

DRAFT

AGRICULTURAL LAND STEWARDSHIP STRATEGIES
DISCUSSION PAPER

MAINTAINING DELTA AGRICULTURE

Chapter 1 (updated)

November 2013



For web version of the paper, see <https://agriculturallandstewardship.water.ca.gov/>

DRAFT
AGRICULTURAL LAND STEWARDSHIP STRATEGIES
DISCUSSION PAPER
MAINTAINING DELTA AGRICULTURE

Table of Contents

EXECUTIVE SUMMARY	4
TABLE ES-1 TOOL BOX OF POTENTIAL AGRICULTURAL LAND STEWARDSHIP STRATEGIES	6
CHAPTER 1: POTENTIAL STRATEGIES	11
GROUP A. STRATEGIES TO HELP MAINTAIN FARMING	12
GROUP B. POTENTIAL STRATEGIES THAT PROVIDE INCENTIVES FOR CONSERVATION ON FARMLAND	55
GROUP C. POTENTIAL STRATEGIES TO MANAGE LAND FOR PURPOSES OTHER THAN CONVENTIONAL CROP PRODUCTION	61
GROUP D: STRATEGIES THAT PROVIDE FOR ECONOMIC DEVELOPMENT AND OTHER BENEFITS	69
TABLE 2-2: AGRICULTURAL STEWARDSHIP STRATEGIES AND IMPLEMENTATION	100
TABLE 2-3: AGRICULTURAL STEWARDSHIP STRATEGIES AND FUNDING	102

This page is intentionally left blank

DRAFT

Executive Summary
AGRICULTURAL LAND STEWARDSHIP STRATEGIES
DISCUSSION PAPER
MAINTAINING DELTA AGRICULTURE

Even with implementation of the mitigation measures and commitments proposed in the Spring 2013 Consultant Administrative Draft Bay Delta Conservation Plan (BDCP) and Environmental Impact Report/Environmental Impact Statement (EIR/EIS), there will still be impacts to Delta agriculture. This paper sets forth a menu of potential agricultural land stewardship strategies that can be considered by decision makers when discussing appropriate mitigation measures or enhancements that support the Delta as a place. The approach outlined in this document does not try to distinguish environmental from economic impacts.

The potential strategies listed in Table ES-1 and discussed in Chapter 1 were developed following conversations with Delta and other interests. At this time, there is no agreement that any potential strategy be pursued as a result of this paper. The primary purpose of the paper is to get additional feedback from Delta interests with regard to whether these are strategies they would like to see implemented, whether they are adequately described and whether there are additional strategies that should be included. Some of the potential strategies are still in development.

People wanting to review the documents can go to <https://agriculturallandstewardship.water.ca.gov> where they can download copies and complete a Feedback Form on line. Comments received will be considered in subsequent versions of the strategy paper and be treated as public records. Requests to meet to discuss issues raised by the paper should be sent to: DWR AgriculturalStewardshipInfo@water.ca.gov

It is expected that implementation of the strategies would be voluntary on the part of the landowner, farmer and local government; that it would not conflict with the implementation of ongoing ecosystem restoration or BDCP conservation measures; and that it would be consistent with state wide and regional policies.

This paper assumes that, with the exception of current estimates for BDCP project and mitigation costs, additional funding will be necessary to implement any one of the strategies. Such funding could be part of a bond program, cap and trade revenues, greenhouse gas emission reduction programs or other sources still to be determined. There are a number of institutional structures that could be used or built upon to distribute funds that might be developed.

Implementation of a strategy could be carried out with regard to one or more of three different kinds of activities. Chapter 2 provides more discussion on implementation and funding. See the following link for Chapter 2:

DWR ALS Workgroup: Maintaining Delta Agriculture: Draft ALSS Discussion Paper: Chapter 1: October 2013

<https://agriculturallandstewardship.water.ca.gov/web/guest/chapter-2-implementation-funding>.

- BDCP planning to include agricultural considerations
- An Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP
- Enhancements for the Delta as a place, consistent with the Delta Plan.

Potential strategies are organized in four categories:

- Strategies to help maintain farming in the Delta
- Strategies that provide incentives for conservation on farmland
- Strategies to manage land for purposes other than conventional crop production
- Strategies that provide for economic development and other benefits

The discussion of each strategy covers its topics in the following order:

- Description of the strategy
- Related policies and program
- Issues
- BDCP and EIR/EIS
- Opportunities and potential partners

Table ES-1 Tool Box of Potential Agricultural Land Stewardship Strategies

Framework for Agricultural Land Stewardship Planning

- A. Incorporate Tool Box of ALS Strategies into planning processes
- B. Develop Agricultural Land Stewardship Plans for projects

Group A: Potential strategies to help maintain farming

Strategy 1: Improve flood management

Strategy 1a: Enhance programs that protect agriculture from flood damage

Strategy 1b: Help farmers comply with FEMA flood insurance regulations

Strategy 1c: Help with local flood response efforts (under development)

Strategy 2: Maintain or improve on-farm agricultural productivity, including assisting with water quality regulatory compliance

Strategy 3: Project Planning (under Development)

Strategy 3a: Early project planning to avoid use of agricultural land

Strategy 3b: Involve farmers and local community in project planning

Strategy 3c: Determine mitigation or assistance, as appropriate for environmental and social/economic impacts of projects

Strategy 4: Empty

Strategy 5: Empty

Strategy 6: Control terrestrial weeds

Strategy 6a: Reinvigorate County Weed Management Areas

Strategy 6b: Prioritize invasive weeds for area-wide control

Strategy 6c: Encourage use of weed-free construction materials

Strategy 7: Reduce conflict between agriculture and nearby habitat lands by adopting a "good neighbor" policy

Strategy 8: Work with other interests to explore the value of reinstating state funding of California Land Conservation (Williamson) Act subventions

Strategy 9: Cooperate with counties

Strategy 9a: Explore relationship between project and county planning activities (under development)

Strategy 9b: Work with counties to expand California Land Conservation (Williamson) Act authorized uses to include open space/habitat lands in California Land Conservation Act Preserves

Strategy 9c: Investigate options for in lieu tax revenue for counties and payments for special districts

Strategy 10: Empty

Strategy 11: Provide for agricultural conservation easements

Group B: Potential strategies that provide incentives for conservation on farmland

Strategy 12: Partner with others to maintain and enhance environmental quality on farmland

Strategy 13: Compensate farmers to manage agricultural land as habitat for wildlife

Strategy 14: Provide incentives for farmers to take part in a market based conservation program

Group C: Potential strategies to manage land for purposes other than conventional crop production

Strategy 15: Provide incentives to stabilize or reverse land subsidence on Delta islands

Strategy 16: Assist landowners to produce and sell greenhouse gas offset credits in the AB 32 Cap-and-Trade program

Strategy 17: Compensate farmers to manage habitat lands

Strategy 18: Designate carbon sequestration and subsidence reversal crops as agricultural production for regulatory and incentive programs (under development)

Group D: Potential strategies that focus on economic development and other benefits

Strategy 19: Develop area-wide economic and land use studies

Strategy 19a: Develop an historic and current land use study

Strategy 19b: Develop an economic study of agricultural activity and related infrastructure

Strategy 19c: Develop a plan for protection and restoration of habitat areas that takes into consideration vitality of agricultural economy (under development)

Strategy 20: Promote economic development

Strategy 21: Improve transportation infrastructure

Strategy 22: Assist farmers who want to manage their land to incorporate recreation and tourism

Strategy 23: Assist farmers in working with governmental agencies

Strategy 23a: Project proponents could establish a public advisor position to serve as an information source for those wanting to more about a proposed project (under development)

Strategy 23b: Farmbudsman – Help farmers navigate regulatory requirements for farm activities.

Strategy 23c: Work with others to better align regulatory processes to expedite wildlife friendly agriculture

Strategy 24: Work with others to identify bond or other funding to help sustain vital economies (under development)

Strategy 25: Work with others to develop a fund (or funds) and governance system to allocate money designated for mitigation of impacts to agriculture and/or for sustaining a vital economies (under development)

DRAFT

DRAFT

**AGRICULTURAL LAND STEWARDSHIP STRATEGIES
DISCUSSION PAPER**

MAINTAINING DELTA AGRICULTURE

DRAFT

CHAPTER 1

POTENTIAL STRATEGIES

Chapter 1: Potential Strategies

This chapter discusses each strategy in the categories listed below. Each strategy covers its topics in the following order:

- Description of the strategy
- Related policies and program
- Issues
- BDCP and EIR/EIS
- Opportunities and potential partners.

Group A. Potential strategies to help maintain farming

This set of strategies discusses a number of strategies for technical and financial assistance for agriculture, including for flood protection, control of terrestrial weeds, high water management, water quality improvements, sediment removal, and water supply reliability. It also includes a discussion of a “good neighbor” policy, the use of conservation easements on agricultural land; the Williamson Act and options for an *in lieu* tax revenue. Description of several of these strategies is still in development.

Group B. Potential strategies that provide incentives for conservation on farmland

This section offers ways to enhance environmental quality on farmland, including wildlife-friendly agriculture, management of farmland for habitat purposes, and establishment of habitat features by farmers that can be offered for sale as credits in a market based conservation program.

Group C. Potential strategies to manage land for purposes other than conventional crop production

This section discusses ways for landowners and lessees to earn income from growing crops other than food and fiber, mainly wetland plants. Such vegetation could provide an economic return for its role in reversing land subsidence, mitigating greenhouse gas emissions, or helping meet environmental permitting requirements.

Group D. Potential strategies that provide for economic development and other benefits

This section offers strategies to help maintain a sustainable agricultural, social and economic community in the Delta region. The description of strategies for this section is still in development.

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 1: Improve flood management

Strategy 1a: Enhance programs that protect Delta agriculture from flood damage

DESCRIPTION

This strategy would enhance existing programs that protect Delta agriculture from flood damage. Improvements to flood protection could include strengthening or otherwise rehabilitating levees, enhancing floodwater bypasses, arresting riverbank and levee toe erosion, removing obstructions to floodwater flow, removal of levee encroachments, and constructing floodgates. Many such projects could be designed to benefit flood-dependent ecosystems as well.

RELATED PROGRAMS AND POLICIES

DWR provides engineering assistance and funds to Delta reclamation districts to maintain and improve levees and other flood protection facilities in a way that avoids environmental damages and enhances habitat. This work is accomplished through the Delta Subventions and Special Projects efforts. DWR's Division of Flood Management is preparing Basin-Wide Feasibility Studies (including Paradise Cut bypass options) and Regional Flood Management Plans that aim for better flood protection in the Delta for areas protected by levees that are part of the State Plan of Flood Control. The Lower Sacramento River/Delta North Regional Flood Management Plan is investigating the feasibility of SPFC improvements along the Sacramento River, the Yolo Bypass, Steamboat Slough, Sutter Slough and other watercourses in the North Delta. DWR is also seeking improvements to flood emergency preparedness at all levels of government in the Delta region via multi-agency coordination, emergency planning and exercises, and increased capacity to fight floods.

The Delta Stewardship Council has recommendations in its draft Delta Plan to (1) improve emergency preparedness and response, (2) finance and implement flood management activities, (3) prioritize flood management investment, (4) improve residential flood protection, (5) protect and expand floodways, floodplains and bypasses, (6) integrate Delta levees and ecosystem functions, and (7) limit State liability.

ISSUES

Flood protection projects could be potentially controversial because of economic feasibility, environmental and social impacts, and questions about how to pay for the projects. There are also issues about how to prioritize projects.

OPPORTUNITIES AND POTENTIAL PARTNERS

In 2012, a highly diverse group of stakeholders came together as an ad hoc group, The Coalition to Support Delta Projects, whose goal, was to identify near-term Delta projects whose implementation the group could unanimously support. Numerous Delta interests took part, including several water agencies and reclamation districts, the Delta Counties Coalition, representatives from four county governments, Local Agencies of the North Delta, and Restore the Delta. Several funding and permitting agencies attended the meetings and helped the group understand potential issues, but otherwise remained neutral. The group developed a list of projects and submitted it to the Governor, the Secretary for Natural Resources, the Secretary for Environmental Protection, and the Acting Secretary of the Business, Transportation and Housing Agency.

The published list of supported projects includes twenty-eight whose main purpose or benefit is flood protection. Several projects also have ecosystem benefits. Nearly all of the projects would improve flood protection for agricultural lands. Seven projects have already begun, four need only permits or funding in order to get started, and the remainder requires detailed engineering or design work. The ad hoc group noted that the total cost of the projects exceeds available funds by about \$500 million.

This strategy could focus on supporting the projects recommended by the Coalition. DWR, as the State's principal flood management agency, would need to play a role. To the extent that any projects are within the jurisdiction of the Central Valley Flood Protection Board, it would also need to be involved.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 1: Improve flood management

Strategy 1b: Help farmers comply with FEMA flood insurance regulations

DESCRIPTION

Outside the major cities, most of the Delta is mapped into the Federal Emergency Management Agency (FEMA) 100-year floodplain (Special Flood Hazard Area). These areas must meet community-mandated National Flood Insurance Program (NFIP) standards as they apply to both residential and nonresidential structures, including barns, agricultural storage sheds and drying sheds.

New residential structures, including major additions, must have the first floor elevated above the NFIP base flood elevation (that is, the 100-year-flood water surface shown on the FEMA effective flood insurance rate map). Required elevation of first floors can well exceed eight feet above the natural grade of the adjacent ground. Nonresidential structures that are not used for agriculture must be dry-flood proofed or elevated above the base flood elevation. Agricultural structures must be elevated or dry-flood proofed unless the community grants a variance to the community floodplain management ordinance or building code. FEMA's minimum regulations allow for a variance for nonresidential agricultural structures and their contents, provided that flood damage is limited by practices such as storage of pesticides and other farm chemicals above the base flood elevation, use of flood-resistant materials for construction, and elevation of utilities that could be damaged during a flood.

This strategy would help agricultural and other rural property owners in the Delta to meet community-adopted NFIP standards, either through buyouts, relocation, structural elevation, or flood-proofing. The financial losses caused by flooding of structures and contents could also be mitigated through the purchase of federally-backed flood insurance. Potential actions include the following:

- elevating existing homes above the base flood elevation
- providing grants for new homes and agricultural structures to be built above the base flood level
- buying out or relocating residential and nonresidential structures that cannot be elevated or retrofitted
- retrofitting existing nonresidential structures to minimize potential flood damage

- helping farmers pay for flood insurance for homes or other structures
- helping pay for crop insurance against natural disasters

RELATED PROGRAMS AND POLICIES

The Department of Water Resources is the coordinating State agency that works with FEMA and the United State Army Corps of Engineers to promote wise floodplain management and on the implementation and management of the NFIP. DWR also applies for grants under the family of FEMA hazard mitigation grants referred to as the Hazard Mitigation Assistance (HMA) Program. HMA grants generally provide 75% to 80% of the funding to implement hazard mitigation projects that include home elevation and small flood control projects. Through Community Development Block Grants, the federal Department of Housing and Urban Development (HUD) can provide funding to assist low-income property owners purchase flood insurance. Regional Flood Management Plans (being prepared by local interests) and Basin-Wide Feasibility Studies (being prepared by DWR) may expand on strategies related to flood risk reduction and compliance with the NFIP. The State Systemwide Investment Approach (SSIA) in DWR's Central Valley Flood Protection Plan (CVFPP) recommends measures to reduce flood risks in rural and agricultural areas.

