working landscapes¹ on project lands that recognize other land use strategies taking place in the Delta, including those designed for mitigation and enhancement relating to aquatic and terrestrial habitat; agricultural use; recreation and eco-tourism and flood management. This appendix identifies a number of agricultural stewardship strategies that can be considered with respect to project lands that can be integrated with project and other land use strategies where appropriate. To the extent that there are still impacts to agriculture, the appendix identifies other strategies to consider that take place outside of the study area but could provide benefits to the Delta.

There are a number of other activities and programs in the Delta carried out by DWR and other entities that affect Delta farmland. These activities are developed pursuant to legislative and administrative authorities that are different from those that guide BDCP. Although it is possible that this approach or some aspects of it may be applicable to these other activities, the concepts in this appendix are not being considered for any activity other than those related to BDCP.

One of the key questions in approaching mitigation for conversion of agricultural land from one use to another for project purposes is whether the impacts identified are economic², environmental, or a mixture of the two. In general, it is not legally necessary to mitigate for purely economic impacts unless they lead to secondary environmental impacts. However, because of the nature of the agricultural resource it is often difficult to determine what is an economic impact and what is an environmental impact. The framework proposed by this appendix does not make an attempt to distinguish strategies based on whether they deal with environmental or economic effects, but instead considers whether they maintain agricultural and economic viability in the Delta. Although these strategies are not focused as a means of reducing environmental impacts on agricultural resources to a level of non-significance, they may result in a significant reduction of those environmental effects and a reduction or elimination of secondary environmental effects on agriculture. Nonetheless, as described in Chapter 14, *Agricultural Resources*, even with these strategies in place, the potential environmental impact as a result of changing the current use of

¹ The CALFED Working Landscapes Subcommittee of the Bay-Delta Public Advisory Committee defined a working landscape as "a place where agriculture and other natural resource-based economic endeavors are conducted with the objective of maintaining the viability and integrity of its commercial and environmental values. On a working landscape, both private production, as well as public regulatory decisions account for the sustainability of families, businesses and communities, while protecting and enhancing the landscape's ecological health. The working landscape is readily adaptable to change according to economic and ecosystem needs. With respect to CALFED, a working landscape is both an objective and a means to achieve it. A working landscape is efficiently managed largely by private agricultural landowners and managers who are supported and encouraged to manage their lands in ways that fulfill CALFED goals, allowing them to pursue ecological health goals while yielding economic returns on investments, and generating tax revenues that support their local governments" (California Bay-Delta Public Advisory Committee 2002).

² In this context, economic may also include social or social/economic impacts.

agricultural land would be potentially significant. This approach, however, provides powerful tools that can reduce agricultural environmental and economic impacts caused by the BDCP.

This approach is not intended to take the place of other ongoing processes designed to achieve similar objectives, but rather to take advantage of processes proposed (or to be proposed) by the Delta Conservancy, the Delta Stewardship Council, the Delta Protection Commission, the California Water Plan, local county, city and regional planning processes, and other conservancy programs. This approach builds upon "visioning" documents and plans that came before such as those produced by CALFED, the Delta Vision, the Delta Protection Commission Economic Sustainability Plan, the California Fish and Wildlife Strategic Vision, the Department of Food and Agriculture's Agriculture Vision, CDFA's Environmental Farming Science Panel, the California Water Plan Agriculture Strategy, the Delta Conservancy's Strategic Plan, the Delta Stewardship Council's White Paper on Agriculture, the Department of Water Resources Climate Change Strategies for California's Water, the California Natural Resources Agency's California Climate Adaptation Strategy, the California Roundtable on Water and Food Supply's recommendations regarding Agricultural Water Stewardship, and local planning for agriculture and natural habitat.

II. Background

Within state government, different agencies have taken different approaches in addressing conversion of agricultural lands for ecosystem improvements, based, in part, on their missions. However, in October 27, 2004, a memorandum from the Secretaries of the Resources Agency and the Department of Food and Agriculture committed the two agencies to work together in a complementary, rather than conflicting, approach on these issues. On May 4, 2005, the Secretary of the Resources Agency followed up with a directive that "in selecting and developing resources related projects, departments under the Resources agencies should incorporate, where appropriate, the strategies identified in the CALFED EIR to reduce the impact of the CALFED Ecosystem Restoration Program on agricultural land and water use" (Chrisman 2005). The Secretary recommended several steps that affected departments should take in cases involving agricultural lands, including the following: (1) projects should include both restoration and agricultural preservation efforts; (2) the lead agency should analyze each situation on a case-by-case basis; and (3) CEQA documents involving resource-related projects that involve agricultural land should include a separate section that describes the social and economic consequences of a conversion.

Separate from CEQA, the 2009 Delta Reform Act and related legislation on Delta activities contemplates that these activities will involve the conversion of agricultural land to habitat and a consideration of the agricultural values of the Delta. Notably, in Public Resources Code section 29702, the Legislature declared that the "coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem...shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." (Emphasis added.)³ Echoing this concern for Delta agriculture, Public Resources Code section 32301[d] notes that "[t]he Delta contains more than 500,000 acres of agricultural land, with unique soils, and farmers who are creative and utilize innovative agriculture, such as carbon sequestration crops, subsidence reversal crops, wildlife-friendly crops, and crops direct for marketing to the large urban populations nearby." Federal law,

³ Similar language is found in Water Code section 85020. See also Food and Agriculture Code sections 560-568.

