# Potential Sources of Funding under California Law to Protect Blue Carbon Coastal Ecosystems in Baja California and Baja California Sur

prepared for the project

Examining Cross-Border, Nature-Based Market Solutions to Protect Blue Carbon Coastal Ecosystems in the Californias

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March 3, 2022

**Abstract**

This paper examines potential sources of funding under California Law to protect blue carbon coastal eco-systems in Baja California and Baja California Sur. The potential funding sources include (1) the California regulatory regime for protection of specified species and related habitats; (2) the California Cap-and-Trade Program to reduce greenhouse gases emitted by certain covered entities, and (3) the California Environmental Quality Act ("CEQA") with respect to mitigation of greenhouse gas emissions related to CEQA-covered development projects. We conclude that there are paths for funding blue carbon project on the Baja Peninsula in Mexico from each of these sources. However, there are barriers along each of these paths, particularly arising from uncertainties as to the interpretation and application of the respective bodies of law. It will be necessary to engage with government bodies on both sides of the border to determine if such barriers can be overcome.

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The Institute of the Americas has established a project to examine cross-border, nature-based market solutions to protect blue carbon coastal eco-systems in Baja California and Baja California Sur (the "Las Californias Project"). The Las Californias Project seeks to identify funding sources that could be used to compensate the owners of land underlying blue carbon coastal eco-systems in B.C. and B.C.S. for the purpose of protecting and potentially enhancing those eco-systems. Payments from these funding sources could potentially be supplemented with other incentives to the owners to protect these eco-systems and thereby avoid their destruction or degradation.

This report will examine potential cross-border funding sources under California law, including (1) the California regulatory regime for protection of specified species and related habitats ("Species and Habitat Protection"); (2) the California Cap-and-Trade Program ("CCTP"), and (3) the California Environmental Quality Act ("CEQA") with respect to mitigation of greenhouse gas ("GHG") emissions. A separate paper for the Las Californias Project will examine international voluntary offset trading mechanisms, including CORSIA (Carbon Offset and Reduction Scheme For International Aviation)[1] and the $1 billion initiative to protect tropical forests through the Lowering Emissions by Accelerating Forest (LEAF) finance coalition.[2]

This report is divided into five chapters: Chapter One is an Executive Summary. Chapter Two concerns potential funding through mitigation payments under the California regulatory regime for Species and Habitat Protection. Chapter Three analyzes potential funding through the CCTP. Chapter Four concerns potential funding through GHG offsets under CEQA. Chapter Five presents conclusions and recommendations.

[1] Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) (icao.int).
[2] The LEAF Coalition.

# Chapter One
# Executive Summary

## I. The California Regulatory Regime for Protection of Plant and Animal Species and Related Habitat

The California Department of Fish and Wildlife ("CDFW") can require developers, under various provisions of California law, to undertake mitigation obligations as to development projects that may impact species and habitats in California. In cases where the broadly defined "waters of the United States" are involved, the U.S. Army Corps of Engineers ("ACE") will also have jurisdiction under the U.S. Clean Water Act and will also be able to impose mitigation obligations. The question for this chapter is whether a blue carbon project on the Baja Peninsula in Mexico could be used to satisfy those CDFW and ACE mitigation obligations.

There are steps along the way, but the answer is potentially yes if (1) the impacts to species and habitats in California, particularly on endangered, rare or threatened species, are unavoidable; (2) there are no suitable mitigation opportunities in California; (3) the species and habitats on the Baja Peninsula are the same as impacted species and habitats in California, particularly if there is a linkage between the two jurisdictions, e.g. with respect to migratory birds that fly between California and the Baja Peninsula; (4) the mitigation project in Mexico will be effective in providing compensatory mitigation for the adverse impacts on affected species and habitats in California, whether through rehabilitation, enhancement, restoration or in some cases preservation of the mitigation site in Mexico; and (5) the mitigation project in Mexico can be protected, managed and financed for the indefinite future to the satisfaction of state and federal authorities in California.

The answer is only potentially yes because of uncertainties in the interpretation of applicable law, regulations and a key memorandum of understanding among California and federal agencies with overlapping jurisdiction as to development projects that may impact water-related species and habitats in California. Those uncertainties are as follows:

CDFW prefers the use of "conservation banks" or "mitigation banks" over individualized mitigation projects to satisfy CDFW mitigation obligations. However, the provisions of California law pertaining to establishment of conservation banks or mitigation banks include terms presupposing that the sites for such banks are in the U.S. It will require consultation with CDFW to determine if it is possible to work around those terms. If it is not possible, an amendment to the law will be necessary to permit conservation/mitigation banks outside of the U.S.

Further, CDFW coordinates with the ACE and other state and federal agencies with overlapping jurisdiction regarding policies and procedures pertaining to mitigation and conservation banking in California. It does so pursuant to a 2011 "Memorandum of Understanding

concerning Mitigation and Conservation Banking and In-Lieu Fee Programs in California."[3] That MOU will require agreement by the parties to the MOU to any interpretation of law and regulations that would permit a site outside of the United States to be used as a mitigation bank or conservation bank. There is some basis for such an interpretation in the mitigation guidelines incorporated in the MOU but it will still require a persuasive effort to obtain concurrence by all the MOU parties to such interpretation.

## II. California Cap-and-Trade Program

According to the California Air Resources Board ("CARB"), California's Cap and Trade System "establishes a declining limit on major sources of GHG emissions throughout California, and it creates a powerful economic incentive for significant investment in cleaner, more efficient technologies."[4]

The CCTP is a potential funding sources for protection of blue carbon coastal eco-systems in B.C. and B.C.S. under two alternative strategies:

- Mexico to Establish a Linked System. Mexico has a pilot program for a Cap and Trade System (*Sistema de Comercio de Emisiones*, or "SCE"), as discussed below. If SCE becomes fully operational, it could be linked with the CCTP and become a "Linked System." This would require California's Governor to make certain findings as to the SCE program and enforcement of that program. Once SCE is so linked, an offset project operator could establish one or more "offset projects" with respect to blue carbon coastal eco-systems in B.C. and B.C.S. which could provide the basis for SCE to issue offsets to the project operator.

