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AGRICULTURAL LAND STEWARDSHIP STRATEGIES DISCUSSION PAPER

MAINTAINING DELTA AGRICULTURE

May 2013

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DISCUSSION PAPER

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BACKGROUND DOCUMENT

Effect of BDCP on Delta Agriculture and Mitigation Measures and Commitments in BDCP and EIR/EIS

Preface
Overview

1. Effect of BDCP on Delta Farmland, includes limitations on use of cultivated lands
2. Mitigation Measures and Commitments in draft BDCP and EIR/EIS
3. Agricultural Land Stewardship Plan

Mitigation Measures and Commitments in draft BDCP and EIR/EIS

1. Introduction
2. List of measures/commitments

Agricultural Land Stewardship Plan

MAPS and TABLES

1. Map of Conservation Zones and Restoration Areas
2. Maps in Chapter 14
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4. Tables on acres of farmland and Williamson Act land that might be affected for different conservation measures

ATTACHMENTS

1. List of agencies and individuals consulted.
2. Resources Agency Memoranda
3. CEQA cases dealing with agricultural resources
4. Vision Documents – summaries of strategies discussed in each document
5. Related Activities –a relatively comprehensive list of program, groups, etc. that relate to the subjects in the paper and involve the Delta
6. Mitigation Measures and Commitments in draft BDCP and/or EIR/EIS
7. Factors to consider in deciding whether to use the Agricultural Land Stewardship Approach

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DRAFT Executive Summary

AGRICULTURAL LAND STEWARDSHIP STRATEGIES

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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. See Attachment 4 of the Appendix for a list of individuals and agencies consulted. 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.

We have included a Feedback Form at the end of this paper that can be used to comment on the potential strategies in this package, to provide ideas that could help with describing strategies under development, or to propose strategies not included. People wanting to review the documents can also go to https://bdcpdfl.water.ca.gov where they can download copies and complete the 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 kspanos@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.

- 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

The Background Document to this paper, which is available on request, is a source document for information in the BDCP and the EIR/EIS relating to effects on agriculture in the Delta. Section I of the Background Document describes the process that led to the development of this paper. Section II describes the impacts of BDCP on agriculture in the Delta and provides an overview for the Sections that follow. Section III describes the mitigation measures and commitments that are in the current administrative drafts of the BDCP and EIR/EIS that relate to these impacts. See Table 2-1 for a summary of these measures. Section IV describes in some detail the primary mitigation measure for agriculture – an Agricultural Lands Stewardship Plan.

Table ES-1 Potential Strategies

Note to reviewers: These strategies are still in the process of development. Feel free to make suggestions for additions or deletions.

Group A: Potential strategies to help maintain farming in the Delta

Strategy 1: Improve flood protection
Strategy 2: Water Management: Maintain or improve water supply (underdevelopment)
Strategy 3: Water Management: Improve water quality (under development)
Strategy 4: Water Management: Prevent or reduce high groundwater levels (under development)
Strategy 5: Water Management: Remove sediment (under development)
Strategy 6: Control terrestrial weeds
- **Strategy 6a**: Reinvigorate Delta County Weed Management Areas
- **Strategy 6b:** Prioritize invasive weed targets for Delta-wide eradication
- **Strategy 6c:** Encourage Use of Weed-Free Construction Materials

Strategy 7: Reduce conflict between agriculture and nearby habitat lands by creating a "good neighbor" policy
Strategy 8: Work with other interests to explore the value of reinstating state funding of Williamson Act subventions
Strategy 9: Work with counties to expand Williamson Act authorized uses to include open space/habitat lands in Williamson Act Preserves
Strategy 10: Investigate options for *in lieu* tax revenue for counties (under development)
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

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

Strategy 15: Provide technical and financial assistance 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

Group D: Potential strategies that provide for economic development and other benefits *Note to reviewers: This section is in the early stages of development. . Strategies may be deleted or added as work continues on this section.*

Strategy 18: Offset economic effects of BDCP on agricultural infrastructure and/or concentric economic impacts, including transportation
Strategy 19: Establish a Delta Economic Development Corporation
Strategy 20: Support 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, including with Rural-Urban Connections Strategy programs
Strategy 21: Make the regulatory system work better for farmers, including possible Delta regional (or sub-region) permits
Strategy 22: Provide technical and financial assistance for farmers to manage land for alternative revenues such as recreation and tourism
Strategy 23: Designate carbon sequestration and subsidence reversal crops as agricultural production for regulatory and incentive programs

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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 in the Delta
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.

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Potential Strategy 1: Improve flood protection

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, removing obstructions to floodwater flow, constructing floodgates, and stockpiling emergency repair and flood-fighting supplies.