ISSUES

FEMA grants under the HMA Program are competitive and most funding is dependent on post-disaster monies made available after a presidential disaster declaration. Even with a state cost-share, many communities cannot raise the funds that are required for projects. Community Development Block Grants from HUD are also competitive and may not be awarded until after the occurrence of a disaster. Due to the implementation of the NFIP Reform Act of 2012 (Biggert-Waters 2012), some properties located in FEMA 100-year floodplains are losing their historic flood insurance subsidies and flood insurance rates will be rising in each of the next five years. For a home with the first floor located four feet below the base flood elevation, NFIP flood insurance rates may rise to above \$9,000 per year.

OPPORTUNITIES AND POTENTIAL PARTNERS

Purchase of flood insurance through the NFIP is a reasonable method to mitigate potential flood damages. Elevation of existing structures, elevation of new structures, and flood proofing/retrofitting agriculture and nonresidential structures are viable and proven means of reducing flood risk. Federal funds may be available under the existing FEMA HMA Program. Funds may also be available through HUD Community Development Block Grants for low income communities. Implementation of DWR's

CVFPP-SSIA and the related Lower Sacramento River/Delta North Regional Flood Management Plan and CVFPP Basin-Wide Feasibility Studies, which are currently under development, may provide a vehicle for implementation of measures within this strategy.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 1: Improve flood management

Strategy 1c: Help with local flood response efforts (under development)

Feel free to make suggestions regarding this strategy through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 2: Maintain or improve on-farm agricultural productivity, including assisting with water quality regulatory compliance

DESCRIPTION

Farmers in the Delta face different on-farm problems that can affect the productivity of the land. Channel sedimentation is a problem in parts of the Delta that can make irrigation pumping for some farmers more difficult or more costly or prevent it altogether. It can also restrict channel capacity and create problems for marinas. Pumping and drainage from agricultural lands can also create water quality problems for landowners and other downstream users. Other farmers may face problems from high salt levels in the soil. Drainage and water supply canals and crossings may not be in the optimal positions. This strategy would provide farmers with technical and financial assistance for on-farm water management activities such as those listed below. This strategy is not intended to cover water quality impacts caused by operation of the SWP, CVP or the BDCP conveyance facility which are being discussed in other arenas. See discussion below on assisting farmers in meeting their own water quality regulatory requirements. Possible measures would include:

- Creating GIS-based topographic or other types of maps of their land that would help farmers better understand and manage their land. For example, GIS-based topographic maps could be used to decide whether there are drainage problems and help determine appropriate solutions.
- Regional weather networks, such as CIMIS, for irrigation scheduling.
- Providing portable pumps to improve water quality by removal of soil salts through drainage.
- Facilitate changes in timing of pumping or discharging water to improve water quality and supply by
 - Providing larger pumps, deepening wells, or extending existing local agricultural diversions further into deeper water
 - Helping to build small holding ponds for drainage water so that it can be released at a time when water quality issues for downstream users are less likely to occur.
- Consolidate intakes.

- Selectively dredging small areas to improve flow conditions and operation of agricultural siphons to provide for better water quality or supply, for example in Middle River, Old River, and West Canal in the South Delta.
- Improve agricultural and wetland management crossings.
- Maintenance and improvement of drainage and water supply canals.

This strategy could also provide technical or financial assistance for the implementation of practices to protect soil from erosion and to keep soil and agricultural chemicals, including fertilizers and pesticides, from entering ground and surface water. In 2003, the Central Valley Regional Water Quality Control Board adopted a new set of regulations pertaining to discharges of waste from irrigated agricultural lands into waters of the State. The purpose of the program is to prevent agricultural discharges from impairing the waters that receive these discharges. These regulations, which are referred to as the Irrigated Lands Conditional Waiver Program provided an individual irrigator with an option to join a coalition group or to participate directly in the program as an individual. This Strategy differs from Strategy 23b which is focused on decreasing actual and perceived regulatory obstacles on agriculture-related businesses seeking to expand, enhance, and/or maintain their operations. Some of the practices envisioned could also be used in Strategy 12 (partner with others to maintain and enhance environmental quality on farmland) and include:

- assistance in preparation of required plans such as farm evaluation plans, nitrogen management plans and sediment and erosion control plans
- installation and maintenance of riparian forest buffers
- grassed waterways
- windbreaks and hedgerows
- cover crops and mulch
- no-till, minimum till or direct seeding
- inter-cropping
- tailwater recovery ponds and sediment basins

RELATED PROGRAMS AND POLICIES

- As part of the Suisun Marsh Preservation Agreement, the Department of Water Resources and the U.S. Bureau of Reclamation currently fund a mitigation program in the Suisun Marsh that provides portable pumps to farmers, as needed, to drain high salinity water from agricultural land to increase productivity. This is used as mitigation during drought years for high salinity soil. For this program specifically, pumps provide removal of salty water through drainage. These pumps provide temporary drainage and can be moved around among farmers. This program is managed by the Suisun Marsh Resource Conservation District.
- In the past, DWR has occasionally been able to find funding to voluntarily dredge an area in the delta which provided relief for a number of years. If funding could be found for continued dredging, it would help the farmers in the area.
- *Try new BMPs at no risk:* The Nutrient *BMP Challenge*¹ allows growers to try current BMP application rates for N, P or K without risk to income. Producers already working at BMP fertilizer application rates can experiment with below-BMP nutrient applications. Any loss of income due to lower yield will be compensated by the program. Limitation: currently limited to corn producers.
- *BMPs and training:* University of California Division of Agriculture and Natural Resources used to offer a *Farm Water Quality Planning Series* to provide training for irrigated crop growers who are interested in water quality protection practices.
- *State bond funding to implement BMPs:* Proposition 84 money has been used to help Central Valley farmers to implement agricultural water quality improvement projects. The funding, available through a bond initiative approved by California voters in 2006, was awarded to Coalition for Urban Rural Environmental Stewardship (CURES) by the State Water Resources Control Board.
- The Delta Conservancy has convened a Habitat Enhancement of Working Landscapes Coalition, to coordinate efforts to enhance the habitat value of working landscapes and benefit agriculture in the Sacramento-San Joaquin Delta. Working with partners (Delta Protection Commission (DPC), the Natural Resources Conservation Service, the five Delta county Resources Conservation

¹ The BMP Challenge is backed by a commercial service agreement provided by Agflex, an Iowa corporation.

Districts (RCD), Point Blue Science Center (previously PRBO), The Nature Conservancy, Audubon California, Ducks Unlimited, and the Delta agricultural community) the group has developed shared objectives and a suite of innovative management practices and project activities that focus on addressing agricultural needs and providing benefits to terrestrial species, waterfowl and other avian species, aquatic species and water quality.

- The NRCS and RCDs provide technical and financial assistance for the practices named above. For example, the NRCS Conservation Stewardship Program makes annual payments for the environmental benefits produced by the practices, and scales payments to match the level of benefits. The DPC sponsors the Delta Working Landscapes Program, a group of projects which demonstrates how farmers can integrate habitat restoration into farming practices. The program established hedgerow grass plantings and other vegetative buffers along irrigation ditch banks to separate farm fields from waterway. These served to reduce runoff of sediment and pesticides, reduce herbicide use, enhance levee stability, and retard levee erosion, among other benefits.
- CDFA's Fertilizer Research and Education Program (FREP) facilitates and coordinates research and demonstration projects by providing funding, developing and disseminating information, and serving as a clearinghouse for information on fertilizing materials.

ISSUES

- Some farmers may not want to participate because of their reluctance in dealing with State or federal agencies.
- There may be impacts on wetlands and other natural resources habitats, water quality and hydrology that would need to be avoided or mitigated;
- Nutrients may be lost as a result of drainage
- Permits may be needed to install or operate facilities.
- The measures may not be a permanent solution.
- Some of the measures could increase subsidence and increase GHG emissions.
- Determining what to fund, how to fund it and how to avoid other adverse impacts is a challenge.
- Whether cost-sharing should be part of the plan

BDCP

The measures described above are not part of the Spring 2013 Draft BDCP or EIR/EIS. They could form the basis for an Optional Agricultural Land Stewardship

Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta Plan.

OPPORTUNITIES AND POTENTIAL PARTNERS

The Natural Resource Conservation Service (NRCS) and local resource conservation districts (RCDs) may be possible partners since these are techniques that can help farmers increase the productivity of their land. Other partners might include reclamation and irrigation districts, UC Cooperative Extension, the Delta Conservancy and the Delta Protection Commission.

The San Joaquin County & Delta Water Quality Coalition (<http://www.sjdeltawatershed.org/>) and the East San Joaquin Water Quality Coalition (<http://www.esjcoalition.org/home.asp>) for water quality issues

Partner with CDFA and other agricultural research organizations such as the University of California Cooperative Extension to create or extend programs such as re-establishing the *Farm Water Quality Planning Series*, or administering a program similar to the Nutrient BMP Challenge that includes more crop types than just corn.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 3: Project Planning (under Development)

Strategy 3a: Early project planning to avoid use of agricultural land (under Development)

Feel free to make suggestions regarding these strategies through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 3: Project Planning (under Development)

Strategy 3b: Involve farmers and local community in project planning (under Development)

Feel free to make suggestions regarding these strategies through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 3: Project Planning (under Development)

Strategy 3c: Determine mitigation or assistance, as appropriate for environmental and social/economic impacts of projects (under Development)

Feel free to make suggestions regarding these strategies through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 4: Empty

Feel free to make suggestions regarding these strategies through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 5: Empty

Feel free to make suggestions regarding these strategies through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 6: Control terrestrial weeds

Strategy 6a: Reinvigorate County Weed Management Areas

DESCRIPTION

The strategy would assist Delta county Weed Management Areas (WMAs) to coordinate and implement weed management projects in the Delta with farmers and other Delta partners. Example projects are early detection, eradication, and control of invasive plants, such as perennial pepperweed and medusahead, in and around agricultural and grazing land.

Controlling the spread of invasive weeds on agricultural lands has the potential to reduce the spread of weeds onto any adjacent habitat reserves or protected areas in the Delta, potentially reducing management costs. Therefore, multiple benefits can be obtained from investing in weed management programs.

WMAs are local stakeholder groups working on weed projects and usually led by the County Agricultural Commissioners or local Resource Conservation District. Each WMA develops a strategic plan that identifies its top priorities for local management. The WMAs that overlap the Delta are Alameda-Contra Costa, Sacramento, Northern San Joaquin Valley, Solano, and Yolo.

Once identified, invasive weed populations could be prioritized by the WMA for management using online region-wide prioritization tools (see Potential Strategy 6b). Landowners could help detect target weeds on their land, including those rated as noxious or invasive by the California Department of Food and Agriculture (CDFA) or listed by the California Invasive Plant Council (Cal-IPC). Where weed management is needed, the work could be contracted to landowners through their local WMA. Landowners are welcome to participate in their local WMA and landowner participation in a WMA could be a condition for farmers to receive WMA funds to implement weed management on their land.

This strategy would benefit farmers because invasive weeds are expensive to manage, and some species of invasive weeds may reduce crop yield, decrease property value, and cause illness or death when consumed by livestock. Additionally, weeds can add fuel to wildfires and impede water flow in canals and streams.

RELATED PROGRAMS AND POLICIES

The California Department of Food and Agriculture (CDFA) administered the WMA program until the funding ended (<http://www.cal-ipc.org/policy/state/wma.php>). The program infrastructure still exists and many WMAs continue to meet.

ISSUES

Permits may be necessary for chemical treatment, possibly including NPDES permits for use of herbicides near water. Environmental impacts from chemical treatments may need to be addressed via CEQA. Non-chemical treatments (e.g., controlled burning, hand clearing, or grazing) are generally expensive, time consuming, or hard to implement/coordinate with residents and agencies.

BDCP and EIR/EIS

Conservation Measure 13 of the Spring 2013 Draft BDCP deals with invasive aquatic control and includes controlling *Egeria*, water hyacinth and other invasive aquatic vegetation through chemical, mechanical and potentially biological control. Implementation also includes research and early detection and rapid response programs. Although the focus of the program is to benefit the biological goals of the BDCP, agriculture and other local interests may benefit from the program. See 3.4.13 of the Spring 2013 Draft BDCP.

Neither the Spring 2013 Draft BDCP nor EIR/EIS propose measures to control unwanted terrestrial vegetation. Depending on how it is implemented, this strategy could be a standard of practice which is part of BDCP planning to include agricultural considerations; form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta Plan.

PARTNERS AND OPPORTUNITIES

See above on Related Programs and Policies.

USDA Grant and Partnership Programs for Invasive Species are available to private land owners, tribes, and farmers and encourage them to enhance or restore habitat, including invasive species management, or convert degraded agricultural land into wildlife habitat on their property:

<http://www.invasivespeciesinfo.gov/toolkit/grantsusda.shtml>. The strategy could provide assistance to the WMAs with the grant application and the cost-share portion.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 6: Control terrestrial weeds

Strategy 6b: Prioritize invasive weeds for area-wide control

DESCRIPTION

The strategy would provide technical assistance to inventory infestations of target invasive plant species and prioritize them for eradication Delta-wide.

There are 130 known CDFA-rated noxious weeds and Cal-IPC-listed invasive plant species in the Delta. In order to assist in regional eradication for the worst of these species, technical assistance could be provided to establish a process similar to the Bay Area Early Detection Network (BAEDN) program to prioritize known infestations using WHIPPET (Weed Heuristics: Invasive Population Prioritization for Eradication Tool). As proposed in Potential Strategy 6a, treatments could then be done through contracts with the landowner through the local Weed Management Areas to treat on private land or contracted with the California Conservation Corps for work on public-owned land.

WHIPPET is a new decision-making tool to help prioritize weed populations for eradication so that land managers can systematically target weed infestations by putting their limited resources into populations known to cause the greatest impacts, are most likely to spread, and are most feasible to eradicate.

This strategy, in concert with Potential Strategy 6a, would complement the efforts of the Department of Boating and Waterways by addressing additional terrestrial invasive plant species that are problematic for agriculture, and often for native vegetation communities as well.

RELATED PROGRAMS AND POLICIES

BAEDN is a collaborative partnership in the nine-county Bay Area that coordinates early detection and rapid response to infestations of invasive plants, proactively dealing with new outbreaks before they can grow into large and costly environmental threats. BAEDN used WHIPPET to prioritize populations of target weed species.