- Establishment of a Sector-Based Crediting Program in Mexico. B.C. and B.C.S. could join together to form a regional jurisdiction within Mexico for purposes of the CCTP. As a regional jurisdiction, they could establish a Sector-Based Crediting Program, i.e. a GHG emissions-reduction crediting mechanism covering a particular economic sector within the jurisdiction, subject to approval by CARB through a regulatory procedure. In our case, the applicable economic sector would be forestry or perhaps tropical forests. Then, if the jurisdiction can reduce GHG emissions in that sector against a baseline – reflecting historical deforestation and and/or degradation leading to increased GHG levels – the jurisdiction can issue Sector-Based Offset Credits at the jurisdiction level, i.e. not to any project operator but for the benefit of the entire sector.

Upon the issuance of offsets to a project operator by SCE as a Linked System, or the issuance of Sector-Based Offset Credits by B.C. and B.C.S. as a regional jurisdiction within Mexico, then if CARB recognizes and registers the offsets or recognizes the Sector-Based Offset Credits, as applicable, they become "compliance instruments" under the CCTP which can be used to meet CCTP compliance obligations. The compliance instruments could then be sold to the California entities that have CCTP compliance obligations to meet those obligations. The sales proceeds would go to the project operator, in the case of Linked System offsets, to be used for protection

[3] https://www.spd.usace.army.mil/Portals/13/docs/regulatory/banking/2011-MOU.pdf
[4] Cap-and-Trade Program | California Air Resources Board

of the offset project. In the case of Sector-Based Offset Credits, the sales proceeds would go to the issuing jurisdiction for protection of the entire sector, in which case the proceeds would be directed to individual projects through "nesting" of individual projects and allocations by means of sector accounting.

As discussed in more detail below, there are potential problems with each of these potential funding strategies.

- There will be major challenges in arranging for a linkage between the SCE and CCTP. To obtain such linkage, the Mexican SCE must have provisions equivalent to or stricter than those in the CCTP (1) on GHG reporting, (2) on GHG reduction, including on issuance of offsets, and (3) on enforcement, to be validated in each case by findings of the California Governor. That will be a difficult standard to meet.

- With respect to B.C. and B.C.S. establishing a Sector-Based Crediting Program, the requirements for approval are rigorous and no approvals have been granted to date. B.C. and B.C.S. would be plowing new ground in seeking approval for their Sector-Based Crediting Program. This could be burdensome and time-consuming. Also, B.C. and B.C.S., in issuing Sector-Based Offset Credits, would likely be evaluated against the California Tropical Forest Standard ("CTFS"). The CFTS, as its name suggests, contemplates offset credits derived from tropical forests. This does not include wetlands, salt marshes or seagrasses, and thus does not cover the full scope of B.C. and B.C.S. blue carbon coastal eco-systems.

There are also strict limitations on the use of either of these offset instruments to meet compliance obligations under the CCTP. Under the CCTP regulatory regime only 2% of the compliance obligations for the period 2021-2025 and 3% of the compliance obligations for the period 2026-2030 would be available as a potential market for Linked System offsets or Sector-Based Offset Credits from B.C. and B.C.S. Considering the competition from existing domestic offset projects, it is not clear that there would be a sufficient market to justify the creation of the Linked System offsets or Sector-Based Offset Credits.

**III. The California Environmental Quality Act ("CEQA") and GHGs**

The California Environmental Quality Act ("CEQA") specifically provides that offsets will be permitted as a mitigation tool for GHG emissions. If local development projects in California, under CEQA, can offset GHG remissions with offsets from outside the United States, i.e. offsets derived from blue carbon coastal eco-systems in B.C. and B.C.S., this would provide another funding source to support protection efforts for those eco-systems.

Under its general regulatory scheme, CEQA does not establish detailed requirements for offsets. Instead, the "lead agencies" for projects subject to CEQA review establish their own terms regarding the use of offsets, subject to broad CEQA guidelines. The California courts, in interpreting those guidelines, have set limits on the scope of lead agency discretion.

In the case of *Golden Door Properties, LLC, v. County of San Diego* (June 12, 2020) 50 Cal.App.5th 467, the California Court of Appeals rejected on CEQA grounds a County of San Diego GHG offset strategy for land development projects that are inconsistent with the

County's General Plan. But in so doing, it identified factors that would provide grounds for court approval of a local offset mechanism, as follows:

- If the local land use agency sets its own rules for use of offsets and those rules are sufficiently robust, the local agency need not rely on the CCTP offset rules to comply with CEQA.

- Offsets may be issued only if the emission reduction achieved is real, permanent, quantifiable, verifiable, enforceable, and additional to any GHG emission reduction otherwise required by law or regulation, and any other GHG emission reduction that otherwise would occur.

- Offsets should be issued by reference to specific identified protocols, which have been vetted to ensure that the offsets issued pursuant to such protocols are real, permanent, quantifiable, verifiable, enforceable, and additional.

- Offsets should be issued by official registries that are credible, which can be established if a registry has been approved for use by CARB, so long as the protocols that the registries use are also credible.

- Offsets should be used as a last resort only after other mitigation efforts that are directed to benefitting the local jurisdiction are exhausted or otherwise not available. Further, there should be some objective criteria regarding the unavailability of local mitigation opportunities, since this issue cannot be left to the unfettered discretion of a local official. Further, Courts will look favorably on percentage limitations upon use of non-local offsets.

- There should be mechanism in place to ensure enforcement, which may be through the registries if they take on that role.

- It may be particularly difficult to establish that out-of-country offsets are valid because of the risk of corruption in establishing and administering the offsets, and because of uncertainty as to foreign enforcement of the offsets.

The *Golden Door* case offers important lessons for our Project:

- It will be essential to engage with the regulatory authority for California development projects, i.e. county or city government, to see if they will incorporate offsets in their GHG mitigation strategy, and in particular out-of-country offsets.

- Where a GHG mitigation plan permits the use of offsets, the plan should incorporate the factors listed above.

- The provisions regarding out-of-country offsets will need to be particularly rigorous to overcome judicial skepticism. Corruption and enforceability are the critical issues.

Therefore, the offsets must be issued in a process that excludes corruption and must be "self-executing" without discretionary enforcement, e.g. through recorded easements that would prevent development.

It must be noted that the Court of Appeals in *Golden Door* was particularly skeptical towards out-of-country offsets. The County of San Diego, following the *Golden Door* decision, set up a GHG mitigation plan for a specific project using the court-identified factors, but that plan did not permit use of out-of-country offsets. The County apparently decided that it would give up on out-of-country offsets and try to strengthen the GHG mitigation plan against court challenges using only in-country offsets.