- through the Farmland Protection Policy Act, recognizes that the Nation's farmland is a unique natural resource and provides food and fiber necessary for the continued welfare of the people of the United States; that each year, a large amount of the Nation's farmland is irrevocably converted from actual or potential agricultural use to nonagricultural use; that the extensive use of farmland for nonagricultural purposes undermines the economic base of many rural areas; and that Federal actions, in many cases, result in the conversion of farmland to nonagricultural uses where alternatives actions would be preferred.⁴
- The following section summarizes positions, approaches, analyses, and recommendations of related past and current documents.

Delta Vision Strategic Plan

The Strategic Plan was developed as a result of the Delta Vision process and includes a number of actions related to the protection and enhancement of Delta agriculture (Governor's Delta Vision Blue Ribbon Task Force 2008).

One action would support marketing efforts by establishing special Delta designations within existing federal and state agricultural support programs. This action includes the creation of partnerships between the California Department of Food and Agriculture, commodity boards, and local governments and the use of USDA Farm Bill funding to begin a regional labeling program and assist in the direct marketing of Delta produce in nearby cities. Under this action, the Farm Bill would be reviewed for funding opportunities in the Delta that could support agricultural marketing and the development of new crops, crop varieties, and value-added products. The action recommends that the Delta Protection Commission, the Delta Conservancy, and state and local agricultural institutions collaborate to secure Farm Bill funding. The action also notes that federal Farm Bill conservation funding can be leveraged by using the state's working lands conservation programs. Finally, the action suggests that the DPC continue working with the USDA to secure funding for a Resource Conservation and Development Council to promote natural resource-based economic development. Among its other functions, this council could develop housing for agricultural laborers in and around the Delta.

Another action associated with this strategy is to conduct research and development for agricultural sustainability in the Delta. This action includes the completion of a Delta-wide study which would identify barriers and opportunities to improving agricultural sustainability through the use of economic analysis and stakeholder interviews. This would include an assessment of the potential to achieve habitat and water management objectives while continuing to farm in potential restoration areas. This action would also increase the research and extension capacity in the Delta to explore the use of crops that slow or reverse subsidence, improve water use efficiency and quality, are wildlife-friendly, and improve floodplain management. Institutions engaged in these activities could include the University of California and the USDA's Natural Resources Conservation Service.

Under this strategy, new markets could be established for innovative agricultural products and enterprises in the Delta. These efforts would include ensuring that carbon farming is recognized as an emissions reduction mechanism under California's Global Warming Solutions Act and that carbon trading mechanisms permit Delta farmers to enter into contracts with carbon emitters. Another activity could involve the creation of federal, state, and local mitigation requirements and agricultural easement programs that support the transition of Delta growers to multifunctional

⁴ 7 USC 4201, Section 2 (USDA 2012).

forms of agriculture, including those that support flood management and wildlife habitat. Protection strategies for farmlands threatened by urbanization could also be developed. These could include conservation easements, Williamson Act contracts, and programs allowing for the transfer of development rights.

Other strategies identified in the Strategic Plan would contribute indirectly to agricultural viability in the Delta. Support for a regional economic development plan would gather input from agricultural stakeholders and identify strategies to strengthen the Delta economy, including agriculture, even if significant changes occur to the Delta landform, to water infrastructure, or to west Delta water quality. Special enterprise zones could also be established as part of the economic development plan, potentially allowing tax incentives or low-interest loans in these zones to encourage investment in tourism-supportive facilities such as welcome centers and interpretive centers. Another strategy identified in support of the Delta economy is the proposed establishment of a Delta Investment Fund to provide for regional economic development and adaptation. As proposed, the fund would be managed by the DPC and a consortium of local governments and initiated with state funding, but structured to accept revenue from federal, state, local, and private sources. A final strategy related to the economic viability of the Delta would support the adoption of land use policies that enhance the Delta's unique values and are compatible with strategies identified for public safety, levees, and infrastructure.

CALFED Record of Decision

The CEQA Findings of Fact for the CALFED Bay-Delta Program identifies a number of mitigation strategies that could be applied in reducing impacts related to agricultural land and water use (CALFED Bay-Delta Program 2000). These strategies are listed below.

- Siting and aligning Program features to avoid or minimize impacts on agriculture.
- Restoring existing degraded habitat as a priority before converting agricultural land.
 - Focusing habitat restoration efforts on developing new habitat on public lands before converting agricultural land.
 - If public lands are not available for restoration efforts, focusing restoration efforts on acquiring lands that can meet ecosystem restoration goals from willing sellers where at least part of the reason to sell is an economic hardship (for example, lands that flood frequently or where levees are too expensive to maintain).
 - Providing water supply reliability benefits to agricultural water users.
 - Supporting the California Farmland Conservancy Program in acquiring easements on agricultural land in order to prevent its conversion to urbanized uses and increase farm viability.
 - Using farmer-initiated and developed restoration and conservation projects as a means of reaching Program goals.
- Retaining water allocations from retired drainage-impaired lands within the existing water districts.
- Supporting the testing and application of alternative crops to idled farmland (for example, agroforestry or energy crops).