CDFA designates plant species as noxious weeds and maintains a noxious weed list per the California Food and Agricultural Code and Title 3 of the California Code of

Regulations. When listed as noxious, each weed receives a rating based on its statewide importance as a pest, the likelihood that eradication or control efforts would be successful, and the present distribution of the weed in the state. CDFA uses the noxious weed list to prioritize weed control and eradication throughout the state.

Weed managers may also consider the National Park Service Exotic Plant Management Program as a model for forming strike teams to assist landowners to respond swiftly to protect their land from invasive plants.

ISSUES

Farmers may not be familiar with Cal-IPC, BAEDN, Calflora, and WHIPPET and how these partners and tools are beneficial.

Draft BDCP and EIR/EIS

Conservation Measure 13 of the Spring 2013 Draft BDCP deals with invasive aquatic control and includes controlling *Egeria*, water hyacinth and other invasive aquatic vegetation through chemical, mechanical and potentially biological control. Implementation also includes research and early detection and rapid response programs. Although the focus of the program is to benefit the biological goals of the BDCP, agriculture and other local interests may benefit from the program. See 3.4.13 of the Spring 2013 Draft BDCP.

Neither the Spring 2013 Draft BDCP nor EIR/EIS propose measures to control unwanted terrestrial vegetation. Depending on how it is implemented, this strategy could be part of BDCP planning to include agricultural considerations; form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta Plan.

PARTNERS AND OPPORTUNITIES

Resource Conservation Districts (RCDs) implement various types of conservation projects on public and private lands and educate landowners and the public about resource conservation. Project activities conducted by the RCDs include, but are not limited to, agricultural land conservation, wildlife habitat enhancement, and wetland conservation. Weed managers could consider engaging the RCDs in helping to educate farmers about invasive species and the benefits of removal as well as provide technical assistance to identify weed populations and prioritize control or eradication on agricultural land.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 6: Control terrestrial weeds

Strategy 6c: Prioritize invasive weeds for area-wide control

DESCRIPTION

Work with County Agricultural Commissioners in the Delta to certify noxious and invasive weed-free products for use in construction and erosion control projects.

Hay and straw can contain viable weed seeds if harvested from fields where weeds are allowed to develop seed. When used for erosion control wattles, these contaminated products can spread noxious and invasive weeds to new areas. The use of certified weed-free materials is one way to prevent the spread of noxious and invasive weeds.

According to a survey conducted in April 2010, the Delta counties with active weed-free certification programs include Alameda, Contra Costa, San Joaquin, Solano, and Yolo, but not Sacramento. PG&E and Caltrans use weed-free materials in construction, operation, and maintenance activities. Encouraging other users to have a policy to use local, weed-free materials for construction, operation, and maintenance project would help expand the market for these products and local growers could have more incentive to manage their fields to produce materials that can be certified as weed free.

This strategy would benefit farmers by increasing their revenue because their product would be purchased for habitat and other projects. The region would benefit because moving the product would not contribute to further noxious and invasive weed infestation.

RELATED PROGRAMS AND POLICIES

County Agricultural Commissioners and CDFA administer the weed-free certification program. Weed-free certification is a voluntary program for producers. Weed-free certification may also be applied to forage for livestock.

Information regarding certified weed-free forage and straw resources and list of available suppliers can be found on Cal-IPC's website: <http://www.cal-ipc.org/ip/prevention/weedfreeforage.php>.

The California Invasive Plant Council has published Prevention Best Management Practices for Land Managers and addresses using weed-free materials: http://www.cal-ipc.org/ip/prevention/PreventionBMPs_LandManager.pdf

ISSUES

Planning ahead is necessary. Growers need to know early in the year (January/February) whether there will be demand for weed-free certified product. Inspections usually take place in June/July before harvest.

Weed-free certification programs usually inspect for noxious weeds from the CDFA Noxious Weed List, so there would need to engage in discussions with the County Agricultural Commissioner regarding expanding the weed-free certification to include invasive species listed by the California Invasive Plant Council.

BDCP and EIR/EIS

Conservation Measure 13 of the Spring 2013 Draft BDCP deals with invasive aquatic control and includes controlling *Egeria*, water hyacinth and other invasive aquatic vegetation through chemical, mechanical and potentially biological control. Implementation also includes research and early detection and rapid response programs. Although the focus of the program is to benefit the biological goals of the BDCP, agriculture and other local interests may benefit from the program. See 3.4.13 of the Spring 2013 Draft BDCP.

Neither the Spring 2013 Draft BDCP nor EIR/EIS propose measures to control unwanted terrestrial vegetation. Depending on how it is implemented, this strategy could be a standard of practice which is part of BDCP planning to include agricultural considerations; form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta Plan.

PARTNERS AND OPPORTUNITIES

County Agricultural Commissioners and CDFA would be the logical agencies to implement this strategy.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 7: Reduce conflict between agriculture and nearby habitat lands by creating a “good neighbor” policy

DESCRIPTION

Many Delta farmers are concerned that habitat lands could harm nearby agriculture in various ways. Habitat areas could export weeds, diseases and pests. Prolonged flooding of constructed wetlands could cause water seepage onto nearby farmland and consequently damage crops. Farmers are also concerned that protected species could migrate from restored habitat areas onto farmland and result in liability under species protection laws. In addition, farmers want assurance that owners of project lands purchased and held pending development and approval of projects will be good stewards and continue to maintain the agricultural nature of the lands pending commencement of the project.

Farmers would like additional assurance that entities that establish and manage habitat projects nearby will consult with their neighbors and find ways to avoid such impacts and resolve problems when they arise. This could include creation of buffer zones between habitat preserves and farmland, which would help to reduce or eliminate exposure to pests and diseases on neighboring lands, prevent overspray of chemicals onto habitat lands, and assist with a successful transition between different land uses. Another option is to provide third-party liability insurance or a fund to compensate landowners for any substantiated property damage.

A third option is develop agreements that protect landowners from liability under state and federal endangered species laws for their otherwise lawful operations, should populations of listed threatened and endangered species enter their property from nearby habitat restoration. The California Endangered Species Act (CESA) has a similar provision that exempts accidental “take” that occurs on a farm or ranch due to lawful agricultural activities from the CESA prohibitions on take. .

RELATED PROGRAMS AND POLICIES

Buffer zones are in use in the North Natomas HCP in Sacramento and Sutter Counties to separate the habitat preserve from urban and potentially urban areas. In that instance, the main aim of the buffer zone is to protect native wildlife from urban threats, such as cats and dogs.

The land use and management plan adopted by the Delta Protection Commission includes a policy that calls for habitat projects to include appropriate buffer areas to prevent conflicts with neighboring agricultural parcels. It further states: "Buffers shall adequately protect integrity of land for...agricultural uses and shall not include uses that conflict with agricultural operations on adjacent...lands."

The final EIR for the Delta Stewardship Council's Delta Plan contains several measures (in Mitigation Measures 7-1 and 7-2) to reduce the impact of habitat projects on agriculture. One measure is to "manage project operations to minimize the introduction of...weeds that may affect agricultural production on adjacent agricultural land." The second is to "establish buffer areas between projects and adjacent agricultural land that are sufficient to... protect the feasibility of ongoing agricultural operations...The buffer shall also serve to protect ecological restoration areas from noise, dust, and the application of agricultural chemicals."

A conservation plan approved under the federal Endangered Species Act or state Natural Community Conservation Planning Act can also include provisions through which landowners neighboring habitat preserves established under the plan could obtain take authorization. The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan provides for "neighboring land protections" to assure neighboring landowners that routine and ongoing agricultural activities on their lands will not be affected by protected species that become established on their land. Protections extend one-half mile out from the habitat preserve border, and provide coverage under both the federal and state endangered species acts. Landowners who seek such protection must sign a Certificate of Inclusion. The East Contra Costa County Habitat Conservation Plan has a similar provision.

ISSUES

Buffer zones are expensive to acquire, both in dollars and land area. Because they typically do not contribute to the acreage requirements for species protected in habitat preserves, their justification lies in their ability to reduce or prevent impacts to neighbors. As discussed above, CESA provides for an accidental take provision. However, it has been adopted for limited time periods and renewed periodically. The

current provision expires on January 1, 2014. Even if new legislation extends it, the proposed BDCP habitat preserves could outlive the provision and leave neighboring farmers without the exemption.

BDCP and EIR/EIS

Section 7.3.3.2 of the Spring 2013 Draft EIR/EIS includes some mitigation measures for potential impacts to agriculture, including water seepage from BDCP lands onto farmland. It does not include the broader strategy outlined above, including any neighboring landowner provisions.

Depending on how it is implemented, this strategy could be a standard of practice or a part of BDCP planning to include agricultural considerations; form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta Plan.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 8: Work with other interests to explore the value of reinstating state funding of California Land Conservation (Williamson) Act subventions

DESCRIPTION: The Williamson Act has proven to be a popular and successful farmland and open space conservation tool for almost 50 years. 53 of 58 counties participate in the voluntary program that provides property tax relief to landowners in exchange for accepting development restrictions on their land for a term of 10 or 20 years. Subvention payments from the State to the participating counties and cities for the lost property tax revenue have been mainstay of the program until 2009. State budget cuts have dramatically reduced funding for the Williamson Act, which places an increased burden on the participating counties and cities and casts doubt on the future of one of the nation's oldest land conservation programs.

Recent research, published in the winter 2012 issue of *California Agriculture*, surveyed 700 ranchers who have Williamson Act contracts and found that 37 percent of ranchers predicted they would sell some or all of their rangeland without property tax reductions provided under the Act. Of those who would sell, 76 percent predicted that the buyers would develop the land for non-agricultural purposes. This suggests that a significant amount of California's agricultural and open space land is in jeopardy of conversion without the property tax reductions provided by the Williamson Act. While land in the primary zone of the Delta is protected from development by the Delta Protection Act of 1992, the Williamson Act undoubtedly increases the economic viability of agricultural operations in the Delta by reducing the property tax burden to farmers and ranchers. It also limits the price of land because of the contract restrictions, and the effects of changes to ownership on the tax burdens. The Act allows farmers to purchase land without feeling the full tax burden of a sale from a seller with long-held ownership (which is limited by Proposition 13 rates) to a new owner (whose land will be valued at the new purchase value unless the tax rate is restricted by the Williamson Act).

In order to offset some of the property taxes lost to cities and counties participating in the Williamson Act, the Open Space Subvention Act (OSSA) was enacted in 1970. The OSSA reimbursed participating local agencies based on the amount and quality of land under contract (for a time, the amount of payment for prime land under contract was also keyed to whether the land was within three miles of a city). Until the OSSA funding was cut in 2010-11, the state had paid approximately \$1 billion to cities and counties for subventions, and also backfilled property tax support to school districts for losses tied to

lower tax rates. Some counties adopted agricultural preserve programs with additional restrictions or benefits to participants.

This strategy involves working with the counties, the California Department of Conservation and others to investigate options that could improve the economic base of the counties that participate in the Williamson Act. Some of the options could include looking at the benefits of restoring OSSA-type incentives and/or to provide incentives to counties to either maintain their current Williamson Act agricultural contracts or to encourage the rescinding of those contracts and the simultaneous signing of new open space/habitat contracts. This strategy could allow farmland to remain privately owned and on the tax rolls while keeping the Williamson Act contracts in place. At the same time it would provide economic relief to counties who have suffered the loss of Williamson Act subventions that have resulted from the recent State budget cuts.

RELATED PROGRAMS AND POLICIES

See discussion above.

ISSUES

The greatest issue is the cost of the subvention program to the state general fund. Before funding was terminated, the state paid \$39 million annually to the cities and counties with Williamson Act programs. Another issue could arise if limited payments are targeted at the BDCP Planning Area only. Even if such payments were identified as “in addition” to any increased statewide subvention program, targeted payments could be viewed as counterproductive to efforts to reinstate the subvention program statewide.

BDCP and EIR/EIS

Mitigation Measure AG-1b of the Spring 2013 Draft EIR/EIS includes a number of mitigation measures relating to Williamson Act impacts and AG-1c includes this strategy as a possible part of an Optional Agricultural Stewardship approach for mitigation. Neither the 2013 Administrative Draft BDCP nor EIR/EIS propose measures to reinstate Williamson Act subventions.

This strategy, with additional funding, could provide for enhancements for the Delta as a place, consistent with the Delta Plan.

OPPORTUNITIES AND POTENTIAL PARTNERS

The counties have been carrying most of the burden of reduced property tax payments under the Act since 2009. Some of the 53 participating counties have placed moratoriums on new contracts due to the uncertainty surrounding the future of subventions funding; however, at present none of the five Delta counties has placed a moratorium on establishing new Williamson Act contracts. The California State Association of Counties currently has a policy and promotes efforts to fully fund Williamson Act Subventions funding and could be an effective potential proponent in bringing this strategy to fruition. In addition to local government, a diverse and sizable roster of organizations have demonstrated their support for reviving funding Williamson Act subventions including environmental and agricultural groups, in addition to various coalitions. The California Farm Bureau has been a prominent voice in explaining the value and success of the Williamson Act and has provided continued support and guidance to California counties on changes and status of the Act. The California Rangeland Conservation Coalition is currently in the process of creating a workgroup to develop ideas that could reinvigorate subvention funding. The Working Lands Coalition, a consortium made up of the California Farm Bureau Federation, the American Farmland Trust, the California Rangeland Trust, several agricultural associations, and many more regional land trust groups, has developed a proposal to fund a comprehensive agricultural land and open space protection with greenhouse gas cap and trade auction revenue. The proposal includes the restoration of Williamson Act subventions and links subventions and planning money to incentives for counties and cities to adopt strong open space and agricultural protection programs.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING IN THE DELTA

Strategy 9: Cooperate with counties

Strategy 9a: Explore relationship between project and county planning activities (under development)

Feel free to make suggestions regarding this strategy through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING IN THE DELTA

Strategy 9: Cooperate with counties

Strategy 9b: Work with counties to expand Williamson Act authorized uses to include open space lands in Williamson Act Preserves

DESCRIPTION

As noted in Potential Strategy 8, the Williamson Act was enacted in 1965 to help lessen the impacts of rapidly spiraling land values and property taxes, and to ensure that California would continue to benefit from a long-term supply of agricultural and open space land. In the 48 years since, the Act has been primarily used by local governments to preserve agricultural land in California. However, the Act also provides options for non-agricultural open space contracts (e.g. for wetland and wildlife habitat) per Government Code § 51205. Cities and counties have the authority to include open space, habitat, and recreation as primary uses in agricultural preserves and to provide for those uses in their Williamson Act contracts. In the Delta, relatively few, if any agricultural preserves currently provide for exclusive open space contracts to be set up. Accordingly, open space, habitat, and recreation uses can occur as a “compatible use” but not as a primary use.

The Williamson Act (Government Code § 51254) provides for the conversion of existing agricultural contracts to open space contracts (or open space easements). The contracting parties, by mutual agreement, can rescind an existing agricultural contract and simultaneously enter into a new open space contract. Securing the cooperation of the Delta counties in the conversion of Williamson Act agricultural contracts to open space contracts could facilitate a farmer’s ability to remain on the land by allowing habitat/open space as the primary use while retaining Williamson Act property tax benefits. The farmer could then act as property manager for the habitat land and, if feasible, continue to farm a portion of the land as a secondary use. Keeping the land in private ownership retains the property’s contribution to the respective county’s tax base.