*Golden Door* also comments favorably on a County of San Diego mitigation measure pertaining to direct investment in offset projects rather than purchase of the offsets derived from those projects. The offsets must still be real, permanent, quantifiable, verifiable, enforceable, and additional, but a direct investment in the project rather than purchase of the offsets could potentially provide an alternative source of funding for out-of-country projects. This should also be explored in depth.

Each California city and county government has its own land use measures and GHG mitigation mechanisms. For our Project, it will be necessary to identify those jurisdictions where there is substantial development and, accordingly, a large potential market for offsets. Then the critical issue is whether it will be possible to incorporate out-of-country offsets in the GHG mitigation strategies for those jurisdictions.

## IV. Conclusion and Recommendations

We conclude that California law offers paths for funding of blue carbon project on the Baja Peninsula in Mexico, through

(1) compensatory mitigation of adverse environmental impacts on plant or animal species in California and related habitats, through conservation or mitigation banks with sites on the Baja Peninsula;

(2) linkage of Mexico's SCE with the CCTP or else the creation of a Sector-Based Offset Program for B.C./B.C.S., and the issuance of offsets or offset credits through these programs, for purchase by covered entities in California to meet their CCTP compliance obligations; and

(3) use of GHG offsets created by blue carbon mitigation offset projects on the Baja Peninsula to meet GHG mitigation obligations under CEQA to which development projects in California cities and counties are subject.

However, there are barriers along each of these paths, and it will be necessary to engage with government bodies on both sides of the border to determine if the barriers can be overcome. To overcome these barriers, we recommend that proponents of cross-border funding for blue carbon coastal eco-systems in Baja California and Baja California Sur take the following steps:

- Engage with CDFW and the Mexican Government to propose habitat for habitat compensatory mitigation by means or conservation or mitigation banks with sites in B.C./B.C.S.
- Explore with the Mexican Government a potential linkage between the CCTP and Mexico's SCE or establishment of a Sector-Based Offset Program in B.C./B.C.S.
- Engage with Southern California governments to explore opportunities for CEQA-compliant land use rules permitting GHG mitigation for development projects through use of offsets generated by mitigation projects in B.C./B.C.S., following the guidelines presented by the *Golden Door* case.

# Chapter Two
# The California Regulatory Regime for Protection of Plant and Animal Species and Related Habitat

The California Department of Fish and Wildlife ("CDFW") can require developers, under various provisions of California law, to undertake mitigation obligations as to development projects that may impact species and habitats in California. In cases where the broadly defined "waters of the United States" are involved, the U.S. Army Corps of Engineers ("ACE") will also have jurisdiction under the U.S. Clean Water Act and will also be able to impose mitigation obligations. The question for this chapter is whether a blue carbon project on the Baja Peninsula in Mexico could be used to satisfy those CDFW and ACE mitigation obligations.

This chapter will first present the legal framework for CDFW Mitigation Obligations and the ways in which those obligations can be satisfied. The chapter then describes a 2011 Memorandum of Understanding (MOU) entered into by the CDFW, the ACE and other state and federal agencies to coordinate their efforts on mitigation and conservation banking where the agencies have overlapping jurisdiction. The chapter then outlines the arguments that could be made within the terms of California law and the MOU to seek approval from state and federal officials in California for use of a mitigation project on the Baja Peninsula to provide compensatory mitigation for adverse impacts on species and habitats in California.

## I. CDFW's Authority to Impose Mitigation Obligations

The mitigation obligations that the CDFW may impose pursuant to California law are as follows (collectively referred to as the "CDFW Mitigation Obligations"):

Mitigation for take or other adverse impacts of activities authorized pursuant to the California Endangered Species Act (CESA), Cal. Fish and Game Code § 2050 *et seq*., as to an endangered species of fish, wildlife or plants, or a threatened species, or a species which is being considered for endangered or threatened status (a "candidate species").

> Legal Framework: Where a construction, utility, transportation or other infrastructure-related project may result in the "taking" of a CESA-listed species – where "take" means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill[5] -- such taking is permitted only if CDFW grants an Incidental Take Permit. Among other requirements for the Incidental Take Permit, permittees must implement species-specific minimization and avoidance measures, and fully mitigate the impacts of the project.[6]

[5] Cal. Fish & Game Code § 86.
[6] Cal. Fish & Game Code § 2081 (b); Cal. Code Regs., tit. 14, §§ 783.2-783.8.

Mitigation of adverse impacts on existing fish or wildlife resources from lake or streambed alteration activities authorized pursuant to Cal. Fish and Game Code 1600 *et seq.* to less than substantial, as documented in a Lake and Streambed Alteration Agreement.

*Legal Framework*: Where there may be substantial adverse effect on fish and wildlife resources from any activity that may (1) divert or obstruct the natural flow of any river, stream, or lake; (2) change the bed, channel, or bank of any river, stream, or lake; (3) use material from any river, stream, or lake; or (4) deposit or dispose of material into any river, stream, or lake, in each case in California, then such activity is permitted only pursuant to a Lake and Streambed Alteration Agreement with CDFW that includes reasonable measures necessary to protect the resource.[7]

Mitigation of significant effects on the environment as to plant or animal species, particularly endangered, rare or threatened species, and related habitats pursuant to CEQA, Cal. Public Resources Code § 21000 *et seq.*, and its implementing regulations, Cal. Code of Regulations, title 14, ch. 6, § 15000 *et seq.*

*Legal Framework*: The California Environmental Quality Act ("CEQA") and its implement regulations generally require state and local government agencies to inform decision makers and the public about the potential environmental impacts of proposed projects, and to reduce those environmental impacts to the extent feasible.[8] Under the CEQA regulations, a project may have a significant effect on the environment where the project may "substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; [or] substantially reduce the number or restrict the range of an endangered, rare or threatened species."[9] The CDFW will play a critical role in evaluating potential impacts on species and habitats, and also in proposing strategies to reduce such impacts, including mitigation measures.

The CDFW may participate in the EIR process in three different capacities, i.e. as lead agency, as a responsible agency or as a trustee agency. In all three of these capacities, it may be able to require mitigation for impacts upon California species and habitat, potentially including offsets.