- Examining structural and nonstructural alternatives to achieving project goals to avoid impacts
 on agricultural land.
 - Where small parcels of land need to be acquired for waterside habitat, seeking out points of land on islands where the ratio of levee miles to acres farmed is high.
 - Obtaining easements on existing agricultural land for minor changes in agricultural practices (such as flooding rice fields after harvest) that would increase the value of the agricultural crop(s) to wildlife.
 - Including provisions in floodplain restoration efforts for compatible agricultural practices.
 - Purchasing water for habitat purposes so that the same locality is not affected over the long term.
 - Using a planned or phased habitat development approach in concert with adaptive management.
 - Minimizing the amount of water supply required to sustain habitat restoration acreage.
 - In implementing levee reconstruction measures, working with landowners to establish levee reconstruction methods that avoid or minimize the use of agricultural land.
 - Working with landowners to establish levee subsidence BMPs that avoid impacts on land use practices. Through adaptive management, further modify BMPs to reduce impacts on agricultural land.
 - Using rotational fallowing to reduce selenium drainage.

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- When it appears that land within an agricultural preserve may be acquired from a willing seller
 by a State CALFED agency for a public improvement as used in Government Code Section 51920,
 advising the Director of Conservation and the local governing body responsible for the
 administration of the preserve of the proposal.
- Limiting the number of acres that can be fallowed (in order to produce transferrable water) in a given area (district or county) or the amount of water that can be transferred from a given area.
- Supporting assistance programs to aid local entities in developing and implementing groundwater management programs in water transfer source areas.
- Analyzing, dredging, and handling dredged materials in accordance with permit requirements.
- Utilizing the criteria in the Water Transfer Program, in conjunction with existing legal constraints on water transfers, to protect against adverse effects due to water transfers.
- Implementing features that are consistent with local and regional land use plans.
- Involving all affected parties, especially landowners and local communities, in developing appropriate configurations to achieve the optimal balance between resource impacts and benefits.

California Agricultural Vision: Strategies for Sustainability

In December 2010, the American Farmland Trust finalized the California Agricultural Vision (Ag Vision), an initiative conceived and supported by the California Department of Food and Agricultural and the State Board of Food and Agriculture (American Farmland Trust 2010). The Ag Vision process involved intensive public listening sessions and workshops among a broad range of

- stakeholders with the goal of developing proposals and strategies to address challenges facing the long-term sustainability of California agriculture. The report recommends 12 strategies, to be implemented by 24 specific actions. The strategies and their supporting actions are categorized into those can be pursued immediately and those that require longer-term activities. They are summarized below.
- Improve access to safe, healthy food for all Californians this strategy revolves around issues of
 food security, food-related health problems, market opportunities for California growers, and
 food safety standards. Immediate actions associated with this strategy involve steps to increase
 the efficiency and efficacy of food assistance programs while longer-term actions include the
 formation of a task force to focus on promotion of food security and healthy diets and
 coordination to ensure that food safety practices are based in science and consider
 environmental impacts.
- Ease the burden of regulation on agriculture while maintaining health, safety and environmental standards this strategy sets a goal of reducing the regulatory burdens on California producers while achieving quality of life and environmental goals. An immediate action proposed under this strategy would lead to the identification and recommendation of practical regulatory "fixes" that would reduce paperwork and compliance costs without compromising environmental quality standards and compliance. A longer-term action is related to the Little Hoover Commission's ongoing review of regulatory burdens, with the objectives of identifying specific examples of regulations that could be changed and proposing specific changes in regulatory substance and processes that would reduce costs while still fulfilling the regulations' purpose.
- Secure an adequate supply of water for agricultural purposes this strategy focuses on assuring that agriculture's water supply and water quality needs are met while allowing for improved environmental quality and reasonable urban needs. An immediate action associated with this strategy includes identifying and expanding promising, on-going efforts on the part of agricultural producers to use water more efficiently; identifying obstacles to increasing most efficient use of water by agriculture; and prescribing programs, policies, and practices to overcome these obstacles. Another immediate action involves public education to broaden support for financing improvements in California's agricultural water storage and conveyance system. A longer-term action proposed under this strategy would result in the passage of legislation to assure sufficient supplies of land, water, and other natural resources to sustain food production and ecosystem services.
- Assure a strong labor force through fairness to agricultural workers and employers this
 strategy focuses on California's ability to secure a sustainable agricultural workforce through
 reform of immigration and workforce laws. Actions revolve around support for reforms of
 federal immigration law and prioritization of state law enforcement on the part of state
 departments. A longer-term effort would adopt a series of policies in support of a sustainable
 agricultural workforce, which could involve driver's license exemptions or access; increased
 farm worker access to job training and other services; and recruitment of agricultural workers.
- Effectively detect, exclude and control invasive species under this strategy, the State Board of Food & Agriculture would work with relevant stakeholders to increase efforts to counteract the effects of invasive species on agriculture by securing funding and resources for various approaches, researching new solutions, improving federal interagency coordination, and seeking understanding and support from the public for responsible control methods.