RELATED PROGRAMS AND POLICIES

DWR provides engineering assistance and funds to Delta reclamation districts to 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. 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 cost, environmental and social impacts, and questions about how to pay for the projects. There are also issues about how to prioritize projects.

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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

In 2012, a diverse group of stakeholders came together as an ad hoc group, The Coalition to Support Delta Projects, 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.

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: Improve Flood Protection Survey.

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Strategies 2-5 are still under development. Feel free to make suggestions regarding these strategies through the Feedback form at the back of this paper or at https://bdcpdfl.water.ca.gov/

Strategy 2: Water Management: Maintain or improve water supply (under development)

Strategy 3: Water Management: Improve water quality (under development)

Strategy 4: Water Management: Prevent or reduce high groundwater levels (under development)

Strategy 5: Water Management: Remove sediment (under development)

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Potential 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 famers 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: Reinvigorate County Weed Management Areas in the Delta Survey.

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Potential Strategy 6b — Prioritize invasive weed targets for Delta-wide eradication

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: Invasive species regional survey

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Potential Strategy 6c — Encourage Use of Weed-Free Construction Materials

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: Invasive Species Weed Free Certification Survey

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Potential 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 and7-2) 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: "good neighbor" policy survey

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Potential Strategy 8: Work with other interests to explore the value of reinstating state funding of 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 re-instate Williamson Act subventions.

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

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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: Williamson Act subventions survey

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Potential Strategy 9: 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: Expand Williamson Act authorized uses survey

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Strategy 10 is still under development. Feel free to make suggestions regarding these strategies through the Feedback form at the back of this paper or at https://bdcpdfl.water.ca.gov/

If you would like to provide feedback on this strategy, please click the following link: Strategies under development

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Potential 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 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 use 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 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 conservation easements survey

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Potential 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: Enhance environmental quality on farmland survey

DRAFT

Potential 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: Compensate farmers to manage agricultural land survey

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Potential 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: Market based conservation program survey

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Potential Strategy 15: Provide technical and financial assistance to 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

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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 subsided 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 subsided 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: Stabilize or reverse land subsidence on Delta islands survey

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Potential 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: Greenhouse gas offset credits survey

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Potential 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: Compensate farmers to manage habitat lands survey

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Strategies 18-23 are still under development. Feel free to make suggestions regarding these strategies through the Feedback form at the back of this paper or at https://bdcpdfl.water.ca.gov/

Strategy 18: Offset economic effects of BDCP on agricultural infrastructure and/or concentric economic impacts, including transportation

Strategy 19: Establish a Delta Economic Development Corporation

Strategy 20: Support 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, including with Rural-Urban Connections Strategy programs

Strategy 21: Make the regulatory system work better for farmers, including possible Delta regional (or sub-region) permits

Strategy 22: Provide technical and financial assistance for farmers to manage land for alternative revenues such as recreation and tourism

Strategy 23: Provide technical and financial assistance for farmers to manage land for alternative revenues such as recreation and tourism

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AGRICULTURAL LAND STEWARDSHIP STRATEGIES DISCUSSION PAPER

MAINTAINING DELTA AGRICULTURE

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CHAPTER 2

IMPLEMENTATION AND FUNDING

Chapter 2: Implementation and Funding

One of the key questions in approaching mitigation for conversion of farmland from one use to another for project purposes is whether the impacts identified are economic[1], environmental, or a mixture of the two. In general, it is not legally necessary to mitigate for purely economic impacts unless they lead to reasonably foreseeable secondary environmental impacts. Because of the complex nature of farmland as a natural and economic resource, there can be different views on when an impact is economic and when it is environmental. In addition, there may be policy reasons to support and encourage Delta farmers[2] and agriculture[3] that go beyond current legal requirements.

Table 2-1 lists the mitigation measures and environmental and non-environmental commitments in the 2013 Consultants Administrative Draft of the EIR/EIS (Spring 2013 Draft EIR/EIS)[4] for the BDCP. The Spring 2013 Draft EIR/EIS proposes an Agricultural Land Stewardship Plan (ALSP) as the primary mitigation measure for environmental impacts to agricultural resources (Mitigation Measure AG-1). Under the ALSP, the first step that project proponents would be required to perform is to consider multi-purpose projects, including agriculture and Williamson Act contracts, when developing projects. The second step is to apply a variety of site-specific measures to reduce impacts to Delta agriculture. The third step is to look at the use of agricultural conservation easements. The Spring 2013 Draft EIR/EIS proposes that the cultivated lands that would be permanently protected as mitigation for impacts to biological resource values would also be considered to meet requirements for mitigation of impacts to agricultural resources, provided that the habitat conservation easements for biological values also incorporate agricultural conservation easement protections.

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[1] In this context, references to economic impacts may also include social or social/economic impacts.