- CDFW will serve as Lead Agency where it proposes projects on its own property (work in CDFW wildlife areas, fish hatcheries etc.) or when it is the only agency issuing a permit or approval for a project, as is sometimes the case with Lake and Streambed Alteration Agreements or a California Endangered Species Act Incidental Take Permits.[10]

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[7] Cal. Fish & Game Code § 1602(a). The agreement may be set by consent of the parties or, if the parties are unable to agree, by means of an arbitral ruling. Cal. Fish & Game Code § 1602(a)(4)(B),(C).

[8] California Governor's Office of Planning and Research, CEQA: The California Environmental Quality Act, CEQA: the California Environmental Quality Act - Office of Planning and Research

[9] Cal. Code Regs., title 14, § 15065(a)(1). For the definition of endangered, rare or threatened species, see Cal. Code Regs., title 14, § 15380.

[10] See Cal. Public Resources Code § 21067; Cal. Code Regs., title 14, § 15051.

- CDFW will serve as a Responsible Agency where it has some level of responsibility for carrying out or approving a project for which a lead agency is preparing or has prepared an environmental document.[11] Most frequently this occurs when a project requires a Lake and Streambed Alteration Agreement or a California Endangered Species Act Incidental Take Permit.

- A Trustee Agency under CEQA is a "public agency that has jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California."[12] CDFW is always a trustee agency with regard to the fish and wildlife of the state, to designated rare or endangered native plants, and to game refuges, ecological reserves, and other areas administered by CDFW.[13]

## II. Satisfaction of CDFW Mitigation Obligations: One-Off Projects v Conservation or Mitigation Banks

In principle, the CDFW may approve one-off mitigation projects that provide compensation for impacts on species or habitats, e.g. to the extent habitat is lost, a one-off project that restores or enhances the same type of habitat in another location could compensate for the lost habitat. In this regard, the one-off project must provide benefits roughly proportional to the lost habitat,[14] and such mitigation measure must be fully enforceable through permit conditions, agreements, or other legally binding instruments.[15]

But the CDFW prefers the use of conservation and mitigation banks over individualized mitigation projects. As stated in the California Fish and Game Code, "[t]he department has found that the establishment and use of conservation and mitigation banks may result in added ecological benefits and reduced administrative costs over the more traditional forms of smaller, single-purpose mitigation projects."[16]

In this regard, a "conservation bank" is defined as follows:[17]

> "'Conservation bank' means a publicly or privately owned and operated site that is to be conserved and managed in accordance with a written agreement with the department that includes provisions for the issuance of credits, on which important habitat, including habitat for threatened, endangered, or other special status species, exists, has been, or will be created to do any of the following:"
>
> - Satisfy any of the three CDFW Mitigation Obligations, as described above.

[11] Cal. Public Resources Code § 21069.
[12] Cal. Public Resources Code § 21070.
[13] Cal. Code Regs., title 14, § 15386(a).
[14] Cal. Code Regs., title 14, § 15126.4(a)(4).
[15] Cal. Code Regs., title 14, § 15126.4(a)(2)
[16] Cal. Fish & Game Code § 1797(g).
[17] Cal. Fish & Game Code § 1797.5(d).

- Establish mitigation in advance of any impacts or effects.
- To the extent feasible and practicable, protect habitat connectivity for fish and wildlife resources for purposes of this section.

A "mitigation bank" is defined as "[a]ny publicly or privately owned and operated site . . . on which wetlands exist, have been, or will be created, and that is to be conserved and managed in accordance with a written agreement with the department" to satisfy any of the three CDFW Mitigation Obligations, as described above, or to establish mitigation in advance of any impacts or effects.[18]

**III. Establishing a Conservation Bank or Mitigation Bank under California Law**

To evaluate whether it would be possible to establish a conservation bank or mitigation bank in Mexico to satisfy CDFW Mitigation Obligations, it is necessary to examine the California legal framework regarding such banks to see if that framework could accommodate a conservation/mitigation bank outside of the U.S., specifically in Mexico.

The first step in establishing a conservation bank or mitigation bank under California Law is to prepare a "prospectus" regarding the bank for review by CDFW. The prospectus must include the following:[19]

> "(A) The proposed bank name.
>
> (B) Contact information, including, but not limited to, the bank sponsor, property owner, and any consultants.
>
> (C) A general location map, address, and the size of the proposed bank in acres.
>
> (D) A 7.5-minute United States Geological Survey map showing proposed boundaries of the bank.
>
> (E) Color aerial photographs that reflect current conditions on the site of the proposed bank and surrounding properties.
>
> (F) Description of how the bank will be established and operated, including, but not limited to, proposed ownership arrangements, long-term management strategy, and any phases.
>
> (G) Qualifications of bank sponsor.

[18] Cal. Fish & Game Code § 1797.5(f). Under section 1797.5(f)(1), the definition of a "mitigation bank" includes a "bank site or mitigation bank site as defined by Section 1777.2" of the California Fish & Game Code. But that element of 1797.5(f) is not applicable for our purposes. Section 1777.2 pertains to establishing a mitigation bank for protection of wetlands under the "Sacramento-San Joaquin Valley Wetlands Mitigation Bank Act of 1993," Cal. Fish & Game Code Division 2, Chapter 7.8, §§ 1775-1796. A person seeking to establish a wetlands mitigation bank site under that Act must apply to CDFW for qualification of the site and the operator, pursuant to Cal. Fish & Game Code § 1785. However, another provision of that same law provides that "[n]o bank site shall be qualified under Section 1785 on or after January 1, 2015." Cal. Fish & Game Code § 1796.

[19] Cal. Fish & Game Code § 1798(b)(2).

(H) Preliminary natural resources surveys that document biotic and abiotic baseline conditions, including past, current, and adjacent land uses, vegetation types, species information, topography, hydrology, and soil types.

(I) Map of proposed bank service areas.

(J) Map depicting other conserved lands in the vicinity of the proposed bank.

(K) Description of bank objectives that includes how the proposed bank would contribute to connectivity and ecosystem function.

(L) A current preliminary report covering the site of the proposed bank that identifies the owner of the fee simple title and shows all liens, easements, and other encumbrances and depicts all relevant property lines, easements, dedications, and other features.

(M) A declaration of whether or not the proposed bank site has been or is being used as mitigation, is designated or dedicated for park or open space use, or designated for purposes that may be inconsistent with habitat preservation.

(N) Details of any public funding received for acquisition or restoration of, or other purposes related to, the proposed bank site."