- Adopt a policy of conserving agricultural land and water resources this strategy secures sufficient land and water resources to sustain California's agricultural industry. An immediate action would be the development of a study to identify the state's long-term agricultural resource needs based on future demands, technology, and other factors. This study would lead to recommended goals and strategies for ensuring that these resource needs are met. A longer-term action would be the translation of these goals and strategies into legislation articulating state policy in support of California agriculture and supporting state agencies and local governments in implementing these strategies and meeting measureable goals.
- Expand environmental stewardship on farms and ranches this strategy recognizes the existing environmental stewardship efforts of producers while broadening the adoption of beneficial management practices through the development of markets that support environmental stewardship, financial support for stewardship practices, and the avoidance of conflicting systems for evaluating environmental performance by agricultural producers. An immediate action would request the California Department of Food and Agriculture to identify and highlight the most successful and promising stewardship programs and initiatives. The longer-term action proposed would support environmental stewardship as a prominent feature of the California "brand," which could lead to the development of standard metrics for voluntary assessment of environmental performance.
- Promote renewable energy and substitutes for fossil-based inputs this strategy focuses on replacing oil and natural gas with alternative energy and input sources. The immediate action would lead to the formation of a task force to identify promising ways that agriculture could reduce fossil-derived inputs including farm- or ranch-based renewable energy projects. The task force would also document potential benefits and costs associated with these efforts and obstacles to their adoption.
- Assure agricultural adaptation to climate change this strategy recognizes the vulnerability of
 agriculture to climate change and seeks to enable producers to adapt to changing conditions
 related to seasonal weather, water supply, pests and diseases, and other climate-related
 changes. An immediate action proposed under this strategy would document efforts to assess
 the potential impact of climate change on California agriculture, determine the most significant
 likely impacts, and propose strategies to help agriculture adapt to these changes.
- Promote robust regional markets for all California producers this strategy capitalizes on demand for locally-sourced food by taking advantage of regional marketing opportunities. The action associated with this strategy would result in the development of a partnership between agricultural and nonprofit organizations to study the potential for regional food markets to create economic opportunity for all California producers, along with barriers to these markets.
- Cultivate the next generation of farmers and ranchers this strategy focuses on reducing the
 barriers for new farmers and ranchers including those created by estate and inheritance
 taxation and those created by a lack of educational opportunities. Actions under this strategy
 would include the development of policy to guide taxation in support of successful transitions
 between generations of operators and the initiation of a task force to study obstacles to
 intergenerational succession and recruitment of new farmers and ranchers and to propose
 strategies in response to these obstacles.
- Promote agricultural research that anticipates 21st Century challenges continue research and extension of research that stimulates innovation and adaptability for California agriculture.
 Under this strategy, the State Board would work with the University of California Agriculture &

Natural Resources Division and that California State University system in prioritizing research and extension needs and assuring that the resources are available to support those needs.

Memorandum: Resources Agency Policy on Projects Involving Agricultural Land

In 2005, Resources Agency Secretary Mike Chrisman issued a memorandum setting forth the

Agency's policy related to projects undertaken by departments under the Resources Agency

involving agricultural lands (Chrisman 2005). Broadly, it identifies a policy that directs departments

under the Resources Agency to recognize the importance of both permanent preservation of

productive agricultural land and restoration, protection and management of the state's natural,

historical, and cultural resources. It also asserts that departments' activities should strive to benefit

both agricultural and resource lands.

Specifically, the memo encourages departments to review and, where appropriate, incorporate one or more of the 24 mitigation strategies identified in the CALFED Programmatic Record of Decision

(or other similar strategies). The Resources Agency also encourages departments to work with local

agencies and other State departments to identify other strategies that would benefit both

agricultural and resource lands.

The memo also identifies three considerations for resource-related projects that departments should consider during CEQA review. First, where feasible, the project should incorporate both restoration and agricultural preservation benefits. This objective relates to the reference to the mitigation strategies identified above. The second item encourages departments to include a separate section describing the potential for social and economic consequences of the conversion of agricultural land. Departments are also encouraged to identify steps the lead agency has taken to design the project to avoid and minimize such consequences. The third point directs lead agencies to analyze each situation on a case-by-case basis and to consider the specific physical changes associated with any particular project.

Memorandum: The Use of the Land Evaluation and Site Assessment Model for Evaluating the Environmental Impacts of the Conversion of Agricultural Lands

In 2006, a memorandum was developed to discuss the Resources Agency's use of the Land Evaluation and Site Assessment (LESA) model for the purposes of evaluating impacts on the environment due to conversion of agricultural land to nonagricultural uses (California Natural Resources Agency 2006). The memo was drafted in response to a request made by the California Department of Food and Agriculture for the Resources Agency to amend the CEQA Guidelines to more clearly indicate that the LESA model is the appropriate tool to analyze the significance of effects on agricultural lands under CEQA, including projects that fallow agricultural lands to create wildlife habitat. The CDFA also requested that the Resources Agency require use of LESA for state agencies serving as CEQA lead agencies when projects involve agricultural lands.

The memo describes the definition of the environment in the CEQA Guidelines and the relationship with this definition to the use of agricultural land. If land is in agricultural use, the agricultural conditions of the property are the baseline conditions against which the project is evaluated; however, "an environmental assessment of the proposed project's impacts need not assess impacts on the land's potential for agricultural use *per se.*" Impacts on the continued agricultural use of the land would only be considered significant and adverse if they caused significant adverse *environmental* impacts.

CDFA, in conjunction with the requests above, reasoned that farmland is an environmental resource because the environment includes both natural and man-made conditions. Additionally, CDFA interpreted CEQA as requiring consideration of whether a project would have a significant adverse impact on the potential for agricultural use of the land and identified LESA as the appropriate tool to undertake such analysis.

California's LESA model was initially developed by the Department of Conservation (DOC) through Section 21095 of the Public Resources Code, which was enacted by SB 850 (1993). Subsection (a) required the Resources Agency to develop an optional methodology to assess environmental impacts associated with the conversion of agricultural land. Subsection (b) required the DOC to develop a LESA model and Subsection (c) specified that the Resources Agency could adopt LESA as its methodology in lieu of adopting the optional approach. In amending the CEQA Guidelines to include the LESA model, Resources Agency required that agricultural conversion be evaluated for "significant environmental effects;" however, the Agency did not require that projects involving agricultural conversion be assessed for their impact on the agricultural use of affected lands. While the Resources Agency allowed lead agencies to use the LESA model to evaluated the impact of agricultural conversions on the environment, this has led to confusion because LESA is better suited to evaluating effects on the potential agricultural use of lands rather than assessing the potential for significant environmental effects. Put another way, LESA evaluates the agricultural significance rather than the environmental significance of agricultural conversions.