RELATED PROGRAMS AND POLICIES

Under the provisions of the Planning and Zoning Act (Gov. Code §65000, et seq.) cities and counties must prepare general plans, incorporating seven mandatory elements, including land use, open space and conservation. Within these elements, a city or county normally provides direction and future intent for the land identified as agricultural or open space land. The Williamson Act provides a narrower spectrum of land that can

be compatible as open space within agricultural preserves and under Williamson Act contracts. These limited uses, which are further defined within the Act, include: (1) a scenic highway corridor, (2) a wildlife habitat area, (3) a saltpond, (4) a managed wetland area, (5) a submerged area, or, (6) an area enrolled in the United States Department of Agriculture Conservation Reserve Program or Conservation Reserve Enhancement Program.

ISSUES

The loss of OSSA funding makes the resulting reduction in property tax revenues a greater challenge for counties. Conversion of producing agricultural land to lower production or open space could also reduce the income from affected land. The strategy could also be viewed as reducing agricultural production and income options and detrimental to the local economy. On the other hand, if there is no agreement to provide for a change from agricultural to open space use, BDCP participants may choose to not renew the existing Williamson Act contracts which could lead to uncertainty with regard to property tax values, in lieu taxes and the potential for subventions. Achieving cooperation from the participating counties will be the key to the success of this strategy and the development of identifiable benefits or meaningful incentives could encourage the counties to consider changing the existing contracts.

BDCP and EIR/EIS

Mitigation Measure AG-1b of the Spring 2013 Draft EIR/EIS includes a number of mitigation measures relating to Williamson Act impacts and AG-1c includes this strategy as a possible element of an Optional Agricultural Stewardship approach for mitigation. In order to implement this measure, the county would have to agree to change existing agricultural contracts.

Depending on how it is implemented, this strategy could form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta Plan.

OPPORTUNITIES AND POTENTIAL PARTNERS

Many NGOs, such as The Nature Conservancy, the Trust for Public Land, and regional and local land trusts, have dealt with the issue of Williamson Act agricultural restrictions on lands that they have acquired for restoration. The conversion of existing Williamson Act agricultural contracts to open space contracts or open space easements could

facilitate habitat restoration and the development of recreational opportunities, which are goals that are shared by many groups. These shared goals could provide partnering opportunities that expand the scope and effectiveness of this strategy. Converting Williamson Act agricultural contracts to open space contracts or easements could provide options to facilitate habitat restoration and the development of recreational opportunities, while avoiding potential conflicts with local Williamson Act rules that may limit nonagricultural open space uses.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING IN THE DELTA

Strategy 9: Cooperate with counties

Strategy 9c: Investigate options for in lieu tax revenue for counties and payments for special districts

DESCRIPTION

Project investments in land can result in public ownership of property, removing it from property tax rolls and reducing property tax revenues to local government. Other public investments could result in the transfer of less than full property ownership in the form of lesser interests in land, such as agricultural conservation easements and other forms of conservation easements. Under existing provisions of the Revenue and Taxation Code, creation of these easements would result in a permanent reduction in assessments for the properties subject to conservation easements.

Some of the ways proposed to make local governments whole as a result of public projects are to:

- commit to fully replace lost tax revenue on land that will be acquired in fee by public agencies;
- reinstitute Open Space Subventions, reducing tax losses from enforceably restricted land;
- provide reimbursement for any losses from enforceably restricted land not otherwise reimbursed by Open Space Subventions;
- commit to pay for applicable special district costs imposed on landowners.

RELATED PROGRAMS AND POLICIES

California Constitution, Article XIII, Section 8 - Provides the basic authority to permit preferential property taxation contingent upon the adoption of enforceable restrictions by the Legislature.

Revenue and Taxation Code §420, *et seq.* establishes qualifying enforceable land use restrictions and sets forth tax formulae for restricted lands.

The Open Space Subvention Act - Government Code §16140, *et seq.* - Provides for State payments to participating counties and cities based on the type of land and amount of land enrolled in Williamson Act contracts (\$5/acre for prime land, \$1/acre for land other than prime). The Act also provides for the State's oversight of local programs, including standing to bring suit to enforce.

The Williamson Act (California Land Conservation Act) - Government Code §51200, *et seq.* - sets forth the structure for establishing agricultural preserves, entering to and

terminating contracts, approving compatible uses for preserves and contracts; and enforcement of restrictions required by the Constitution in exchange for tax benefits.

§51252 provides: “Open-space land under a contract entered into pursuant to this chapter shall be enforceably restricted within the meaning and for the purposes of Section 8 of Article XIII of the State Constitution and shall be enforced and administered by the city or county in such a manner as to accomplish the purposes of that article and of this chapter.”

ISSUES

Loss of open space subventions (See Strategy 8) – The Williamson Act was enacted almost 50 years ago, and in the intervening period has had a profound effect by helping to retain large swaths of agricultural land and open spaces in California. However, it did not become widely popular in California before the enactment of the Open Space Subvention Act (OSSA) in 1969. The OSSA, until it was defunded in 2010, reimbursed participating cities and counties for a portion of their tax revenue losses resulting from limiting the property taxes on landowners of land contracted under the terms of the Williamson Act. Two Delta counties, San Joaquin and Yolo, were among the top 10 counties receiving subventions before defunding occurred. In 2009, San Joaquin received \$1,872,435 and Yolo received \$1,309,555 from the State General Fund. For the other Delta counties, 2009 subventions were: Contra Costa - \$66,947; Sacramento - \$517,933; Solano - \$644,178.

Because of the loss of OSSA subventions, the Delta Counties already face significant unreimbursed tax revenue losses from property tax restrictions on land. Much of the land that is expected to be affected by the use of various conservation easements would be valued under the same Revenue and Taxation code provisions that now apply to the land subject to Williamson Act contracts. In the case of the Williamson Act or Farmland Security Zone contracts, the counties are free to “nonrenew” the contracts, causing taxes to return to a Prop. 13 basis over the remainder of their 10- or 20-year terms. However, conservation easements will be eligible for lower taxes in perpetuity, so long as the Revenue and Taxation Code formulae for enforceably restricted land remain on the books.

Currently, the Bay Delta Conservation Plan provides no proposed offset for revenue loss for easements – However, Assessors are required to consider conservation easements as enforceable restrictions that will affect property valuation (See R&T Code §§421, 422, 422.5).

Making local governments “whole” The Delta Five-County Coalition has signaled that it expects that payments associated with BDCP will “make the Counties whole” by replacing lost tax revenues, and that special districts will also receive full payments for revenue lost to public ownership effects on the tax rolls.

BDCP AND EIR/EIS

Chapter 8 of the EIR/EIS provides in section 8.4.23 (Property Tax and Assessment Revenue Replacement) as follows:

“New Delta conveyance facilities are required to offset impacts on property taxes or assessments levied by local governments or special districts for land used in the construction, location, mitigation, or operation of the facilities (Water Code section 85089). Although not legally required, the Implementation Office will also offset impacts on property taxes and assessments caused by acquiring land in fee title for either natural community protection (CM3) or natural community restoration (CM4 to CM10).

The annual cost of these offsets is estimated to range between 0.75 and 1.0% of the estimated market value of the converted private acreage. Midpoint cost estimates are summarized in Table 8-31. Total estimated costs for property tax and assessment revenue replacement are \$218.5 million in undiscounted 2012 dollars.”

In a footnote to a revised Table 8-31 is the following comment:

“No revenue replacement is shown for CM2 because it only entails easements and is not expected to affect property tax payments to local governments. Revenue replacement associated with CM7 is accounted for in the CM4, CM5, and CM6 estimates.”

PARTNERS AND POSSIBILITIES

- The California Climate and Agriculture Network
- California Department of Food and Agriculture
- California Department of Conservation
- California Natural Resources Agency
- Delta Five County Coalition

California Special Districts Association

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING IN THE DELTA

Strategy 10: Empty

Feel free to make suggestions regarding this strategy through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group A. STRATEGIES TO HELP MAINTAIN FARMING

Strategy 11: Provide for agricultural conservation easements

DESCRIPTION

An agricultural conservation easement (ACE) is a voluntary, legally recorded deed restriction that is placed on a specific property used for agricultural production. ACEs are created specifically to ensure agriculture remains viable over a long period of time and to prevent incompatible development on the subject parcels. While other benefits may accrue because the land is not developed (scenic and habitat values, for example), normally the primary use of the land is agriculture. Strategies 13 and 17 may make use of easements in addition to other tools such as direct payments.

Normally, ACEs are held in perpetuity, which demands careful contemplation of future potential agricultural uses, as well as current customary uses. Historically, the goal of an ACE has been to maintain agricultural land in active production by removing the development pressures from the land. Such an ACE generally prohibits practices which would damage or interfere with the agricultural use of the land, although multipurpose easements may impose restrictions on agriculture needed to preserve other, nonagricultural land values that are also within the scope of the ACE's purposes.

Because the ACE is a restriction on the deed of the property, the ACE runs with the land; that is, as long as it exists, the restrictions it contains remain in effect through all subsequent changes in ownership. Depending upon each situation, the placement of an ACE on land may provide income, property, and estate tax benefits. Historically, ACEs have often been held by land trusts or local governments, which are responsible for ensuring that the terms of the ACE are upheld. The property proposed for an ACE must have characteristics (e.g., location, soil quality) that make it a priority for the ACE holder organization. If the potential ACE holder wishes to pursue an ACE on the proposed property, it would negotiate terms with the landowner, including price and restrictions

This strategy is referred to elsewhere in this paper on strategies as a "Conventional Mitigation Approach." As it is normally used in other areas of California, when agricultural land is converted to another use, the strategy requires the preservation and, in some cases, enhancement of other land of similar agricultural value, and is most effective if the ACE is on land that is in the path of development. Thus, typically, ACEs are used to conserve or protect farmland subject to economic pressure to convert to a use other than agriculture. In the Delta, the approach is complicated by the fact that there is little development pressure in the inner Delta due to regulatory restrictions, flood threats, and the large number of acres potentially planned for restoration by DWR and

other public and private entities. These circumstances make both the valuation of potential ACE property interests, and the identification of the best locations for ACEs much more complex.

In considering locations for ACEs, the following factors could be considered:

1. Would ACEs provide a sustainable area of high quality or unique farmland in the Delta?

There is significant acreage of high quality farmland in the Delta. Some of the historically productive land is under threat of inundation from sea level rise, and other land would be converted from agricultural use if required for implementation of some BDCP or other HCP/NCCP conservation measures. However, there may be non-developed uses (e.g., conversion from farming to some recreational or conservation uses) that could cause conversion from agricultural use of high quality soils. Obtaining ACEs on such lands could ensure long-term agricultural uses on Delta farmland.

Determining the best locations for ACEs will depend on soil quality, long-term viability of agricultural uses, owner interest in capitalizing land value through voluntary participation in an ACE program, and local factors, including local governments' interest in preserving agricultural land uses. Where in-Delta and out-of-Delta orchard and crop types or planting patterns are geographically and/or economically linked, there may be a benefit to ensuring long-term protection on in-Delta land, via ACEs, by providing a bridge to preserving agricultural land outside the Delta. The economic vitality of Delta agricultural land may also benefit from protection of land with similar orchard and crop types located adjacent to, or reasonably close to comparable Delta farmland.

To the maximum extent possible, replacement land should be of equal or greater value, using either the Department of Conservation's Important Farmland classifications, the Storie Index for California soils, or using the NRCS soil survey classes. All ACEs should comply with statutory requirements qualifying them as enforceable restrictions pursuant to §421, *et seq.* of the Revenue and Taxation Code.

2. In considering the use of ACEs as mitigation, what are the possible land loss/easement ratios that could be considered?

Recent custom for mitigation of the conversion of agricultural land for development purposes tends to be that a 1:1 ratio for ACEs meets the feasible mitigation standard. This approach appears to recognize that the mitigation would result in a net loss of

farmland, since the action would permanently restrict equivalent acreage to agricultural use, but still would not cause an increase in high quality land available for agricultural uses. Other approaches using lower or higher ratios have also been used and in some cases the determination that there is no feasible mitigation has resulted in no ACEs being proposed (see the Appendix, Attachment 3 for a summary of CEQA cases). Where multi-purpose agricultural conservation easements (see below) are used to mitigate for the loss of farmland elsewhere, the 1:1 ratio would most likely be based on the net land available for farming on the easement property (that is, by not counting land from which farming would be excluded in order to meet conservation measures).

A suggestion has been made that acreage restricted to habitat conservation easements should not be counted toward CEQA mitigation for agricultural land. Another suggestion is that a higher ratio may be appropriate, for example, in conversion of a Farmland Security Zone parcel, reflecting the high quality of the land and the longer term commitment by landowners and local governments. A suggestion has also been made that a 3:1 ratio should apply to any conversion of agricultural land to non- agricultural uses.

3. What issues arise with combination habitat conservation and ACEs?

Habitat conservation easements are often placed on lands to preserve the land for preservation and restoration of plant and animal species. ACEs are recognized in statute and can be more broadly used to protect habitat as well as to preserve agricultural land. Easements used by the Department of Conservation and the Coastal Conservancy have provided for both habitat and agricultural conservation in perpetuity.

Factors to consider in determining when it is appropriate to use a combination habitat conservation easement and ACE include:

- The extent to which the easement serves both habitat and agricultural purposes;
- Whether, and the extent to which, restrictions needed to conserve or mitigate for loss or replacement of habitat prevent the use of some of the land for agriculture or limit the kind of crops that can be grown; and,
- Whether the farmland preserved for conservation or mitigation of the loss of habitat occurs in areas identified as priorities for preserving agricultural resources.

A suggestion has been made that all habitat restoration projects proposed through BDCP and other state agencies should occur on government owned land first and that any habitat restoration projects on privately owned land should only be

considered after all public owned lands used for habitat mitigation activities are exhausted. Private lands shall only be considered on a willing seller, willing buyer agreement with payment of fair and just compensation. Another suggestion is that acquisition of land should be obtained through conservation easements first before fee title is considered by the implementing entity.

RELATED PROGRAMS AND POLICIES.

- California Farmland Protection Program, California Department of Conservation
- California Coastal Conservancy, Grant program for Government agencies (federal, state, local, and special districts) and certain nonprofits.
- Local Williamson Act programs, including Williamson Act “Easement Exchange” actions
- USDA Conservation Reserve and Wetland Reserve Programs
- USFWS LIP program

ISSUES

Issues involve questions of who will negotiate and acquire the ACEs; who will hold the ACEs; how will any ACE be enforced (for performance requirement and to ensure acreage commitments are met); and how would ACEs be endowed, if necessary, to ensure the permanent administration and enforcement of easement rights by the holder(s) of the ACE.