The law does not specify the criteria for evaluation of the prospectus including these elements, which means that the CDFW will have substantial discretion in judging the feasibility and likely effectiveness of the proposed bank, and the credibility of the sponsor proposing the bank.[20]

For our purposes, a key question is whether a site in Mexico could fit within the stated requirements for the prospectus. There is no specific language which requires that a bank site be located in the U.S. On the other hand, the statutory requirement for a "7.5-minute United States Geological Survey map showing proposed boundaries of the bank" presupposes that the land is within the U.S. since the U.S.G.S. will have survey maps only for real property located in the U.S. This presents the issue whether the CDFW could, by administrative interpretation or regulation, accept some form of survey map for land outside of the U.S. which is the ***equivalent*** of a "7.5-minute United States Geological Survey map." To seek guidance on this issue, it would be appropriate to consult with CDFW and its counsel. If the CDFW determines that it could **not** accept any substitute for a "7.5-minute United States Geological Survey map," e.g. due to the fact that this requirement is included in the statute, then it would become necessary to amend the statute to permit the use of maps other than the specified U.S.G.S. map.

Beyond the issue of the requirement for a 7.5-minute United States Geological Survey map, the specified terms on what constitutes appropriate land for conservation and mitigation banking is broadly stated, and does not exclude land located outside of the U.S.

[20] In the CDFW document Conservation and Mitigation Banking Guidelines, discussed in the text below, the CDFW sets forth its own "Considerations for Determining Acceptability," https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=79095&inline=1 at pp 14-15.

The CDFW has issued a document entitled "Conservation and Mitigation Banking Guidelines," adopted on 15 August 2014, updated on 12 July 2019 (the "Banking Guidelines"), [21] which includes the following "Guidance on Lands Appropriate for Banking"[22]

> Bank sponsors should carefully select proposed bank sites to assure they provide conservation value for the sensitive species, habitats, and/or wetlands for which credits are sought. CDFW encourages bank sponsors to consider siting prospective banks where they will conserve significant high value resources, contribute to regional conservation strategies, and create a bank of ecologically sustainable size near other conserved lands. . . . For additional guidance, see *Siting Banks to Contribute to CDFW Conservation Objectives* [discussed below]
>
> Some locations may not be appropriate for banking. Lands may be unsuitable to become mitigation or conservation banks if they have been used to mitigate impacts of previous projects, were acquired or conserved using public funding sources, or are subject to incompatible uses that could preclude an ecologically functional and sustainable bank. Lands that do not support significant biological resources or are not biologically viable, or would not meet obligations of permits or authorizations that require mitigation, may also not be appropriate for a bank.

The commentary in the Banking Guidelines on "Siting Banks to Contribute to CDFW Conservation Objectives" is as follows:[23]

> "CDFW encourages bank sponsors to consider multiple factors when selecting a site for a new bank [referencing the CDFW document "Bank Site Selection Considerations,"[24] attached hereto as Exhibit A], including ecological value of wildlife habitat and landscape considerations, adjacent land uses, and management factors such as threats, conflicting uses, encumbrances, and major restoration needs.
>
> Bank sponsors should consider what resources are likely to be impacted in the area in the future and existing credits that may already be available to mitigate impacts to those resources. A critical element required to create a new bank is a location that will provide high conservation value and sustainable mitigation for impacts to wetlands, threatened or endangered species, or other sensitive resources.
>
> Bank sites that make a valuable contribution to the habitat protection objectives of CDFW by contributing to a regional conservation strategy and are connected to other conserved lands are encouraged by CDFW."

None of the language cited above or in other CDFW guidance[25] specifically excludes land located outside the U.S. Instead it speaks in general terms of evaluating the ecological benefits

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[21] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=79095&inline=1
[22] Ibid at p. 11.
[23] Ibid at 17.
[24] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=76123
[25] The CDFW website, referenced in the Banking Guidelines, includes guidance on "What Lands are Appropriate for Banking?" at https://wildlife.ca.gov/Conservation/Planning/Banking/Appropriate-Lands.

that could be provided by the potential site, e.g. "conservation value and sustainable mitigation for sensitive species, habitats, and wetlands impacts." This provides an opening to suggest that land outside the U.S. could be suitable for a conservation bank or mitigation bank.

Of course, identification of an appropriate site is only one of issues required for the preparation of the prospectus. The project sponsor will also need to develop comprehensive information on the proposed site, confirming that the site is suitable for a conservation/mitigation bank, as well as plan on how the bank will be established and operated, including, but not limited to, proposed ownership arrangements and long-term management strategy.

Once the CDFW finds that a proposed prospectus is acceptable, "the person seeking to establish the bank may submit a bank agreement package to the department,"[26] although the CDFW "may adopt and amend guidelines and criteria for the bank agreement package, including, but not limited to, recommended standard forms for bank enabling instruments or long-term management plan and conservation easements."[27]

The law specifies what must be included in the bank agreement package as follows:

> "The bank agreement package shall be consistent with the prospectus and contain at least all of the following information:
>
> (A) The draft bank enabling instrument and all exhibits.
>
> (B) Drafts of the interim management plan, long-term management plan, bank closure plan, and, if applicable, a development or construction plan for the bank.
>
> (C) A draft conservation easement, or if potential state ownership is contemplated by the department, a draft grant deed.
>
> (D) A map and written description of the proposed bank service area.
>
> (E) A proposed credit ledger and credit release schedule for the bank.
>
> (F) A property analysis record or other comparable economic analysis of the funding necessary to support bank maintenance activities, such as monitoring and reporting, in perpetuity.
>
> (G) Estimates of financial assurances and proposed forms of security. Proposed forms of security may be either cash or a letter of credit.
>
> (H) A phase I environmental site assessment of the site of the proposed bank dated not more than six months prior to the date the bank agreement package is submitted to the department. This assessment shall be performed in accordance with the American Society of Testing and Materials Standard E1527-05 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" or any successive ASTM standard active at the time of the assessment."

[26] Cal. Fish & Game Code § 1798.5(a)(1).
[27] Ibid.

The issues presented by these requirements regarding a potential conservation/mitigation bank located in Mexico include the following:

- The law requires "[d]rafts of the interim management plan, long-term management plan, bank closure plan, and, if applicable, a development or construction plan for the bank." The bank proponent would need to develop all of these plans for the proposed bank. Such plans would need to take account of the Mexican legal context for coastal land management and be enforceable under Mexican law. But the CDFW could have difficulty in evaluating the plans due to the applicability of Mexican law. If acceptable to the CDFW, the bank proponent would need to provide independent legal commentary on the relevant issues as support for this element of the bank agreement package.