Additionally, there are several other elements of LESA that limit its applicability to assessing the significance of environmental impacts. LESA does not evaluate the proposed land use following conversion, even if the project provides environmental or agricultural benefits. Further, LESA was established as an optional model and cannot be made mandatory, even for state lead agencies. Requiring the use of LESA would also increase costs for CEQA lead agencies, both in the analysis stage and potentially in terms of mitigation costs. Based on these items, the memorandum recommends that Resources Agency not follow CDFA's suggestion to adopt LESA as the appropriate tool to evaluate the significance of effects on agricultural lands of all projects or that LESA be a mandatory tool for any state lead agency.

However, the memo also recommends that Resources Agency undertake one or more of a list of "options" that could result in stronger protections for agricultural lands. These include:

- Encouraging consistency in applying the approach to the Resources Agency policy regarding agricultural lands;
- Evaluating the merits of elevating CALFED agricultural mitigation measure considerations to apply to all state agencies impacting agricultural lands;
- Developing inter-departmental MOUs as needed to increase consultation and collaboration among state departments for projects impacting agricultural lands;
- Conducting analysis of the sources of conversion of both habitat and agricultural lands. Use that analysis to inform other policy tools and approaches;
- Developing a methodology or model to assess the environmental impacts of agricultural conversions; and
- Evaluating and providing incentives, if appropriate, for the application of LESA to local land use planning.

III. Basic Integrated Approach: Working Landscapes

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The approach proposes a framework that would work on a case by case basis. Each project would be encouraged to establish a working landscape that integrates project activities (including mitigation and restoration) with other uses such as agriculture⁵, flood management, recreation and ecotourism in a way that encourages multiple-benefits and long-term partnerships with local interests in order to meet not only the conservation demands and ecological benefits of the project but that also results in the sustainability of the projects as a basis for betterment of the Delta region and beyond. This may be easier or more difficult depending on how the project area is defined. In some cases it may be all of a component such as the conveyance footprint or all of a BDCP habitat restoration area. In other cases it may a part of a component that is being developed sequentially. Each project would include an Agricultural Lands Stewardship Plan (ALSP), as described in Chapter 14, Agricultural Resources, Section 14.3.3.2, under Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan (ALSP) to preserve agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones. Implementation of an ALSP would consist of all the steps listed below. It may be worthwhile to consider whether there would be a benefit to developing an agricultural stewardship program for the Delta region that could provide a framework for individual ALSPs.

- A. After describing the project area, identify acreage of "Agricultural land" potentially affected. For the purposes of this document, Agricultural land means prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture land inventory and monitoring criteria as modified for California.⁶
- B. Plan project to avoid agricultural land conversion; where choices are possible, avoid "highest quality" Agricultural land. This document does not define "highest quality" but assumes that if choices can be made regarding different locations for a project it is better not to site the project where the "quality" of the resource is higher. How such determinations could be made would be the subject of further discussion. Determine amount of residual Agricultural land that will not continue to be farmed.
- C. Plan project to mitigate on site (i.e., convert areas currently not in agriculture to agriculture)⁷. Determine amount of residual Agricultural land that will not continue to be farmed.
- D. Analyze the project and the land to determine whether there is a potential significant environmental impact that must be mitigated if feasible under CEQA. This is a multi-faceted analysis that focuses on Agricultural land that is currently farmed and can continue to be farmed economically and on a sustainable basis for an indefinite period of time absent a conversion to a different use under the BDCP. In this document this land is called Important Farmland. The analysis could look at the LESA score, if appropriate; sustainability of agricultural farming (e.g.,

⁵ Note that some of the strategies discussed later in the appendix advance a broad view of "agricultural" activities.

⁶ CEQA (Pub. Resources Code section 21060.1 (a)). Note also that in the CEQ regulations that define the term "significantly", in the subsection that discusses the intensity or severity of impacts, there's a specific reference to prime farmland: "Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas" 40 CFR 1508.27(b)(3) and that the federal Farmland Protection Policy Act defines the term farmland, for the purposes of the act, to includes all land defined as follows: (A) prime farmland ..., (B) unique farmland..., (C) farmland, other than prime or unique farmland, that is of statewide or local importance.... [7 USC 4201] Section 2 (c).

⁷ Such conversions might have other environmental impacts subject to mitigation requirements.

no subsidence, adequate water supply, economic ability, etc); whether the impact is temporary and use of the land for agriculture can be restored or whether it is irreversible; whether the area is designated natural habitat in a local plan; and whether there are other benefits that help preserve agricultural resources on or near the project area (e.g., improved flood protection). As a result, in some cases, it may be determined that even though some Agricultural land is converted, it is not potentially significant. Determine amount of residual Important Farmland that will not continue to be farmed. This is land that is potentially subject to a CEQA mitigation feasibility analysis.