BDCP and EIR/EIS

Mitigation Measure AG-1c of the Spring 2013 Draft EIR/EIS discusses the use of ACE’s as mitigation for conversion of agricultural land in the context of both a Conventional Mitigation Approach and an Optional Land Stewardship Approach (see Chapter II and Appendix Section I).

Depending on how it is implemented, this strategy could form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta Plan.

OPPORTUNITIES AND POTENTIAL PARTNERS

Potential Partners include: the Delta Conservancy; private land trusts and conservancies; the Department of Conservation; the California Coastal Conservancy; and USDA, Natural Resources Conservation Service

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group B. POTENTIAL STRATEGIES THAT PROVIDE INCENTIVES FOR CONSERVATION ON FARMLAND

Strategy 12: Partner with others to maintain and enhance environmental quality on farmland

DESCRIPTION

Additional funds could enhance existing programs that work with farmers to create and maintain habitat on private land. Many governmental and non-profit entities and private landowners work to improve wildlife habitat and other aspects of environmental quality on farmland. They recognize the value of natural habitat features on agricultural land. Similarly, they may see value in establishing a mosaic of habitat and conventional crops across the landscape.

Thus, many growers build wildlife-friendly features on their farms, including hedgerows, grassed waterways and vegetated tail-water ponds. These have beneficial roles in agriculture and serve as habitat features. Some managers make use of livestock for weed control in habitat areas; e.g., livestock grazing is sometimes the key to maintaining desirable conditions in vernal pools.

RELATED PROGRAMS AND POLICIES

A familiar example is the work of Resource Conservation Districts and the NRCS. They offer ways to improve management of farms and rangeland to benefit both agriculture and wildlife. RCDs work with the NRCS to help fund projects on private land. Federal Farm Bill programs, including the Conservation Reserve and Wetland Reserve Programs, share costs with landowners to create and maintain habitat on private land.

The Central Valley Joint Venture is another example of successful establishment of countless wetland habitat projects on privately-owned farmland over the past twenty-five years. The projects are compatible with production agriculture and often involve rice land in both the growing and fallow season and winter flooding of other crops.

BDCP and EIR/EIS

Mitigation Measure AG-1c of the Spring 2013 Draft EIR/EIS discusses a variety of strategies that might be used in the Optional Land Stewardship Approach for mitigation for agricultural resources. .

Depending on how it is implemented, this strategy could form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group B. POTENTIAL STRATEGIES THAT PROVIDE INCENTIVES FOR CONSERVATION ON FARMLAND

Strategy 13: Compensate farmers to manage agricultural land as habitat for wildlife

DESCRIPTION

Where agricultural production is consistent with or necessary for conservation purposes, farmers and ranchers could be paid to manage habitat lands, either as owners or lessees. Examples of practices that have been carried out in the Delta or elsewhere are these:

- cultivation of alfalfa and irrigated pasture as foraging habitat for Swainson's hawks, tricolored blackbirds and sandhill cranes
- cultivation of rice, wheat and feed corn for sandhill cranes
- rangeland management that supports burrowing owls
- rice cultivation that supports giant garter snakes
- seasonal flooding of agricultural land on floodplains and enhancement of channel margin habitat for fish

RELATED PROGRAMS AND POLICIES

Managers of several properties in the Delta area, including Cosumnes River Preserve, Staten Island, and Yolo Bypass Wildlife Area, lease land to growers, who successfully integrate commercial crops and valuable habitat. The Habitat Conservation Plan for the Natomas Basin in Sacramento and Sutter Counties includes a habitat reserve area, most of which is kept in commercial crops, leased to farmers, and managed to provide habitat for Swainson's hawk.

Some commercial habitat mitigation banks are built around farm property and managed by farmer owners, e.g. Sacramento River Ranch in Yolo County, owned by Wildlands, Inc.

ISSUES

One important issue is the reluctance of growers to accept restrictions on their choice of crops or management practices.

BDCP and EIR/EIS

Mitigation Measure AG-1c in the Spring 2013 Draft EIR/EIS discusses the involvement of the farmer as a partner in implementing the BDCP.

Depending on how it is implemented, this strategy could be part of BDCP planning to include agricultural considerations, form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta Plan.

OPPORTUNITIES AND POTENTIAL PARTNERS

The Delta Conservancy's Strategic Plan recognizes the need to evaluate options for public/private partnerships to develop restoration projects and to give priority to management models that preserve economic uses of the land. The Conservancy has established the Delta Restoration Network of entities that will be engaged in restoration efforts in the Delta, and representatives from the Delta community, with a goal of coordinating and integrating ongoing and future restoration activities.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group B. POTENTIAL STRATEGIES THAT PROVIDE INCENTIVES FOR CONSERVATION ON FARMLAND

Strategy 14: Provide incentives for farmers to take part in a market based conservation program

DESCRIPTION

A consortium (including American Rivers, Environmental Defense Fund, PRBO Conservation Science, Environmental Incentives and Trout Unlimited, Delta Conservancy, and California Department of Conservation) has proposed development of exchanges in which private landowners produce habitat, or otherwise improve environmental quality, and package those accomplishments as credits for sale. Buyers could be either investors or permit-seekers, such as agencies or entities needing to comply with environmental regulations or mitigation requirements. A third-party program administrator would link buyers, producers and regulatory agencies. The consortium is developing the outline of a habitat credit exchange that could be used to improve both flood protection and habitat on floodplains in the Central Valley and Delta.

The operation of habitat credit exchanges would require creation of scientific techniques to measure benefits (credits), both as acreage and as habitat quality. The consortium is developing such a measurement tool for rice fields and aims to use it in a pilot project that would compensate rice growers for creating and maintaining high-quality bird habitat. One use of these performance measures is to provide accountability and a justification for both the money invested and the regulatory permit granted.

Credits are envisioned as being available on specific land parcels for a fixed period, rather than permanently. Thus, an owner could enroll a parcel and then opt it out of the program at the end of the contract term. The program aim is to keep sufficient acreage enrolled so as to maintain the desired number of credits at all times.

ISSUES

Most environmental market credit programs are in development at this point; neither the crediting process nor the standards that define acceptable habitat projects have been defined. The first few projects will have the burden of proving the feasibility of the programs. Another issue will be whether and how such programs will deal with situations that require mitigation measures to be provided in perpetuity.

BDCP and EIR/EIS

Mitigation Measure AG-1c in the Spring 2013 Draft EIR/EIS discusses a variety of strategies that might be used in the Optional Land Stewardship Approach for mitigation for agricultural resources. .

Depending on how it is implemented, this strategy could form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta Plan.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group C. POTENTIAL STRATEGIES TO MANAGE LAND FOR PURPOSES OTHER THAN CONVENTIONAL CROP PRODUCTION

Strategy 15: Provide incentives stabilize or reverse land subsidence on Delta Islands

DESCRIPTION

Over the past century, agricultural practices in the Delta have caused the loss of over one million acre-feet of peat soils, causing land subsidence down to 20-25 feet below sea level on some islands. Current agricultural practices continue to remove these soils and, as part of that loss, emit about five million tons of carbon dioxide annually—about 1% of California’s total emissions.

This strategy includes two land management options, sometimes referred to as carbon capture wetland farms and low carbon agriculture, that could reduce soil loss and greenhouse gas (GHG) emissions, reduce the flooding and other risks associated with land subsidence, and provide habitat benefits to the Delta ecosystem.

Carbon capture wetland farms are constructed wetlands operated to maximize retention of atmospheric carbon, mainly in the soil, and minimize the release of other GHGs. Native tule wetlands, in particular, can capture and store carbon at very high rates and, in doing so, build soil that continuously reverses subsidence.

Low carbon agriculture refers to farming practices that reduce GHG emissions and rates of ongoing land subsidence. These practices could include increasing groundwater levels during the growing and fallow seasons, winter flooding, reduced tillage, reduced use of nitrogen-based synthetic fertilizer, and conversion to rice production.

RELATED PROGRAMS AND POLICIES

The Delta Stewardship Council’s draft Delta Plan recommends that State agencies not renew or enter into agricultural leases on Delta or Suisun Marsh islands if the actions of the lessee promote subsidence, unless the lessee takes part in subsidence-reversal efforts.

The Delta Conservancy strategic plan calls for incorporation of subsidence reversal into habitat restoration projects and collaboration with growers and landowners to identify

areas for subsidence mitigation, potentially including rice fields and carbon sequestration wetlands.

Federal Farm Bill programs, including the Wetland Reserve Program, compensate private landowners to remove their land from cultivation and place it in managed marsh or pasture. The federal Conservation Reserve Program specifically targets highly erodible farmland.

DWR operates a 300-acre wetland on Twitchell Island where researchers from UC Davis, UC Berkeley and the private sector are examining the efficacy of shifting land uses toward rice and wetlands. By 2017, about 3100 acres of wetlands on Sherman Island and 1000 acres of wetland and tidal marsh on Twitchell Island will be completed to provide a farm-scale test of the technical and economic viability of carbon capture wetland farming and the success of subsidence reversal.

ISSUES

Establishment of tule wetlands for subsidence reversal faces three issues:

- Potential adverse impacts, including contamination from mercury and dissolved organic carbon and the need for mosquito control, need resolution.
- Implementation will be difficult on islands with multiple owners, unless all owners agree to take part in the project.
- Subsidence reversal requires land management practices that differ from much of conventional agriculture in the Delta.

Expansion of low-carbon agriculture, in the form of rice culture, may be an economic issue for farmers because rice yields are lower in the Delta than in the more favorable climate of the Sacramento Valley.

BDCP and EIR/EIS

Mitigation Measure AG-1c in the Spring 2013 Draft EIR/EIS discusses a variety of strategies that might be used in the Optional Land Stewardship Approach for mitigation for agricultural resources. .

Depending on how it is implemented, this strategy could form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta

OPPORTUNITIES

Both DPC and DSC policies assert that all beneficiaries of flood protection in the Delta, including landowners, water exporters, CalTrans, and other infrastructure owners, such as privately owned utilities, should help pay for those benefits. Although these policies were developed with levees in mind, they could be clarified to include subsidence reversal projects as part of the long-term solution to flooding. Subsidence reversal should gradually and continuously reduce the cost of levee maintenance and, in the long run, would provide more secure flood protection.

The “walking wetland” management practice pioneered at National Wildlife Refuges in the Klamath Basin allows rotation between habitat crops and conventional crops on a given parcel. This rotation has proved attractive to growers of conventional crops in the Klamath Basin because it reduces both fertilizer costs and crop losses to pests. In addition, a three-year rotation into wetlands could meet one requirement for organic certification, namely, that the farm field has been free from prohibited synthetic chemicals for three years. If the economic benefits of wetland rotation do not outweigh their costs in the Delta, other incentives might be needed. In addition, there are questions of whether these practices can be applied to subsidized areas of the Delta.

POTENTIAL PARTNERS

The State could consider providing funds for the federal Wetland Reserve Program or developing a similar State program. The Delta Plan and the Delta Conservancy’s Strategic Plan recognize subsidence reversal as an important component of future Delta management. The Delta Conservancy anticipates funding multi benefit projects that result in subsidence reversal, carbon emission reductions and sequestration.

The State program could publicly solicit participation by landowners, and seek out large contiguous blocks of deeply subsidized land, preferably whole islands. Annual payments could be scaled to match habitat and subsidence reversal benefits.

Funds for the program might come from projects that need to mitigate greenhouse gas emissions under CEQA or from proceeds of the AB 32 cap-and-trade allowance auctions. The April 2013 draft investment plan for cap-and-trade auction proceeds recommends funding for “pilot projects for restoration of wetland areas, including the Delta, to increase carbon sequestration and provide co-benefits such as increased native species populations and water quality improvement.” It also recommends funding for “agricultural practices and fertilizing material application practices that reduce GHG emissions, improve water quality and provide other co-benefits.”

The Delta Levees Subvention Program at DWR and CDFW requires levee repair and improvement projects to include habitat enhancement in order to be eligible for a State cost share. Development of non-tidal wetlands, such as tule marshes, could be explored as one type of enhancement that could help meet a program requirement and reverse land subsidence.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group C. POTENTIAL STRATEGIES TO MANAGE LAND FOR PURPOSES OTHER THAN CONVENTIONAL CROP PRODUCTION

Strategy 16: Assist landowners to produce and sell greenhouse gas offset credits in the AB 32 Cap-and-Trade program

DESCRIPTION

As described in the previous strategy, the greenhouse gas cap-and-trade regulation provides for the use of offset credits to meet compliance obligations. Marketable credits can be generated under methodologies (called protocols) approved by the California Air Resources Board. Protocols for peat wetlands and rice cultivation are under consideration for adoption. This strategy would promote and track the development of such protocols, examine their financial viability in the carbon offset market, and offer financial incentives, if needed.

RELATED PROGRAMS AND POLICIES

The Delta Stewardship Council's Delta Plan proposes that the DSC partner with the California Air Resources Board and the Delta Conservancy to develop a program for Delta farmers to earn AB 32 credits for carbon sequestration by growing native wetland plants and reducing land subsidence. The Delta Conservancy's strategic plan includes a similar idea.

Farm-scale pilot projects to grow tule wetlands on Twitchell and Sherman Islands are in development, as described in the subsidence reversal strategy above. These projects may contribute to development of a protocol for calculation, monitoring and reporting of carbon credits derived from wetland restoration and conservation projects. Such a protocol is essential for carbon captured in wetlands to become marketable in the AB 32 greenhouse gas offset program. The Department of Water Resources, Delta Conservancy, Coastal Conservancy, and several private sector interests are involved.

The Air Resources Board is considering admitting certain rice cultivation activities into the carbon offset program. The source of offsets is a reduction in methane emissions from flooded rice fields. Efforts are under way at the Climate Action Reserve (a nonprofit corporation) to develop a protocol for peat soil, including soils in the Delta.

ISSUES

- Even after protocols are established, Tule farms are unlikely to provide a clear financial incentive to landowners or investors without either fairly high carbon prices in the cap-and-trade program or subsidies for some of the costs of conversion and management. Another factor affecting the market may be that Credits under AB 32 are available only for carbon that remains sequestered for long periods (a 100-year minimum) or in perpetuity--a condition that restricts land uses to those compatible with carbon sequestration.

BDCP and EIR/EIS

Mitigation Measure AG-1c of the Spring 2013 Draft EIR/EIS discusses a variety of strategies that might be used in the Optional Land Stewardship Approach for mitigation for agricultural resources.

Depending on how it is implemented, this strategy could form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta

OPPORTUNITIES

Research on tule wetlands on Sherman and Twitchell Island by USGS, the University of California and DWR shows large reductions in greenhouse gas emissions through a combination of increased carbon sequestration and prevented loss of soil carbon that results from substitution of tules for conventional crops. Economic models are in development to project break-even costs for replacing conventional farmland with wetlands that can provide carbon offset credits for the AB 32 cap-and-trade program.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group C. POTENTIAL STRATEGIES TO MANAGE LAND FOR PURPOSES OTHER THAN CONVENTIONAL CROP PRODUCTION

Strategy 17: Compensate farmers to manage habitat lands

DESCRIPTION

Landowners could be retained to establish and manage habitats that have replaced agricultural land uses. Management could involve contouring the land and reconfiguring its drainage, maintaining levees, water control structures and other infrastructure, controlling invasive weeds, and providing security against trespass and vandalism.