- The law requires a "draft conservation easement, or if potential state ownership is contemplated by the department, a draft grant deed." Once again, these legal documents would have to be enforceable under Mexican law. But the CDFW could have difficulty in evaluating these documents because of lack of expertise in Mexican law. If acceptable to CDFW, the bank proponent would need to provide supporting legal opinions and/or other support by Mexican experts as to the enforceability and effectiveness of the proposed legal documents.

- The law requires a "property analysis record or other comparable economic analysis of the funding necessary to support bank maintenance activities, such as monitoring and reporting, in perpetuity." This analysis would first require a presentation of how bank maintenance activities would be carried out in Mexico and the corresponding costs, taking account of local cost structures. The analysis would also necessarily include all sources of revenue to meet these costs, including all funding sources with respect to the carbon sequestration and habitat protection provided by the bank. The CDFW could have difficulty in evaluating the tendered analysis due to its lack of familiarity with the mechanisms in Mexico to carry out the bank maintenance activities and related costs, and potential funding sources. If acceptable to CDFW, it would be necessary to describe those mechanisms in depth, with expert support, and also provide expert commentary on the related costs, how those costs would be funded, and mechanisms to ensure continued availability of funding.

- The law requires a "phase I environmental site assessment of the site of the proposed bank dated not more than six months prior to the date the bank agreement package is submitted to the department" in accordance with ASTM Standard E1527-05 or a successor standard. The issue here is whether it would be possible to obtain such a phase I site assessment for a site located in Mexico.

With respect to a proposed conservation or mitigation bank on the Baja Peninsula, all of these issues and questions would have to be presented to CDFW with proposed solutions and supporting expert commentary that would make up for CDFW's own lack of expertise in dealing with land located in Mexico.

## IV. The Multi-Agency MOU concerning Mitigation and Conservation Banking in California

In many cases, the CDFW will share jurisdiction with the U.S. Environmental Protection Agency ("EPA") and the U.S. Army Corp of Engineers ("ACE"), as well as other federal agencies, with respect to coastal and other water-related projects in California. Among other things, the EPA and ACE work together on implementing U.S. Clean Water Act ("CWA") Section 404,[28] which regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The current regulatory interpretation of "waters of the United States"[29] is expansive, which means that many California development projects subject to CDFW jurisdiction will also be subject to ACE/EPA CWA Section 404 jurisdiction and will require a discharge permit to be issued by the ACE. Those permits are subject to conditions, which may include mitigation measures. And like the CDFW, ACE/EPA prefers the use of conservation and mitigation banks over one-off mitigation projects.

Because of the overlapping jurisdiction and the common interest in conservation/ mitigation banking, a "Memorandum of Understanding concerning Mitigation and Conservation Banking and In-Lieu Fee Programs in California" (the MOU) was entered into in 2011 by the California Natural Resources Agency (the parent agency for CDFW), CDFW, ACE, the EPA, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the USDA Natural Resources Conservation Service, and the California State Water Resources Control Board, collectively referred to as the "Parties."[30]

The purpose of the MOU is to establish "a framework for developing and using combined or coordinated approaches to mitigation and conservation banking and [In-Lieu Fee (ILF)] programs in California to improve consistency of processes, services and products. It is the intent of the Parties that this MOU will provide a collaborative process for the development of standardized banking and ILF program documents . . . and guidance, and confirmation of an agreed upon process for continuous improvement of those documents, guidance, and the processes defined therein."[31]

The MOU will require agreement by the Parties to the MOU to any interpretation of law and regulations that would permit a site outside of the United States to be used as a mitigation bank or conservation bank. There is some basis for such an interpretation in the mitigation

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[28] 33 U.S.C. 1344.

[29] The current interpretation of "waters of the United States is summarized at https://www.epa.gov/wotus/current-implementation-waters-united-states#Pre-2015. For a discussion of the changes in the regulations defining "waters of the United States" and current pending regulations, see the EPA discussion "About Waters of the United States" at https://www.epa.gov/wotus/about-waters-united-states#Current.

[30] https://www.spd.usace.army.mil/Portals/13/docs/regulatory/banking/2011-MOU.pdf

[31] Ibid at Section IA

guidelines incorporated in the MOU but it will still require a persuasive effort to obtain concurrence by all the MOU parties to such interpretation.

The Parties to the MOU act through various "teams," to which each party is a member, that would have the responsibility to deal with the policy question of whether a site outside of the United States to be used as a mitigation bank or conservation bank. The Project Development Team (PDT) will:

> a. Develop standardized Templates [standardized forms] for the various banking and ILF program documents, and will develop proposed guidance and processes for use in the evaluation of proposed mitigation and conservation banks and ILF programs; [and]
>
> b. Periodically review previously developed and approved Templates, guidance documents, and processes, and propose modifications as necessary. Proposed modifications may also be based on input from [the Banking Agency Management Team (BAMT)] representatives, banking and ILF sponsors, or the public. The PDT will submit all proposed modifications to the Templates, guidance documents, and processes to the BAMT for consideration and approval.[32]

After the PDT develops "proposed guidance and processes for use in the evaluation of proposed mitigation and conservation banks," it will be the BAMT that has the responsibility to "[r]eview and approve Templates, guidance documents, and processes proposed by the Project Delivery Team (PDT)."[33]

Under this allocation of responsibilities, a project developer who sought to use a site outside of the U.S. for a mitigation or conservation bank would need to obtain concurrence from both the PDT and the BAMT. These teams in turn would need to include their approval in corresponding Templates, guidance documents, and processes that permit use of a site outside of the U.S. for a mitigation or conservation bank.

To make an argument to the PDT and BAMT teams that a site outside of the U.S. should be permitted, a mitigation/conservation bank proponent could call upon the guidance provided by the regulation entitled "Compensatory Mitigation for Losses of Aquatic Resources; Final Rule, Department of the Army, Army Corps of Engineers and Environmental Protection Agency," 33 C.F.R. Part 332 and 40 C.F.R. Part 230, April 10, 2008, (Mitigation Rule).[34] The Mitigation Rule serves as a reference point to all the parties of the MOU, by agreement of the parties, even though the Mitigation Rule is a regulation specific to the Corps and EPA.[35]

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[32] Ibid at Section 4B2.
[33] Ibid at Section 4A2a.
[34] https://www.govinfo.gov/content/pkg/FR-2008-04-10/pdf/E8-6918.pdf
[35] MOU at Section 4C2b and Section 4D2b.