- E. Some Important Farmland that may be converted may also protect terrestrial species. The BDCP cultivated lands conservation strategy (under CM3) to mitigate for loss of habitat for these species may require mitigation lands off-site of the project lands to have an agricultural use similar to use on the converted land. Determine the amount of off-site land to be protected for mitigation of terrestrial species and determine what amount of this offsite land will be Important Farmland. Subtract this amount from the Important Farmland in Paragraph D. The result represents Important Farmland that is potentially subject to a CEQA mitigation feasibility analysis.
- F. Mitigation: The "conventional" approach for mitigation for significant adverse environmental effects relating to agricultural resources has generally been to purchase off-site easements of similar agricultural quality in areas that are threatened with encroaching urban development. However, aside from monetary compensation for the direct loss of lands, the conventional approach does little to help the individual farmer. In addition, given the lack of development pressure in the Delta due to regulatory restrictions and the large number of acres potentially planned for restoration by BDCP Conservation Measures and other public and private entities, the conventional approach might have to look for land outside the Delta. This appendix proposes an optional approach that focuses on the effect of the BDCP on the landowner and the Delta.
 - a. Mitigation Option 1 (Optional Agricultural Stewardship Program). The Optional Agricultural Stewardship Program would seek opportunities to protect and enhance agriculture in the Delta as part of the project landscape and focus on maintaining economic activity on agricultural lands. The BDCP proponents would partner with the landowner, farmer, local government and other interests to try to incorporate farmers' diverse needs necessary for continuing their farming practices in the Delta while carrying out the conservation components needed to achieve the BDCP's goals and objectives.

The Optional Agricultural Stewardship Program would consider agricultural stewardship strategies designed to keep the farmer on the project property and/or improve the agricultural environment in other parts of the Delta. Some of these strategies could include some aspects of the conventional program discussed below as Mitigation Option 2. Agricultural stewardship strategies to be explored are discussed below in Section IV. Some of the strategies would involve keeping the landowner/farmer on the land being converted in a way that would eliminate or reduce a potential mitigation requirement. Others, based on an assumption that there will still be mitigation requirements, would consider mitigation elsewhere in the Delta (or outside the Delta if it provided a benefit to the Delta). The Optional Agricultural Stewardship Program would probably include reporting and monitoring actions necessary to show that the actions agreed to were being carried out. Examples of the strategies to be explored include the following.

- Pay landowners to manage converted land as tidal wetlands, designate managed wetlands as agriculture, and work with counties to change Williamson Act preserve designations.
- Provide additional support for levee improvements or sediment removal.
- Provide incentives for other farmers to manage subsided land as managed wetlands.
- Purchase permanent easements on some high value agricultural land in and near the Delta.
- Work with counties in an effort to provide a neutral or positive effect on county revenues.

Some of the strategies of the Optional Agricultural Stewardship Program would help mitigate some of the direct and indirect environmental effects of the BDCP on agricultural resources. These strategies are likely to result in a reduction of potential environmental effects. Nonetheless, as described in Chapter 14, *Agricultural Resources*, even with these strategies in place, the potential environmental impacts as a result of changing the current use of agricultural land would be potentially significant.

b. Mitigation Option 2 (Conventional Mitigation Program). Where a project has been determined to have a significant adverse environmental impact, the Conventional Mitigation Program focuses on off-site easements (or similar measures) of similar agricultural quality in areas that are threatened with encroaching urban development. Mitigation for agricultural resources would most likely be coordinated with requirements to protect agricultural land off-site for mitigation of terrestrial species displaced from converted land. Different projects have taken different approaches to what is provided in the way of mitigation. Some projects have purchased easements at a 1:1 (or greater or smaller) ratio and some have found that the purchase is infeasible either because of cost or distance from project. The conventional approach usually has focused on land in the path of urban development. This approach does not usually consider the impacts on the farmer displaced or the county where the displacement occurred since these are economic impacts.

The Conventional Mitigation Program could lead to a determination that the conversion of agricultural land is potentially significant and that the purchase of easements for all significant and unavoidable impacts may not be feasible because of cost or availability of land.

IV. Agricultural Stewardship Strategies

This is a list of strategies proposed by different vision papers that could be part of an Agricultural Land Stewardship Plan under the Optional Agricultural Stewardship Program. Strategies are included that are also applicable to the Conventional Mitigation Program since those strategies may also have a role in the Optional Agricultural Stewardship Program. Each strategy will be examined for feasibility, difficulties, obstacles and other potential implementation issues. After further study some may be found to not be feasible; some may be modified and new ones may be identified. Many of the strategies have been used in other programs and a review or evaluation of projects that have used these strategies would not only help identify different types of strategies, but may also provide

- some insight as to whether the strategies work. No effort has been made to prioritize or organize
- 2 strategies with the exception that strategies to keep farmers on the land are generally earlier in the
- 3 list and off-site mitigation is later in the list. However, it should be kept in mind that many of the
- 4 strategies may apply on-site and off-site.
- 5 Each strategy will also need to be considered in the context of what kind of land (if any) is involved:
- for example (a) project land that is a necessary part of the conveyance facilities' footprint (CM1); (b)
- 7 project land that is a necessary part of the habitat restoration or enhancement conservation
- 8 measures' footprint (CMs 4–10); (c) mitigation land for terrestrial species displaced because of
- 9 habitat restoration or enhancement conservation measures; (d) non-project land kept (or put in)
- agriculture as a result of agricultural stewardship strategies and (e) non-project land that is the
- subject of other non-land strategies that could protect or improve agricultural productivity in the
- 12 Delta.