BDCP and EIR/EIS

Mitigation Measure AG-1c of the Spring 2013 Draft EIR/EIS discusses the involvement of the farmer as a partner in implementing the BDCP.

Depending on how it is implemented, this strategy could be part of BDCP planning to include agricultural considerations, form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta Plan.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group C. POTENTIAL STRATEGIES TO MANAGE LAND FOR PURPOSES OTHER THAN CONVENTIONAL CROP PRODUCTION

Strategy 18: Designate carbon sequestration and subsidence reversal crops as agricultural production for regulatory and incentive programs (under development)

Feel free to make suggestions regarding these strategies through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group D: STRATEGIES THAT PROVIDE FOR ECONOMIC DEVELOPMENT AND OTHER BENEFITS

Strategy 19: Develop area-wide economic and land use studies

Strategy 19a: Develop an historic and current land use study

DESCRIPTION

This strategy proposes a comprehensive land use study to collaboratively evaluate Delta land use, past, present, and future. The strategy could help in understanding the most appropriate future uses and help the Delta community, local government, and state and federal agencies to understand how to invest effectively in the Delta.

This type of analysis could answer a number of questions. For instance:

- What are the current land uses by crop type and land use designation?
- How can current habitat restoration efforts support the long-term sustainability of agriculture in the Delta?
- How does the geography—past and current—affect land uses?

To fully understand the potential for agricultural losses from BDCP or other projects or programs and how such losses could be avoided or reduced, a clear understanding of past and current land uses are necessary. Critical to this understanding is knowledge about current land uses in the Delta as well as the historical context for these uses. Once the agricultural landscape of the Delta region is better understood, specific measures to maintain and improve Delta agriculture can be developed. A project such as this could be considered as foundational research that would assist the Delta Conservancy, the Delta Protection Commission and other agencies in understanding how to invest effectively in the future

RELATED PROGRAMS AND POLICIES

The San Francisco Estuary Institute (SFEI) has been conducting historical topography research to understand how land forms have influenced water flows, levees, and land use. SFEI is now considering an agriculture overlay to better understand the nexus between topography and agricultural land uses.

The Delta Conservancy is managing the Delta Restoration Network (DRN)—a coalition of agencies and nonprofits conducting and planning to conduct habitat restoration in the Delta.

Department of Water Resources' Land and Water Use Data program collects land use data and develops water use estimates required for statewide water planning by conducting surveys of agricultural, urban and environmental land uses, collecting weather and other data required to make crop and landscape water use estimates, and developing annual estimates of land and water uses on a regional basis.

Department of Conservation's Farmland Mapping and Monitoring Program produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance.

Some of the Delta counties have or are the process of conducting different analyses of agricultural use in the counties.

ISSUES

The primary issues associated with this strategy are financial and organizational. Funding would need to be found to conduct this type of analysis. Funding might come from different grant programs, governmental land use program or education research programs. Interested parties would also have to consider how to identify relevant existing data, what additional information and analyses are needed and who should do the study or studies. There are numerous ways to approach these considerations but all would benefit from input from local interests. One approach would be for the Delta Conservancy and/or the Delta Protection Commission to take the lead on organizing this discussion.

BDCP AND EIR/EIS

Social and economic impacts of the BDCP are described in Chapter 16 of the spring 2013 Draft EIR/EIS. Several non-environmental commitments are proposed in the spring 2013 Draft EIR/EIS, but they do not include the measures described above. The measures in this strategy could support Delta agriculture and enhancements for the Delta as a place, consistent with the Delta Plan.

DWR ALS Workgroup: Maintaining Delta Agriculture: Draft ALSS Discussion Paper: Chapter 1: October 2013

OPPORTUNITIES AND POTENTIAL PARTNERS

The Delta Conservancy and the Delta Protection Commission would most likely be involved in carrying out this strategy. The following organizations may also wish to collaborate to fund, advise, or conduct an agricultural infrastructure analysis, and then help implement any recommendations:

- Delta Stewardship Council
- Departments of Water Resources, Conservation and Food and Agriculture
- SACOG and the Councils of Government which include the Counties of San Joaquin, Contra Costa, and Solano
- The five Delta Counties
- The University of the Pacific
- The University of California
- CSUS
- Local community colleges
- Local labor organizations
- Economic Development Corporations which cover Delta counties

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group D: STRATEGIES THAT PROVIDE FOR ECONOMIC DEVELOPMENT AND OTHER BENEFITS

Strategy 19: Develop area-wide economic and land use studies

Strategy 19b: Develop an economic study of agricultural activity and related infrastructure

DESCRIPTION

This strategy proposes a comprehensive economic study to collaboratively evaluate the Delta agricultural infrastructure, and the technical and financial assistance needed to support a sustainable and competitive agricultural community in the Delta. Currently, there isn't a clear and detailed understanding of agricultural infrastructure in the Delta. Agricultural infrastructure includes, but is not limited to production support, distribution, aggregation, processing, storage, and marketing facilities. This strategy could help understand agricultural needs, which could result in additional strategies to (1) minimize the potential loss of agricultural infrastructure; and (2) improve and expand existing and potential markets.

This type of analysis could consider a number of unanswered questions. For instance:

- What types of agricultural infrastructure are needed in the Delta?
- What is the feasibility and economics of developing needed agricultural infrastructure?
- What is the entry point for various types of specialty crop aggregation, distribution and processing?
- What is the strategy to scale up from entry-level position to larger facilities? What are the feasible scales for this region?
- What costs and revenue are associated with developing new infrastructure needed to accommodate current and future agricultural needs at various scales?
- Is collaboration around community-supported agriculture (CSA) feasible amongst Delta growers?
- Are there opportunities for cost sharing with existing distributors, processors, and food banks? Traditionally, food banks have large capacity for storage and can assist in distribution.

- What costs are associated with operating existing and new infrastructure, and how are those costs covered?
- What are the regulatory, marketing, and distribution barriers and other challenges to developing new infrastructure and operating existing infrastructure?
- What are the recommended strategies and suggested action plans for establishing aggregation and distribution site(s) and establishing and expanding processing facilities in the region?
- What is the history of processing, distribution, etc. in the Delta. Why did it change and how has the market changed since then?
- What are the current worker supply issues? Is there adequate housing?

To determine the potential for agricultural infrastructure losses from BDCP or other projects or programs and how such losses could be avoided or reduced, a clear understanding of why these losses could occur is needed. Critical to this understanding is knowledge about the current structure of the Delta region's agricultural infrastructure, potential losses to that infrastructure, and the needs of Delta agriculture. Once the agricultural landscape of the Delta region is better understood, specific measures to maintain and improve Delta agriculture can be developed. A project such as this could be considered as foundational research that would assist the Delta Conservancy, the Delta Protection Commission and other agencies in understanding how to invest effectively in the future.

RELATED PROGRAMS AND POLICIES

A number of tools currently exist that could be employed individually or in combination that would be most helpful in understanding the agricultural activity and related infrastructure of the Delta:

- RUCS. The Sacramento Area Council of Government's (SACOG) Rural Urban Connection Strategy (RUCS) initiative has been working to answer questions related to stimulating economic development in rural communities around the six-county SACOG region, and expanding market opportunities for agricultural producers. SACOG's current project seeks to answer various questions to better understand the feasibility of expanding existing, and creating new, agricultural infrastructure in Yolo and Sacramento counties. It is possible that this project could be extended to the three other Delta counties to understand and identify the agricultural infrastructure needs in San Joaquin, Contra Costa, and Solano counties, as well.

- **IMPLAN.** Used locally by Yolo County, IMPLAN is an input-output analysis that examines relationships within an economy, between businesses and between businesses and final consumers. The analysis captures all monetary transactions in a given time period. This type of analysis examines the effects of a change in one or several economic activities on an entire economy (impact analysis).
- **LESA.** Used by the USDA, the National Agricultural Land Evaluation Site Assessment (LESA) rates soils and places them into groups ranging from the best to the least suited for a specific agricultural use, such as cropland, forestland, or rangeland. A relative value is then determined for each group. California has adapted the model for use as an optional methodology to be used in environmental assessments. The California Agricultural LESA Model evaluates measures of soil resource quality, a given project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. For a given project, the factors are rated, weighted, and combined, resulting in a single numeric score. This type of analysis can assist landowners and others in making decisions regarding land use and conversion.
- **Tipping Point Analysis.** This analysis calculates how various factors can change an outcome. More specifically, a tipping point analysis (1) identifies the driving conditions that have the greatest impact; (2) determines the points of change in each condition at which a specific strategy would be impacted (tipping points); (3) calculates the probability of reaching each tipping point; and (3) chooses a strategy based on the probability of reaching each tipping point.

In order to determine the best analysis tool—or combination of tools—a clear understanding of the information needed is necessary, as well as more specifics about each analysis tool, a scope of work, and potential funding sources. Project partners and local stakeholders can assist in vetting this information.

ISSUES

The primary issues associated with this strategy are financial and organizational. Funding would need to be found to conduct this type of analysis. Funding might come from different grant programs, governmental land use program or education research programs. Interested parties would also have to consider how to identify relevant existing data, what additional information and analyses are needed and who should do the study or studies. There are numerous ways to approach these considerations but all

would benefit from input from local interests. One approach would be for the Delta Conservancy and/or the Delta Protection Commission to take the lead on organizing this discussion.

BDCP AND EIR/EIS

Social and economic impacts of BDCP are described in Chapter 16 of the Spring 2013 Draft EIR/EIS. Several non-environmental commitments are proposed in the Spring 2013 Draft EIR/EIS but they do not include the measures described above. With additional funding, the measures described for this strategy could provide support for Delta agriculture and enhancements for the Delta as a place, consistent with the Delta Plan.

PARTNERS AND POSSIBILITIES

The Delta Conservancy and the Delta Protection Commission would most likely be involved in carrying out this strategy. The following organizations may also wish to collaborate by helping to fund, advise, or conduct an agricultural infrastructure analysis for the Delta, and then helping to implement the recommendations of that program:

- Delta Stewardship Council
- Departments of Water Resources, Conservation and Food and Agriculture
- SACOG and the Councils of Government which include the Counties of San Joaquin, Contra Costa, and Solano
- The Five Delta Counties
- NRCS and associated RCDs
- The University of the Pacific
- The University of California
- CSUS
- Local community colleges
- Local labor organizations
- Economic Development Corporations which include some or all of the five Delta counties
- NGOs associated with agriculture, land trusts and the environment

There is currently much interest in the Sacramento and Bay Area in local food sources. In fact, the City of Sacramento and the Sacramento Convention and Visitors' Bureau has branded Sacramento as the "Farm to Fork Capitol." With this level of interest, and

the ideal location of the Delta, midway between the major urban centers of Sacramento, Stockton, and the Bay Area, the momentum is there to help the Delta further develop its agricultural markets. A program to identify, and then help meet, the infrastructure needs of Delta agriculture could help the region's farmers achieve a sustainable and prosperous future.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group D: STRATEGIES THAT PROVIDE FOR ECONOMIC DEVELOPMENT AND OTHER BENEFITS

Strategy 19: Develop area-wide economic and land use studies

Strategy 19c: Develop a plan for protection and restoration of habitat areas that takes into consideration vitality of agricultural economy (under development)

Feel free to make suggestions regarding these strategies through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group D: STRATEGIES THAT PROVIDE FOR ECONOMIC DEVELOPMENT AND OTHER BENEFITS

Strategy 20: Promote economic development

DESCRIPTION

The Delta has many small, isolated, and potentially under-capitalized farms and agricultural support companies. Delta businesses could benefit from increased access to capital and financial expertise.

There are number of ways to support or promote economic development in the Delta t the Delta (or perhaps the Delta plus Suisun Marsh and the Yolo Bypass) that could ensure a central depository for technical expertise, financing, business development, and promotional efforts that would benefit the Delta, including Delta agriculture. These could include some or all of the mechanisms listed below.

- The formation of an Economic Development Corporation (EDC). An EDC is an organization, usually a 501(c)(3) non-profit corporation, whose mission is to promote economic development and job creation within a specific geographic area. It is controlled by a local Board of Directors, and often receives some funds from local governments, and technical expertise from local colleges. It often provides technical advice and low-interest loans to help new businesses get started in the area, and to enable existing businesses, including farms, to expand their operations.
- An Economic Development Summit Conference. While not an ongoing institution, it can help organize and produce thinking about how to move forward.
- An agricultural ombudsman program that assists farmers, ranchers, and agriculture-related businesses with various permitting processes, including assistance with agricultural permitting, standards and reporting as required by regulatory agencies. An ombudsman could help to facilitate and expedite the development and implementation of agricultural projects. (See Strategy 23a)
- A position within an existing EDC that focuses on part or all of the five-county Delta region.

RELATED PROGRAMS AND POLICIES

There are more than 80 different regional, county, or city-level EDC's or similar organizations in California. Not one covers the Delta. The San Joaquin Partnership covers all of San Joaquin County. The Solano EDC serves all of Solano County. The Sacramento Area Commerce and Trade Organization serves all of Sacramento and Yolo Counties, plus four other counties which do not contain any part of the Delta. While Contra Costa County does not have an EDC, a number of businesses, local government entities, and educators in eastern Contra Costa County have created East Contra Costa Squared (EC2). EC2 is a volunteer-run collaborative focusing on economic development and education and the nexus of the two.

The Kern EDC² could serve as a model for a Delta EDC. It works to ensure a “diverse and strong economic climate for all businesses in Kern County.” It supports the growth of local “value-added agriculture” by “recruiting related business” to the county and working with existing value-added agricultural businesses – such as wineries. The Kern EDC has formed task forces to aid local agriculture by addressing some of the industry's challenges, including regulatory burdens, resource needs, logistics, transportation, and infrastructure, as well as research and development.

The Central Valley Business Incubator (CVBI) is a resource for entrepreneurs wishing to start or expand an enterprise. It partners with UC Merced and CSU Fresno-affiliated institutions to help support agricultural and other businesses in the San Joaquin Valley.

ISSUES

Possible issues which could affect developing an organization and implementing a program to support economic development in the Delta include the following:

- Funding. Significant funds, from low-interest loans, grants, and contracts, would be needed to create, and then to operate, a Delta Economic Development Corporation. While some base funding could come from the five Delta Counties, as well as local entrepreneurs and philanthropists, additional funding would probably be needed, at least at the beginning, to get it started.
- Non-political boundaries. Although many EDC's in California cover more than one county, there does not appear to be an EDC which covers a region such as the Delta, which includes parts of six different counties.

² For more information about the Kern EDC, visit their Website at <http://www.kedc.com/>.