## IV. Arguments under the Mitigation Rule in support of a Mitigation Project on the Baja Peninsula

We argue that, within the terms of the Mitigation Rule and under the circumstances presented, a mitigation project on the Baja Peninsula would be permitted to provide compensatory mitigation for adverse environmental impacts in California.

*Unavoidable Impacts*. Under the Mitigation Rule, "[t]he fundamental objective of compensatory mitigation is to offset environmental losses resulting from unavoidable impacts to waters of the United States authorized by DA [Department of the Army] permits."[36] The adverse environmental impacts to species and habitats in California would have to be unavoidable before any compensatory mitigation strategy, including a project in Mexico, could be considered. We understand that with respect to many development projects adjacent to California aquatic resources, that is the case.

*No Mitigation Opportunities in California*. In general, the preference under the Mitigation Rule is for a watershed approach, I.e. a site in the same watershed,[37] but in some cases this is not appropriate. "Compensation for impacts to aquatic resources in coastal watersheds (watersheds that include a tidal water body) should also be located in a coastal watershed where practicable."[38] In our case, compensatory mitigation by means of a project in Mexico will be permissible only if there is no suitable mitigation opportunity in California, whether that is in the same watershed or in a comparable coastal watershed in California. Once again, we understand that California is running out of in-state mitigation opportunities to compensate for adverse impacts on species and habitats.

*Mexico can provide In-Kind Compensation for Adverse Impacts on Species and Habitats*. To the extent a watershed approach is not available and it is necessary to go outside a watershed or other discrete area where the permitted impacts occur to find mitigation opportunities, then "in-kind mitigation is preferable to out-of-kind mitigation because it is most likely to compensate for the functions and services lost at the impact site. For example, tidal wetland compensatory mitigation projects are most likely to compensate for unavoidable impacts to tidal wetlands, while perennial stream compensatory mitigation projects are most likely to compensate for unavoidable impacts to perennial streams."[39]

In our case, it would be critical for the proposed mitigation project in Mexico to compensate for the functions and services lost at the impact site, i.e. it would need to make up for the specific adverse impacts on species and habitats in California. If the impact is on wetlands in

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[36] 33 C.F.R. §332.3(a)(1), 40 C.F.R. §230.93(a)(1).

[37] 33 C.F.R. §332.3(b)(1), 40 C.F.R. §230.93(b)(1). In this regard, a "watershed" means "a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean." 33 C.F.R. §332.2, 40 C.F.R. §230.92.

[38] Ibid.

[39] 33 C.F.R. §332.3(e)(1), 40 C.F.R. §230.93(e)(1).

California, then it is most likely that the necessary compensation could be provided by wetlands in Mexico.

*Efficacy of the Proposed Mexican Mitigation Project and Ecological Suitability*. If a proposed mitigation project promises to be particularly effective for mitigation of specified environmental impacts, this is another argument for acceptance of the site even if it is outside of the country. In this regard, the proposed site "must be ecologically suitable for providing the desired aquatic resource functions."[40] Applying the factors of ecological suitability to our case, the first point is that the proposed mitigation project in Baja California must be ecologically healthy and sustainable. This will mean, among other things, that it

- has appropriate hydrology and soils,
- supports high value biological resources,
- is protected from degradation, including from contamination or other damage from adjacent and upstream lands and activities, and
- is resistant to potential climate change impacts, including drying of wetlands, changes of habitat type, and loss of coastal marshes to the sea.

Another relevant factor is that the project site have "watershed-scale features, such as aquatic habitat diversity, habitat connectivity and other landscape scale functions."[41] In this context, "watershed-scale features" pertains to supporting the health of an overall ecosystem. Here, insofar as the adverse environmental impact is on migratory birds that take advantage of resting and breeding grounds in both California and Baja California, a mitigation project on the Baja Peninsula could support "habitat connectivity" between sites in the two Californias for migratory birds, and thereby strengthen the ecosystem that maintains the migratory birds.

Another aspect of ecological sustainability to provide "the desired aquatic resource functions" involves the "[r]easonably foreseeable effects the compensatory mitigation project will have on ecologically important aquatic or terrestrial resources . . . or habitat for federally- or state-listed threatened and endangered species."[42] In our case, the adverse environmental impacts are to important aquatic and terrestrial resources, because of the species they support, and many of those species, including migratory birds that take advantage of resting and breeding sites in both California and the Baja Peninsula, are federally- or state-listed threatened and endangered species. This is an additional reason to permit compensatory mitigation through projects on the Baja Peninsula.

*The Baja Peninsula Mitigation Project will Compensate for Difficult to Replace Resources*. Under the Mitigation Rule, in the case of "difficult-to-replace resources (e.g., bogs, fens, springs, streams, Atlantic white cedar swamps) if further avoidance and minimization is not

[40] 33 C.F.R. §332.3(d)(1), 40 C.F.R. §230.93(d)(1).
[41] Ibid.
[42] Ibid.

practicable, the required compensation should be provided, if practicable, through in-kind rehabilitation, enhancement, or preservation since there is greater certainty that these methods of compensation will successfully offset permitted impacts."[43] We would argue here that the wetlands of California are particularly difficult to replace as so many have been lost already.

*The Mitigation Project Sponsors will Comply with all Management and Financial Requirements*. The Mitigation Rule has rigorous management and financial requirements. Among other things, the discharge permit to be issued by the ACE will have stringent conditions that will identify the responsible party, incorporate a final approved mitigation plan, provide performance standards and specify required monitoring, and describe required financial assurances or long term management provisions.[44]

The financial assurances will be sufficient "to ensure a high level of confidence that the compensatory mitigation project will be successfully completed, in accordance with applicable performance standards," and will be based "on the size and complexity of the compensatory mitigation project, the degree of completion of the project at the time of project approval, the likelihood of success, the past performance of the project sponsor," and other relevant factors.[45]

The mitigation project sponsors will necessarily comply with all these management and financial requirements in order to be considered for a potential mitigation project within the terms of the Mitigation Rule.