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- A. Have farmers manage habitat land for project purposes.
 - Where possible, project lands could be managed by the existing owners/operators who would be compensated to manage restored or other conserved land consistent with easements that meet the project purposes. Another option would be to pay to maintain easements on land managed by other third parties (i.e., private or public land trusts or conservancies). Where agricultural use is consistent with the conservation purpose of the easement, it is possible that these lands can be leased to farmers, as a revenue source and to provide proper management of the conserved lands. This could allow land to remain in landowners' hands, bring income to the "traditional" landowner and keep it as part of the tax base. This strategy is related to Action 2.2.3 of the Delta Vision Strategic Plan to establish new markets for innovative agricultural products and enterprises in the Delta.
- B. Work with farmers/landowners and counties to identify and incorporate recreational ecotourism components and other potential new market products in ecosystem restoration projects that could bring income to the landowner/farmer.
 - This could allow land to remain in landowners' hands, bring income to the "traditional" landowner and keep it as part of the tax base. This strategy is related to Action 2.2.3 of the Delta Vision Strategic Plan to establish new markets for innovative agricultural products and enterprises in the Delta.
- 31 C. Designate habitat production as agricultural production for specifically defined purposes.
 - There may be instances where there is an economic value to a farmer/landowner if the land can be shown to be involved in specific kinds of agricultural production which does not include habitat production. This strategy would seek to change such designations if they are a barrier to habitat production. This would be similar to federal conservation reserve programs, as a type (or equivalent) of farmland or "working landscape." An example where this has been done is legislation enacted in 2008 that identified biofuels as a compatible use under the Williamson Act. This could allow land to remain in landowners' hands, bring income to the "traditional" landowner and keep it as part of the tax base.

- D. If management by landowner or easements on landowner's land is not feasible, consider other options.
- If not feasible, consider purchase by state and transfer to private or public land trusts (or conservancies) or purchase by state with an agreement to pay tax equivalent. This could allow land to still provide a tax benefit to the counties.
 - E. Work with counties to include habitat lands in Williamson Act preserves.
 - Under current law, counties decide whether habitat lands are included in Williamson Act preserves. Many of the current Williamson Act preserve designations by counties having land in the Delta do not include habitat lands which discourages farmers from converting their land to habitat use because they might lose the advantage of current Williamson Act designations. This could allow land to remain in landowners' hands, bring income to the "traditional" landowner and keep it as part of the tax base.
 - F. Re-invigorate Williamson Act Program.

- State funding of Open Space Subventions that offset local property tax losses has been eliminated during the past several budget cycles, although the Open Space Subvention Act remains in statute. Work with others to re-invigorate the State Williamson Act Subsidy. In addition, consider ways to provide incentives to use Williamson Act contracted land, or to permit contracts to be rescinded and replaced with either Williamson Act Open Space contracts or open space easements, including ways to provide the county with additional funding.
- Priorities could be based on land that remains under Williamson Act in an Open Space Contract, land for which the contract is rescinded and replaced with a permanent open space easement, and land that is brought into new contracts as part of a mitigations strategy. This strategy could allow land to remain in landowners' hands and keep it in the Williamson Act or open space easements, but provide economic relief for counties currently faced with loss of Williamson Act subsidies.
- G. Provide technical and financial assistance to support farming of rice and development of permanently flooded wetlands in the Delta.
 - This could stabilize or reverse subsidence and may provide a potential net sink for carbon and methylmercury through particle settling and photodemethylation. This could allow land to remain in landowners' hands, bring income to the "traditional" landowner and keep it as part of the tax base. This is related to the strategy identified in the CALFED ROD to obtain easements on existing agricultural land for minor changes in agricultural practices (such as flooding rice fields after harvest) that would increase the value of the agricultural crop(s) to wildlife.
- H. Provide technical and financial assistance to support water supply reliability benefits to agricultural water users.
- Identify areas where water supply reliability is a concern to Delta farmers and look at ways to improve water reliability. This could allow land to remain in landowners' hands, add value to the land and keep it as part of the tax base. This is related to the strategy identified in the CALFED ROD to provide water supply reliability benefits to agricultural water users.

1 I. Consider ways to improve water quality for Delta farmers.

- Identify areas where water quality is a concern to Delta farmers and look at ways both within and outside the Delta to improve water quality. This could allow land to remain in landowners' hands, add value to the land and keep it as part of the tax base. This is related to the strategy identified in the CALFED ROD to use rotational fallowing to reduce selenium drainage.
- J. Provide technical and financial assistance for flood management activities which provide additional protection for agricultural activities.
 - This could be used to provide additional funding for flood management activities proposed by local flood districts or by the state or federal government. This could allow land to remain in landowners' hands and keep it as part of the tax base and add value to the land and reduce flood flight costs. This strategy is related to activities identified in the CALFED ROD to implement levee reconstruction methods that avoid or minimize the use of agricultural land and to work with landowners to establish levee subsidence BMPs that avoid impacts on land use practices.
- K. Provide technical and financial assistance for activities which prevent or reduce potential higher groundwater levels.
 - This could be activities geared towards reducing potential seepage problems caused by project or non-project activities. It could also be used to encourage farmers to carry out activities that would prevent or reduce groundwater levels that are not optimal for agricultural production, but not in a way that would subsidize ground water pumping. This could allow land to remain in landowners' hands and keep it as part of the tax base and add value to the land and reduce agricultural management costs.
- L. Provide technical and financial assistance for measures to reduce impacts of Delta agriculture on fish.
 - Funding could be used to encourage farmers to carry out "fish-friendly" activities and/or to provide funding for activities that would prevent or reduce losses to fish. The effects of agriculture diversions on fisheries in the Delta are currently not known. Although agriculture is not constrained by screening requirements, fisheries agencies have, at times, suggested that screening and/or combining agricultural diversions would reduce impacts on fisheries. There may be other measures worth considering either throughout or in different parts of the Delta. This could allow land to remain in landowners' hands and keep it as part of the tax base and add value to the land and reduce potential regulatory measures that could increase agricultural management costs.
 - M. Provide technical and financial assistance for sediment removal to improve agricultural diversions.
 - In some areas sedimentation may have created problems for pumping water from the Delta. Assistance could be provided to help streamline the regulatory process and for sediment removal. This could allow land to remain in landowners' hands and keep it as part of the tax base and add value to the land and reduce potential regulatory measures that could increase agricultural management costs.