[2] In this paper, farmer is used as a generic term that includes farmers, ranchers, landowners, or tenants if they are currently farming the land and want to continue managing the land whether or not it is used for project purposes, The approach suggested in this paper would not prohibit farmers from selling or leasing their land for project purposes if they do not want to continue to farm the land themselves.

[3] When discussing agriculture, farmland or agricultural land in general terms, the terms can generally be used interchangeably. The term "agriculture" is also intended to include the related effects on Delta farm workers, tenant farmers, and farmland owners and the economic impacts on the companies and individuals who provide productive inputs to Delta farmers, and on those who transport, process, store, and market the output of Delta farms.

[4] Consultant Administrative Draft BDCP and EIR/EIS placed on the BDCP webpage in Spring 2013.

For converted farmland that is not mitigated as part of a habitat conservation easement, the ALSP proposes two options. The first is called the Conventional Mitigation Approach of mitigation and it would mitigate through purchase of agricultural conservation easements, generally on a 1:1 basis. The second is an Optional Agricultural Land Stewardship Approach, which contemplates a mitigation package agreed to by the landowner and other parties that includes other less traditional measures, in addition to agricultural conservation easements, that could protect, enhance or improve the agricultural nature or productivity of lands in Delta. These measures are called strategies and are the subject of Chapter 1 of this paper.

In the 2013 Consultants Administrative BDCP (Spring 2013 Draft BDCP), the cost for mitigation by using the Optional Approach is assumed to be the same as the cost of acquiring agricultural conservation easements on a 1:1 basis. 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".

The Spring 2013 Draft BDCP also includes costs for other mitigation measures and environmental and non-environmental commitments. These measures and commitments are listed in Table 2-1 and the costs are discussed in Chapter 8 of the Spring 2013 Draft BDCP. Neither the Spring 2013 Draft BDCP nor EIR/EIS include implementation or funding for the strategies discussed in this paper not included as measures or commitments in draft documents.

Implementation

Assuming there is adequate funding, implementation of a strategy could be carried out with regard to one or more of three different kinds of activities. These activities are identified below. Table 2-2 is a first step at showing which implementation activity or activities applies to each strategy.

- ***BDCP planning to include agricultural considerations*.**

  Some of the strategies are standards of practice that could be included as part of the project. Others could include ways to involve farmers in managing project lands for project purposes and could range from payments to use the land to partnerships to manage the land. Some of these might not result in any additional costs to the projects. Others might add to project costs and additional funding would be necessary.

- ***Optional Agricultural Land Stewardship Approach for CEQA/NEPA mitigation*.**

  As discussed above, to the extent that strategies are selected as a result of the Optional Agricultural Land Stewardship Approach for CEQA/NEPA mitigation, it is expected that they would not be more costly than the Conventional Agricultural Approach which would be based on the costs to acquire necessary agricultural conservation easements.

- ***Enhancements for the Delta as a Place, Consistent with the Delta Plan*.**

  Enhancements may include some of the same strategies considered forthe Optional Agricultural Land Stewardship Approach for CEQ/NEPA mitigation, but the funding would have to come from other sources.

  *New funding on a case by case basis***.** Some of the strategies have (or have in the past had) funding, for example Williamson Act subvention funds and funding for Weed Management Areas and funding has been reduced or eliminated for budgetary reasons. It is possible that additional funding could be found for these programs. Alternatively, new funding may come from new programs such as from a market to buy carbon credits or environmental services on the land. Each of these might require additional legislation, funding allocations or executive decisions. They would be pursued on a case by case basis and would be subject to other priorities determined by state and federal governmental and legislative decision-makers. .

  New funding as part of a new program to fund Agricultural Land Stewardship Strategies not part of environmental mitigation. Funding could come from new sources – such as from new bond funds or grants from new programs such as Cap and Trade funds or money used to mitigate for other projects. Funds from existing programs or new money to existing programs could also become part of such a program. There are a number of ways to set up such programs. Several options are listed below:

1. Give the funds to a governmental agency such as the California Department of Conservation, the California Department of Food and Agriculture, the Delta Conservancy, the Delta Stewardship Council, the Delta Protection Commission or to Regional Conservation Districts. This option could also involve the creation of a new organization or a Joint Powers Agency consisting of relevant local agencies. The agency could distribute funds based on a set of factors to be determined.

2. Give the funds to a governmental agency to distribute as competitive grants similar to programs run by the California Department of Fish and Wildlife for the Environmental Restoration Program or the California Department of Water Resources for the Integrated Regional Water Management Program. The agency could distribute funds based on a set of factors to be determined.

3. Give the funds to a governmental agency to distribute based on the recommendations of an advisory group composed of appropriate local agencies. All (or a specified percentage of the members) would have to agree on a specified project before funding could be disbursed. Consideration would need to be given to whether there would be any limitations on the funding besides consistency with relevant state and local policies.