- Some of the support given by a Delta EDC would go to non-agricultural companies in the Delta. However, a sustainable and prosperous Delta economy would also benefit Delta agriculture.

BDCP AND EIR/EIS

Social and economic impacts of the BDCP are described in Chapter 16 of the Spring 2013 Draft EIR/EIS. Several non-environmental commitments are proposed in the Spring 2013 Draft EIR/EIS, but they do not include the measures described above. With additional funding, the measures described for this strategy could provide for support for Delta agriculture and enhancements for the Delta as a place, consistent with the Delta Plan.

PARTNERS AND POSSIBILITIES

- The Discover the Delta Foundation, which promotes tourism and recreation in the Delta, helps preserve the Delta's rich heritage, and supports Delta agriculture by sponsoring Farmer's Markets and other activities.³
- Colleges and universities in and near the Delta, including UC Davis, CSUS, the University of the Pacific, and the various local Community Colleges.
- The Sacramento Area Council of Governments, which promotes economic development and local agriculture in two of the Delta Counties (Sacramento and Yolo), plus four other counties.
- The San Joaquin Council of Governments, which promotes economic development in San Joaquin County.
- The Delta Stewardship Council.
- The Delta Conservancy, which is authorized to "spend funds on developing an economic sustainability program" for the Delta⁴.
- The Association of Bay Area Governments, which promotes economic development in three Delta Counties (Alameda, Contra Costa, and Solano), plus six other counties.
- The Farm Bureaus of the five Delta Counties.
- The Delta Protection Commission, which authored the Delta Economic Sustainability Plan.
- The local banking community.

³ For more information about the Discover the Delta Foundation, please visit: <http://www.discoverthedelta.org/>

⁴ From Page 2 of an 8/19/10 letter from Mary N. Piepho, Delta Conservancy Chairperson, to Phil Isenberg, Delta Stewardship Council Chairperson.

- Regional labor organizations.
- Delta region Chambers of Commerce.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group D: STRATEGIES THAT PROVIDE FOR ECONOMIC DEVELOPMENT AND OTHER BENEFITS

Strategy 21: Improve transportation infrastructure

DESCRIPTION

This strategy proposes transportation infrastructure improvements to provide a (1) safe, reliable transportation system for Delta agriculture and commerce and (2) safe and clearly signed access for cars, buses, trains, boats, and bikes for recreation and tourism purposes. Strategy 19b addresses agricultural infrastructure, especially distribution and processing which rely heavily on safe and reliable roads.

Potential programs that are more focused on recreation and tourism include:

- Local and CalTrans assistance to encourage compatibility among drivers/tourists and farm operations (e.g., signs, farm signs, crop signs, etc.)
- Project proponent commitment to incorporate hiking and biking routes, as well as public access to waterways for fishing, wildlife watching and non-motorized boating, and publicly-funded levee improvements, where feasible and in coordination with the local communities.
- Local (county) assistance to develop recreational touring routes, including planning, road widening, off-street trails, bridges and signage (one example is implementing the DPC's Great California Delta Trail)
- CalTrans engagement on recreation improvements along State Routes 4, 12 and 160, such as bicycle routes, signage, viewing pull-outs, parking at fishing access points, etc.

RELATED PROGRAMS AND POLICIES

The five counties and the State all have varying degrees of responsibility with the Delta's roadways. Transportation infrastructure improvements are critical for increasing safety and access for Delta agriculture and commerce, and for better safety, access and signage for increased recreation and tourism by car, bus, train, bike, boat, and foot. The *Economic Sustainability Plan for the Sacramento-San Joaquin Delta (ESP)*, states:

“Driving for pleasure in the Delta is very popular and is a prime example of the right of way/tourism-related recreation use. This recreation category also includes bicycling, hiking, and walking. The winding roadways, interesting

bridges, scenic views of waterways and agricultural areas, Legacy Communities, and historic structure all contribute to its visual appeal. The ability to buy fresh fruits and vegetables straight from the grower, visit a winery and sample their product, stop and pick up a freshly made deli sandwich or an ice cream at a 50-year-old grocery store all deepen the Delta experience. To many, the resources are part of the charm—the historical town of Locke, the wildlife preserves, or even the beautiful oak tree canopies shading the roadway.”⁵

The Delta Protection Commission (DPC) is developing the Great California Delta Trail to create a contiguous land-based trail system throughout the Delta. DPC is meeting with local governments, trail organizations, and locals to discuss trail routes, connectivity, and concerns related to publicly accessible trails. The Delta Conservancy (Conservancy) supports DPC’s efforts and is identifying projects that can contribute to the trail program, including the development of recreation plan for the McCormack-Williamson Tract.

A few towns and chambers of commerce have developed or are interested in developing driving/touring maps that will make it easier to navigate the Delta. Additionally, the Conservancy—in coordination with the DPC—is developing a Delta brand and marketing plan that will coordinate tourism opportunities in the region.

In 2011, State Parks released a *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh*, which discussed a “Gateway-Basecamp-Adventure” strategy. This strategy would create a network of recreation areas to help manage and coordinate recreation in the region.

Delta agri-tourism organizations currently advertise their trails and farms on the roadways.

The ESP also states that “Several physical and operational constraints have an impact on current facilities and recreation access including...access points...private land trespass, and complex regulations.”⁶ The Conservancy, DPC, and State Parks are also discussing how to encourage compatibility amongst tourism, recreation, and farm operations.

⁵ Delta Protection Commission, *Economic Sustainability Plan for the Sacramento-San Joaquin Delta*. 2012. Page 168.

⁶ Ibid. Page 147.

ISSUES

Farmers are often concerned about trespass - a concern which has eliminated many traditional recreation access points in the region. A program to increase recreation access points, or even provide clarity to recreationists on where they can find legal recreation access points, will reduce trespass. This could include signage, parking and safety improvements at legal access points, and a web-based map guide. The ESP states, "When attracting visitors and expanding recreation access to waterways and landside recreation improvements, potential negative impacts on agriculture from increased tourism and recreation can be minimized by focusing recreation uses and activities through expansion of existing recreation sites, development in Legacy Communities, creating buffer areas adjacent to agriculture, and increasing public safety enforcement."⁷ Compatibility needs to be front and center as does including the community in determining how best to address these issues.

BDCP AND EIR/EIS

The measures described above are not part of the Spring 2013 Draft BDCP or EIR/EIS. They could form the basis for an Optional Agricultural Land Stewardship Approach for a CEQA/NEPA mitigation package for BDCP or, with additional funding, provide for enhancements for the Delta as a place, consistent with the Delta Plan.

OPPORTUNITIES AND POTENTIAL PARTNERS

The Delta Conservancy, DPC, State Parks, Department of Fish and Wildlife and local government.

The State Lands Commission should be involved in identifying legal access points, along with public land managers.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

⁷ Ibid. Page 148.

Chapter 1: POTENTIAL STRATEGIES

Group D: STRATEGIES THAT PROVIDE FOR ECONOMIC DEVELOPMENT AND OTHER BENEFITS

Strategy 22: Assist farmers who want to manage land to incorporate recreation and tourism.

DESCRIPTION

This strategy envisions recreation and tourism, including road touring, hunting, wildlife watching, fishing, farm stays, on-farm sales, value-added products, and u-pick harvesting as marketable products of land management whose first product is an agricultural crop.

RELATED PROGRAMS AND POLICIES

There are numerous private hunting clubs in the Delta and Suisun Marsh. Some forms of eco-tourism are also fairly well developed locally. The Department of Fish and Wildlife leads tours of fallow rice fields in the Sacramento Valley and areas in the Delta to view wildlife--mainly birds--and charges visitors a use fee. Many State Wildlife Areas and federal National Wildlife Refuges charge an entry fee. The Nature Conservancy makes several of its properties, including Staten Island and the Cosumnes River Preserve, available for wildlife viewing and other forms of non-consumptive recreation. TNC does not charge an entry fee, but accepts donations. The Habitat Conservation Plan for East Contra Costa County has a preserve system that allows recreation, including hiking, cycling, and horseback riding.

Agri-tourism entities include Solano Grown, Brentwood Farm Trail, Sacramento River Delta Grown, wineries, and the Delta Farmer's Market. The University of California Small Farm Program offers promotional activities and training for agricultural tourism.

Both the California Department of Parks and Recreation and the Delta Protection Commission have recommended creation of a network of recreation areas in the Delta, including improved public access to shorelines. California State Parks' *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh* recommends inclusion of recreational facilities in ecosystem restoration projects, as do several recreation-related Delta Plan policies. DPC's *Economic Sustainability Plan* emphasizes enlarging the tourism and recreation economy through private visitor-serving

businesses and collaboration and partnerships between public- and private-sector recreation providers.

The Delta Conservancy has committed to work to “design restoration projects that allow for activities that create revenue, including wildlife-friendly farming practices...and bird-watching, to help pay for long-term maintenance and stewardship of the property.” The Conservancy has also partnered with the Delta Protection Commission to develop a “Delta brand” and marketing plan that Delta businesses—farmers included—can use to promote their service or destination.

The Delta Conservancy and the Delta Protection Commission have received comments at public forums regarding the need for assistance with risk-reduction measures to help mitigate the effects of increased tourism on agriculture. Both agencies have conducted some research into these issues and are in the process of determining how best to move forward.

ISSUES

These include the following:

- Few growers are knowledgeable about the outdoor recreation business, so that partnerships with professionals may be needed.
- Current agri-tourism organizations are volunteer-run by farmers and others in agriculture with already full-time jobs, limiting the amount of outreach and marketing that can realistically be conducted.
- Recreation on or near private farmland raises issues for the landowner, including liability, trespass, sanitation, pesticide management, vandalism, traffic, and litter.
- Planning for recreational uses on BDCP habitat lands could complicate the permitting process, because the regulatory agencies would need to consider how to manage the property so that tourism is not a threat to covered species.

BDCP AND EIR/EIS

Social and economic impacts of BDCP are described in Chapter 16 of the Spring 2013 Draft EIR/EIS. Several non-environmental commitments are proposed in the Spring 2013 Draft EIR/EIS but they do not include the measures described above. With additional funding, the measures described for this strategy could provide for support for

Delta agriculture and enhancements for the “Delta as a place,” consistent with the Delta Plan.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group D: STRATEGIES THAT PROVIDE FOR ECONOMIC DEVELOPMENT AND OTHER BENEFITS

Strategy 23: Assist farmers in working with governmental agencies

Strategy 23a: Project proponents could establish a public advisor position to serve as an information source for those wanting to more about a proposed project (under development)

Feel free to make suggestions regarding this strategy through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group D: STRATEGIES THAT PROVIDE FOR ECONOMIC DEVELOPMENT AND OTHER BENEFITS

Strategy 23: Assist farmers in working with governmental agencies

Strategy 23b: Farmbudsman - Help farmers navigate regulatory requirements for farm activities.

DESCRIPTION

There are multiple local, State and Federal permitting processes and regulations that affect the way that farmers do business. It can be difficult for farmers to navigate the various levels of regulations or simply to understand all that exist from water quality, to environmental health, to business regulations. An agricultural ombudsman or farmbudsman program can assist farmers, ranchers, and agriculture-related businesses with various permitting processes, including assistance with agricultural permitting, standards and reporting as required by regulatory agencies. An ombudsman could help to facilitate and expedite the development and implementation of agricultural projects.

RELATED PROGRAMS AND POLICIES

The idea of an agricultural ombudsman program was first discussed locally prior to 2008. Both Solano and Yolo counties' General Plans incorporate the concept of the ombudsman position. Solano County was the first to develop the concept into a real position with the Farm Assistance, Revitalization, and Marketing Coordinator that existed in the county from 2008-2009. In November 2011, the Solano and Yolo Counties Joint Economic Summit identified an Ombudsman Program as an "opportunity to enhance the value of agriculture within the two counties and decrease actual and perceived regulatory obstacles on agriculture-related businesses seeking to expand, enhance, and/or maintain their operations." Working with the Small Business Development Center at Solano College, Yolo and Solano counties released a request for qualifications for consultant services for the Farmbudsman Program. A consultant was selected in mid-2013.

Sonoma and Marin counties also have agricultural ombudsman programs managed by Agriculture and Natural Resources – Cooperative Extension at the University of California. San Mateo County is in the process of starting an ombudsman program, as well.

ISSUES

The Sacramento-San Joaquin Delta encompasses parts of five counties, however, the focus of a Delta-specific ombudsman could be reduced to three counties by collaborating with the Yolo and Solano Farmbudsman. In addition to geographic logistics, a few other issues exist:

- Funding – start-up and on-going. Yolo and Solano counties both contribute \$27,000 per year to the part-time position.
- Location and office space. The Delta is large. Ideally the position would be housed somewhere in the middle. Funding and space availability, however, may make a less central location more appropriate.
- Consensus. With five counties and multiple agencies already working in the Delta, consensus on the position's focus, scope, location, etc., could be challenging.

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group D: STRATEGIES THAT PROVIDE FOR ECONOMIC DEVELOPMENT AND OTHER BENEFITS

Strategy 23 Assist farmers in working with governmental agencies

Strategy 23c: Work with others to better align regulatory processes to expedite wildlife friendly agriculture

DESCRIPTION

Ecological restoration and enhancement projects, including habitat restoration, are generally subject to the same regulatory permit requirements as projects that convert agricultural and open space lands to developed, urban uses. The result can be long lag times, an uncertain approval process, and extra costs. This can create barriers to achieving voluntary ecosystem improvements.

To encourage continued participation of farmers in ecosystem enhancements, the following actions could be explored, taking advantage of recent and on-going efforts discussed below:

- Provide third-party support to facilitate completion of permitting requirements; Resource Conservation Districts have played this role
- Identify a core set of conservation practices and environmental protection measures and develop a programmatic permit for such projects
- Clarify CEQA Guidelines for restoration programs
- Create an inter-agency permit coordination task force

RELATED PROGRAMS AND POLICIES

Recent efforts by the California Biodiversity Council (CBC) have highlighted this topic in their resolution adopted February 6, 2013. The Resolution, "Strengthening Agency Alignment for Natural Resources Conservation," includes a related goal and specific recommendation. The goal, "better alignment of planning, policies and regulations across governments and agencies; and coordinated and streamlined permitting to increase regulatory certainty," addresses statewide concerns that are specifically relevant to ongoing BDCP mitigation of impacts to agriculture.

Other studies and workgroups that have looked at the issue include:

- California Public Policy Institute of California: “Integrated Management of Delta Stressors – Institutional and Legal Options” (April 2013 publication) and “Partners in Restoration (PIR) Permit Coordination Program – DRAFT – Comprehensive Program Assessment” (September 2010 briefing paper)
- Roundtable on Agriculture and the Environment (CRAE) November 2010 publication, “Permitting Restoration – Helping Agricultural Land Stewards Succeed in Meeting California Regulatory Requirements for Environmental Restoration Projects”
- California Rangeland Conservation Coalition “California Restoration and Enhancement Permitting: Challenges to California’s Permitting Process for Restoration and Enhancement Projects” publication – offers insights and recommendations on the topic
- UCLA and UCB report, “Room to Grow: How California Agriculture Can Help Reduce Greenhouse Gas Emissions”
- Task Force to Remove Barriers to Restoration – California Natural Resources Agency, 2003

Partners in Restoration (PIR), a project begun by Sustainable Conservation in 1998, has successfully coordinated among permitting agencies in Santa Cruz, Marin, Mendocino, and other counties. The PIR experience suggests that programmatic, regional, and even statewide permits for environmental enhancements would be advantageous on agricultural lands.