- N. Establish buffer zones as part of habitat restoration projects ensuring that vegetation will have minimal potential to harbor pests and diseases.
 - This would provide assurances to neighboring properties that they will not be harmed by proposed projects. This could allow land to remain in landowners' hands and keep it as part of the tax base and add value to the land and reduce potential regulatory measures that could increase agricultural management costs.
 - O. Off-site mitigation.

- To the extent that off-site mitigation is determined to be appropriate, efforts should first consider maintaining a large "sustainable" area of high quality farm land in the Delta. Even though not in danger of urban development, there may be specific reasons to preserve and enhance specific areas which could provide a firm basis for agricultural economy industries and businesses and be a bridge to preserving neighboring agricultural land outside of the Delta primary (or even secondary) zone. However, at least in the context of the BDCP, the conversion of agricultural land can be thought of in terms of its regional significance and it may be appropriate to go beyond the project's surrounding area, including considering easements and activities outside of the Delta that might provide benefits to the Delta.
- P. Consider effects on agricultural infrastructure and/or concentric economic impacts

 These would most likely be considered indirect economic impacts and are likely to be harder to quantify. One possibility would be to consider whether it makes sense to limit the percentage of agricultural land use change in a specific area.
- Q. Consider opportunities to coordinate with others in helping to develop a sustainable agricultural land community in the Delta Region consistent with ecosystem conservation and restoration activities.
 - There are a number of state, local and non-profit efforts directed either at conserving and restoring wetlands and/or farmland. There may be ways to coordinate and enhance such efforts⁸ such as through sharing information; developing common definitions; and identifying common objectives and goals.⁹
 - Thought could also be given to a process that would develop a programmatic approach that recognizes the value of natural habitats with agricultural components or agricultural habitats with natural components rather than treat each land use independently. Some of the strategies identified might work better if there is a coordinated approach to the development of an overall restoration/land use strategy for the Delta. It may be helpful to develop a land stewardship program for the delta region which looks at all land uses and would provide a framework for individual projects.

⁸ An initial list would include the five Delta counties, Central Valley Flood Protection Program, the Delta Levees Program, the Regional Advance Mitigation Program, the DFG Environmental Restoration Program, the State Wildlife Action Plan, the California Water Plan, Department of Conservation and Food and Agriculture, Delta Protection Council, Delta Conservancy, existing and planned habitat conservation plans and natural community conservation plans, NCRS programs and other non-governmental conservation and restoration plans of agencies such as TNC, Ducks Unlimited, Point Reyes Land Trust.

⁹ One approach to consider is the Ramsar Convention for Wetlands that includes the concept of "wise use" of wetlands which is the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development (Ramsar Convention on Wetlands 1994).

- 1 R. Consider timing of BDCP components and timing of mitigation measures.
- 2 Include adaptive management principles with regard to farmer/landowner involvement.
- S. Consider ways to provide incentives for farmers to participate in the BDCP program and make the regulatory system work better for individual farmers/landowners participating in conservation and restoration actions in the optional mitigation program.
- 6 Look at whether there is information that could help regulatory agencies do their job better and sooner.
- 8 Provide safe harbor agreements for farmers carrying out habitat conservation and restoration.
- 9 T. Look at ways to provide multiple benefits from mitigation actions.
- 10 U. Coordinate regulatory reviews and reduce duplication, where appropriate.
- 11 V. Consider possibility of delta-wide (or sub-region) permits.
- W. Other options with regard to mitigation options.

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V. Potential Sources of Funding

- In considering whether and how to obtain subsidies for an Optional Agricultural Stewardship
 Program, the BDCP proponents shall be guided by, at a minimum, the following strategies and
 principles, as applicable:
 - In determining whether the funds necessary to make an alternative additional mitigation program feasible are necessary and acceptable, the BDCP proponents shall be guided by the principle that funds that might otherwise be necessary for off-site preservation or another form of compensation may be made available instead to assist with making it economically feasible for the owner(s) and/or operator(s) to be employed on an ongoing basis working the landscape of the Delta in a manner consistent with the BDCP while making a viable living.
 - The BDCP proponents shall attempt to work with the California Air Resources Board (CARB) to
 establish a greenhouse gas offset market using credits created through the development and
 restoration of wetlands.
 - The BDCP proponents shall seek any available funding from CARB's "Cap and Trade" program developed pursuant to the Global Warming Act Solutions Act of 2006 (AB 32).
- The BDCP proponents shall consider recommending to the Governor and Legislature that funds for subsidies for Optional Agricultural Stewardship Programs be included in any bond measure(s) placed on the statewide ballot.

VI. References

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