Funding

Table 2-3 is a first step at identifying possible funding sources for each strategy. To date the following potential sources of funding have been proposed:

1. Funds that might otherwise be used to purchase agricultural conservation easements as BDCP mitigation could be made available instead to assist with making the Optional Agricultural Land Stewardship Approach work.

2. Funds that might be used by BDCP and non-BDCP projects for mitigation of greenhouse gases could be used to support agriculture friendly GHG reduction activities.

3. California Air Resources Board (CARB) established greenhouse gas offset market using credits created through the development and restoration of wetlands.

4. Funding from CARB's "Cap and Trade" program developed pursuant to the Global Warming Act Solutions Act of 2006 (AB 32).

5. Bond measure(s) placed on the statewide ballot

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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 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.

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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 *in lieu* 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 habitat lands for BDCP purposes	X		

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STRATEGY	TYPE OF ACTIVITY		
	Part of Project	Potential Environmental Mitigation*	Enhancements for Delta as a place
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			

* 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 *in lieu* 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 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			X	X	X

STRATEGY	TYPE OF FUNDING				
	No extra costs or minimal costs	May involve additional costs	Possible New Funding		
			Bond	Cap and Trade Revenues	Other
subsidence on Delta islands					
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 habitat lands 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					
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					

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ALSS FEEDBACK FORM

For more on each Strategy, go the following link: https://bdcpdfl.water.ca.gov/list-of-agricultural-land-stewardship-strategies

PLEASE provide feedback below:

Pick the Strategy which you are commenting on from the list below.

☐ Strategy 1: Improve flood protection

☐ Strategy 2: Water Management: Maintain or improve water supply (under development)

☐ Strategy 3: Water Management: Improve water quality (Under Development)

☐ Strategy 4: Water Management: Prevent or reduce high groundwater levels (Under Development)

☐ Strategy 5: Water Management: Remove sediment (under development)

☐ Strategy 6a: Reinvigorate Delta County Weed Management Areas

☐ Strategy 6b: Prioritize invasive weed targets for Delta-wide eradication

☐ Strategy 6c: Encourage Use of Weed-Free Construction Materials

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

☐ Strategy 8: Work with other interests to explore the value of reinstating state funding of Williamson Act subventions

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

☐ Strategy 10: Investigate options for in lieu tax revenue for counties (under development)

☐ Strategy 11: Provide for Agricultural Conservation Easements

☐ 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

☐ Strategy 15: Provide technical and financial assistance 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: Offset economic effects of BDCP on agricultural infrastructure and/or concentric economic impacts, including transportation

☐ Strategy 19: Establish a Delta Economic Development Corporation

☐ Strategy 20: Support 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, including with Rural-Urban Connection Strategy programs

☐ Strategy 21: Make the regulatory system work better for farmers, including possible Delta regional (or sub-region) permits

☐ Strategy 22: Provide technical and financial assistance for farmers to manage land for alternative revenues such as recreation and tourism

☐ Strategy 23: Designate carbon sequestration and subsidence reversal crops as agricultural production for regulatory and incentive programs

☐ Other:

1) How do you feel about this statement: This is a strategy Delta Farmers might find helpful.

☐ strongly disagree

☐ disagree

☐ neutral

☐ agree

☐ strongly agree

2) How would you improve it?

3) Reasons why you think it would not work (particularly if you have on the ground examples)

4) If you can suggest a person or organization to contact for further information regarding this strategy, please provide the information below.

5) If you have suggestions related to this strategy or an alternative approach, please help us by providing details. The following questions are intended to prompt you for information we think is important, but please feel free to add anything we may have overlooked and that you think might be important for us to understand and develop a meaningful strategy.

5a) Please describe the Farmer's role

5b) Please describe how an agency might fit into this strategy or how they might help

5c) Please list any similar operations or success stories currently in place, and if possible, contact information

6) Please check all that apply:

- ☐ I am a Farmer
- ☐ I am a Delta Landowner
- ☐ I am affiliated with Local Government
- ☐ Other:

7) Contact Information (Optional)

Would you like to discuss this strategy or other related topics with the DWR BDCP Agricultural Land Stewardship Workgroup? Please include a way to contact you (name, e-mail address, phone number, mailing address).

8) If you have a comment that is not directly related to a strategy, please feel free to include it below:

9) Options for Submitting Responses

1) Electronically:
Submit electronically by clicking the "submit" button below. Once the form has been submitted, you will be presented with a link giving you the option submit additional Feedback Forms.

2) Email to: Kspanos@water.ca.gov

3) Mail to address below:

DWR ALS Workgroup
c/o Katherine Spanos
Department of Water Resources
1416 Ninth Street
Sacramento, CA 95814

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