ISSUES

- Difficult to coordinate multiple agencies with multiple objectives
- Agencies may not have a clear mandate to treat environmental preservation or enhancement projects differently from “development” projects
- Inadequate staffing and resources at regulating/permitting agencies
- Possible insufficient capacity at some RCDs to manage the permit requirements for establishment and implementation of habitat enhancement projects
- Lag time, uncertain approval process, and undue costs
- Consistency of interpretation (or lack thereof), including clear definition of required information

OPPORTUNITIES AND POTENTIAL PARTNERS

- Biodiversity Council, Delta Conservancy and Delta Protection Commission, Delta Stewardship Council

- California Association of RCDs – Guide to Watershed Project Permitting for the State of California
- Sacramento River Watershed Program – Online Regulatory Permitting Guide
- The Central Valley Joint Venture is engaged with the State Water Resources Control Board to simplify requirements in the Board’s Draft Water Quality Control Policy for Wetland Area Protection and Dredged or Fill Permitting as they apply to habitat enhancement

If you would like to provide feedback on this strategy, please click the following link: [Agricultural Stewardship Strategy Feedback Form](#)

Chapter 1: POTENTIAL STRATEGIES

Group D: STRATEGIES THAT PROVIDE FOR ECONOMIC DEVELOPMENT AND OTHER BENEFITS

Strategy 24: Work with others to identify bond or other funding to help sustain vital economies (under development)

Feel free to make suggestions regarding these strategies through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

Chapter 1: POTENTIAL STRATEGIES

Group D: STRATEGIES THAT PROVIDE FOR ECONOMIC DEVELOPMENT AND OTHER BENEFITS

Strategy 25: Work with others to develop a fund (or funds) and governance system to allocate money designated for mitigation of impacts to agriculture and/or for sustaining a vital economies (under development)

Feel free to make suggestions regarding these strategies through the Feedback survey at [Agricultural Stewardship Strategy Feedback Form](#)

DRAFT

**AGRICULTURAL LAND STEWARDSHIP STRATEGIES
DISCUSSION PAPER**

MAINTAINING DELTA AGRICULTURE

CHAPTER 2

IMPLEMENTATION AND FUNDING

**(This chapter has been removed for future updating. Please refer to
the May 2013 version for Chapter 2.)**

Table 2-1: Spring 2013 Consultant Administrative Draft BDCP and EIR/EIS Mitigation Measures and Commitments

Mitigation Measures and Environmental Commitments
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, in EIR/EIS Chapter 14, Agricultural Resources.
AG-1a: Preserve agricultural productivity of Important Farmland to the extent feasible
AG-1b: Minimize impacts on land subject to Williamson Act contracts or in Farmland Security Zones
AG-1c: Consideration of an Optional Agricultural Land Stewardship Approach or Conventional Mitigation Approach
Mitigation Measure GW-1: Maintain water supplies in areas affected by construction dewatering, in EIR/EIS Chapter 7, Groundwater.
Mitigation Measure GW-6: Agricultural lands seepage minimization, in EIR/EIS Chapter 7, Groundwater.
Mitigation Measure WQ-11: Avoid, minimize, or offset, as feasible, reduced water quality conditions, in EIR/EIS Chapter 8, Water Quality.
WQ-11a: Conduct additional evaluation and modeling of increased EC levels following initial operations of CM1.
WQ-11b: Consult with CDFW/USFWS, and Suisun Marsh stakeholders, to identify potential actions to avoid or minimize EC level increases in the marsh.
Perform Geotechnical Studies, in EIR/EIS Appendix 3B, Environmental Commitments.
Transmission Line Pole Placement, in EIR/EIS Appendix 3B, Environmental Commitments.
Develop and Implement Erosion and Sediment Control Plans, in EIR/EIS Appendix 3B, Environmental Commitments.
Develop and Implement a Fire Prevention and Control Plan, in EIR/EIS Appendix 3B, Environmental Commitments.
Fugitive Dust Control, in EIR/EIS Appendix 3B, Environmental Commitments.
Dispose of Spoils, Tunnel Muck, and Dredged Material, in EIR/EIS Appendix 3B, Environmental Commitments.
Mitigation Measure SOILS-2a: Minimize extent of excavation and soil disturbance, in EIR/EIS Chapter 10, Soils.
Mitigation Measure SOILS-2b: Salvage, stockpile, and replace topsoil and prepare a topsoil stockpiling and handling plan, in EIR/EIS Chapter 10, Soils.

Mitigation Measures and Environmental Commitments
Mitigation Measure AES-1a: Locate new transmission lines and access routes to minimize the removal of trees and shrubs and pruning needed to accommodate new transmission lines and underground transmission lines where feasible, in EIR/EIS Chapter 17, Aesthetics and Visual Resources.
Mitigation Measure AES-1c: Develop and implement a spoil/borrow and tunnel muck area management plan, in EIR/EIS Chapter 17, Aesthetics and Visual Resources.
Mitigation Measure AES-1f: Locate concrete batch plants and fuel stations away from sensitive visual resources and receptors and restore sites upon removal of facilities, in EIR/EIS Chapter 17, Aesthetics and Visual Resources.
Mitigation Measure AES-6a: Underground new or relocated utility lines where feasible, in EIR/EIS Chapter 17, Aesthetics and Visual Resources.
Mitigation Measure CUL-6: Conduct a survey of inaccessible properties to assess eligibility, determine if these properties will be adversely impacted by the project, and develop treatment to resolve or mitigate adverse impacts, in EIR/EIS Chapter 18, Cultural and Historic Resources.
Mitigation Measure TRANS-1a: Implement site-specific construction traffic management plan, in EIR/EIS Chapter 19, Transportation.
Mitigation Measure TRANS-1b: Limit hours or amount of construction activity on congested roadway segments, in EIR/EIS Chapter 19, Transportation.
Mitigation Measure TRANS-1c: Make good faith efforts to enter into mitigation agreements to enhance capacity of congested roadway segments, in EIR/EIS Chapter 19, Transportation.
Mitigation Measure TRANS-2a: Prohibit construction activity on physically deficient roadway segments, in EIR/EIS Chapter 19, Transportation.
Mitigation Measure TRANS-2b: Limit construction activity on physically deficient roadway segments, in EIR/EIS Chapter 19, Transportation.
Mitigation Measure TRANS-2c: Improve physical condition of affected roadway segments as stipulated in mitigation agreements or encroachment permits, in EIR/EIS Chapter 19, Transportation.
Mitigation Measure UT-6a: Verify locations of utility infrastructure, in EIR/EIS Chapter 20, Public Services and Utilities.
Mitigation Measure UT-6b: Relocate utility infrastructure in a way that avoids or minimizes any effect on operational reliability, in EIR/EIS Chapter 20, Public Services and Utilities.
Mitigation Measure UT-6c: Relocate utility infrastructure in a way that avoids or minimizes any effect on worker and public health and safety, in EIR/EIS Chapter 20, Public Services and Utilities.
Mitigation Measure AQ-15: Develop and Implement a GHG Mitigation Program to Reduce Construction Related GHG Emissions to Net Zero (0), in EIR/EIS Chapter 22, Air Quality and Greenhouse Gases.
Mitigation Measure HAZ-6: Test dewatered solids from solids lagoons and dredged sediment prior to reuse and/or disposal, in EIR/EIS Chapter 24, Hazards and Hazardous Materials.

Non-Environmental Commitments
Partner with Delta Municipal, Industrial, and Agricultural Water Purveyors in Developing Methods to Reduce Potential Water Quality Effects
Property Tax and Assessment Revenue Replacement, in BDCP Chapter 8, Implementation Costs and Funding, and in EIR/EIS Chapter 16, Socioeconomics.
Where applicable, BDCP proponents will provide compensation to property owners for losses due to implementation of the BDCP. This compensation would not constitute mitigation for any related physical impact; however, it would reduce the severity of economic effects. This is a commitment that is referenced in EIR/EIS Chapter 13, Land Use, and in EIR/EIS Chapter 16, Socioeconomics.

DRAFT

Table 2-2: Agricultural Stewardship Strategies and Implementation

STRATEGY	TYPE OF ACTIVITY		
	Part of Project	Potential Environmental Mitigation*	Enhancements for Delta as a place
Maintain Farming in the Delta			
1. Improve flood protection		X*	X
2. Maintain or improve water supply			
3. Improve water quality		X*	X
4. Prevent or reduce high groundwater levels		X*	X
5. Remove sediment		X*	X
6. Control terrestrial weeds		X*	X
7. Reduce conflict between agriculture and habitat lands by creating a “good neighbor” policy		X*	X
8. Work with other interests to explore the value of reinstating state funding of Williamson Act subventions			X
9. Work with counties to expand Williamson Act authorized uses to include open space/habitat lands in Williamson Act preserves		X	
10. Investigate options for <i>in lieu</i> tax revenue for counties			
11. Provide for Agricultural Conservation Easements		X*	X
Provide incentives for conservation on farmland			
12. Partner with others to maintain and enhance environmental quality on farmland	X	X*	X
13. Compensate farmers to manage agricultural land for BDCP purposes	X		
14. Provide incentives for farmers to take part in a market based conservation program		X*	
Manage land for purposes other than conventional crop production			
15. Provide technical and financial assistance to stabilize or reverse land subsidence on Delta islands			X
16. Assist landowners to produce and sell greenhouse gas offset credits in the AB 32 Cap-and-Trade program	X		X
17. Compensate farmers to manage <u>habitat lands</u> for BDCP purposes	X		
Provide for economic development and other benefits			
18. Establish a Delta Economic Development Corporation			
19. Make the regulatory system work better for farmers who want to participate - take advantage of other “alignment” efforts			
20. Consider possibility of Delta-wide (or sub-region) permits			

STRATEGY	TYPE OF ACTIVITY		
	Part of Project	Potential Environmental Mitigation*	Enhancements for Delta as a place
21. Provide technical and financial assistance for farmers to manage land to incorporate recreation, including agrotourism and eco-tourism			
22. Consider effects on agricultural infrastructure and/or concentric economic impacts, including transportation			
23. Designate for-profit habitat protection as agricultural production for specifically defined purposes			
24. Adaptive management for agricultural stewardship programs			
25. Look at ways to provide multiple benefits from mitigation actions as a way to increase overall benefits, not just as a way to reduce costs			
26. Consider opportunities to coordinate with others in helping to maintain a sustainable agricultural social and economic community in the Delta Region consistent with ecosystem conservation and restoration activities			

* Strategies that could be part of Optional Agricultural Land Stewardship Strategy. Funds that could be spent for easements would be spent on an agreed menu of options which could include the items in this column. In BDCP Chapter 8.8.1, the following assumptions are made: “it is assumed that mitigation will be required for permanent effects to approximately 45,000 acres of Important Farmland as a result of all conservation measures. Additionally, it is assumed that approximately 39,500 acres protected in restricted agricultural use in the BDCP Reserve System (CM3) will qualify as full mitigation for impacts to Important Farmland, based on the proportion of agricultural land that is Important Farmland throughout the study area. Since these numbers are based on assumptions, it will not be known until implementation if the 39,500 acres can also count toward the EIR/EIS mitigation measure for agricultural resources. However, for the purposes of the cost estimate, if it were assumed that the full acreage is counted, the additional EIR/EIS mitigation requirement for agricultural resources would be just over 5,400 acres at a 1:1 ratio. For cost estimating purposes in Chapter 8, mitigation through the “Conventional Mitigation Approach” at a 1:1 ratio is assumed, and the cost of acquisition of additional conservation easements of cultivated land at a 1:1 ratio is calculated at \$32.8 million, based on a per-acre easement cost of \$6,040”.

Table 2-3: Agricultural Stewardship Strategies and Funding

STRATEGY	TYPE OF FUNDING				
	No extra costs or minimal costs	May involve additional costs	Possible New Funding		
			Bond	Cap and Trade Revenues	Other
Help maintain farming in the Delta					
1. Improve flood protection	X*		X		X
2. Maintain or improve water supply	X*				
3. Improve water quality	X*		X		X
4. Prevent or reduce high groundwater levels	X*		X		X
5. Remove sediment	X*		X		X
6. Control terrestrial weeds	X*		X		X
7. Reduce conflict between agriculture and habitat lands by creating a “good neighbor” policy	X*		X		X
8. Work with other interests to explore the value of reinstating state funding of Williamson Act subventions				X	X
9. Work with counties to expand Williamson Act authorized uses to include open space/habitat lands in Williamson Act preserves				X	X
10. Investigate options for <i>in lieu</i> tax revenue for counties In lieu tax revenue for counties					
11. Provide for Agricultural Conservation Easements	X*		X	X	X
Provide incentives for conservation on farmland					
12. Partner with others to maintain and enhance environmental quality on farmland	X*				
13. Compensate farmers to manage <u>agricultural</u> land for BDCP purposes	X				
14. Provide incentives for farmers to take part in a market based conservation program	X*				
Manage land for purposes other than conventional crop production					
15. Provide technical and financial assistance to stabilize or reverse land subsidence on Delta islands			X	X	X
16. Assist landowners to produce and sell greenhouse gas offset credits in the AB 32 Cap-and-Trade program	X				X
17. Compensate farmers to manage <u>habitat lands</u> for BDCP purposes	X				

STRATEGY	TYPE OF FUNDING				
	No extra costs or minimal costs	May involve additional costs	Possible New Funding		
			Bond	Cap and Trade Revenues	Other
Provide for economic development and other benefits					
18. Establish a Delta Economic Development Corporation					
19. Make the regulatory system work better for farmers who want to participate - take advantage of other "alignment" efforts					
20. Consider possibility of Delta-wide (or sub-region) permits					
21. Provide technical and financial assistance for farmers to manage land to incorporate recreation, including agro-tourism and eco-tourism					
22. Consider effects on agricultural infrastructure and/or concentric economic impacts, including transportation					
23. Designate for-profit habitat protection as agricultural production for specifically defined purposes					
24. Adaptive management for agricultural stewardship programs					
25. Look at ways to provide multiple benefits from mitigation actions as a way to increase overall benefits, not just as a way to reduce costs					
26. Consider opportunities to coordinate with others in helping to maintain a sustainable agricultural social and economic community in the Delta Region consistent with ecosystem conservation and restoration activities					

This page is intentionally left blank

DRAFT

If you would like to submit written comments, please submit to:

DWR ALS Workgroup

c/o Katherine Spanos

Department of Water Resources

1416 Ninth Street

Sacramento, CA 95814

DRAFT