*The Mitigation Project Sponsors will Ensure Permanence and Other Requirements related to Preservation Mitigation.* The Mitigation Rule favors *restoration*, *rehabilitation* and *enhancement* of habitats as means of compensatory mitigation. But it does permit preservation of habitat so long as certain conditions are met. One of those conditions is that "[t]he preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust)."[46] There is some degree of flexibility on what "permanent protection" means, since commentary in the Mitigation Rule "recognize[s] that the terms of real estate or legal instruments used to protect compensatory mitigation project sites will differ, because of the variability in real estate laws among states and local jurisdictions" and analysis of the long term protection provided, including the means of establishing that protection, must be analyzed on a case by case basis.[47]

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[43] 33 C.F.R. §332.3(e)(3), 40 C.F.R. §230.93(e)(3).
[44] 33 C.F.R. §332.3(k)(2), (3), 40 C.F.R. §230.93(k)(2), (3).
[45]33 C.F.R. §332.3(m), 40 C.F.R. §230.93(m). q
[46] 33 C.F.R. §332.3(h), 40 C.F.R. §230.93(h).
[47] Mitigation Rule, https://www.govinfo.gov/content/pkg/FR-2008-04-10/pdf/E8-6918.pdf, 73 Fed. Reg. at 19646 (April 10, 2008)

In our case, it will be critical to establish an enforceable legal mechanism under Mexican law whereby the preserved site on the Baja Peninsula is permanently protected. In our case, it will be critical to establish an enforceable legal mechanism under Mexican law whereby the preserved site on the Baja Peninsula is permanently protected. As discussed in the paper on Mexican legal issues included with this project, it is possible that such protection with respect to the Mexican land in question can be obtained for a period of 50 years by means of a legal mechanism referred to as an *Acuerdo de Destino*.

Another requirement for the use of preservation for compensatory mitigation is that "to the extent appropriate and practicable the preservation shall be done in conjunction with aquatic resource restoration, establishment, and/or enhancement activities," subject to a waiver where preservation is identified as a high priority using a watershed approach, i.e. for the broader ecosystem.[48] In our case, the mitigation project sponsors will need to provide for restoration, establishment, and/or enhancement of the site in Mexico or establish that a waiver would be appropriate because of the critical importance of preservation.

* * *

All of the foregoing arguments and other points made support the proposition that a mitigation project on the Baja Peninsula, under the circumstances presented, should be permitted to provide compensatory mitigation for adverse impacts on species and habitats in California under the terms of the Mitigation Rule.

[48] Ibid.

**Exhibit A to Chapter Two**
# California Department of Fish & Wildlife
# Bank Site Selection Considerations

## Ecological Value

### Wildlife and Habitat Values

- Fish and wildlife presence, use, and diversity
- Endangered, threatened, rare, declining species or habitats (special habitat use)
- Presence of non-native and/or invasive species, proportion of native vs. invasive
- Site and resource viability (Consider the long-term ability to retain or enhance resources of interest considering unit size and long-term outlook for adjacent and upstream lands)

### Landscape Values

- Juxtaposition with other conservation lands
- Contribution to wildland connectivity and corridors
- Relationship of area to existing or planned conservation planning efforts
- Water - Sources, availability, reliability, quality, rights

### Climate Change

- Potential to help facilitate adaptation to climate change (Examples of how lands might facilitate adaptation to climate change include the establishment or improvement of corridors, reliable water sources, and topography that allows upward migration of plants and animals)
- Potential of climate changes to diminish key wildlife habitat values (Climate change threats to current resource values include likely drying of wetlands, changes of habitat type, and loss of coastal marshes to the sea.)

## Management Factors

### Other Attributes

- Cultural resource protection/preservation
- Physical modifications and improvements (Consider types, sizes, and condition of buildings, roads, levees, etc. Consider whether they are a positive or negative attribute, likely management and maintenance needs, and public use opportunities.)
- Contaminant presence or potential
- Threats (Threats include things like suburbanization, conversion to agriculture or more intensive agriculture or change in crop types, i.e. pasture to vineyard, loss of water, etc.)
- Other issues, encumbrances, rights (Consider anything else important, positive or negative, including encumbrances or title restrictions that will affect management of the property.)

### Management Objectives and Needs

- Consider likely management challenges and opportunities. Of particular focus should be issues of such magnitude that they may influence the very decision to select the land for conservation purposes.
- Critical inventory and monitoring needs
- Ongoing habitat/wildlife management requirements
- Major restoration needs

# Chapter Three
# Potential Funding through The California Cap-and-Trade Program

## I. Introduction to the California Cap-and-Trade Program

The California Cap-and-Trade Program (CCTP) is a means of controlling GHG emissions by "covered entities" (responsible for roughly 75% of California emissions). The covered entities consist of industrial entities that generate GHGs, electrical distribution utilities ("EDUs"), natural gas suppliers and other GHG emitters, in each case located in California,[49] so long as their emissions reach a threshold level. The basic threshold for applicability of the CCTP is 25,000 metric tons of carbon dioxide equivalent (MTCO2e) per year.[50]

The fundamental concept underlying the CCTP is that covered entities which emit GHGs must obtain a "compliance certificate" for each metric ton of carbon dioxide equivalent (MTCO2e) emitted by the covered entity. Compliance certificates - each representing one $MTC0_2e$ – consist of

- Allowances or offsets issued by the California Air Resources Board ("CARB");
- Allowances or offsets issued by an External Greenhouse Gas Emissions Trading System ("External GHG ETS") to which California has linked its Cap-and-Trade Program (a "Linked System"); or
- A "Sector-Based Offset Credit" from a "Sector-Based Crediting Program" established by a country, region, or subnational jurisdiction in a developing country.

Below, we will review the regulatory regime for allowances issued by CARB, offsets issued by CARB, allowances and offsets issued by a Linked System, and finally Sector-Based Offset Credits. We will then review which of these mechanisms might provide a funding source for protection of blue carbon coastal eco-systems in B.C. and B.C.S.

### A. Allowances Issued by CARB

"Allowances" issued by CARB are the primary driver of the California cap and trade system. The number of allowances made available by law each year sets a cap of GHG emissions, with that cap becoming lower each year. Allowances are made available each year in two ways: Some are granted for free – to industrial entities for competitive reasons and to EDUs and natural gas suppliers for the benefit of their ratepayers. The remaining allowances are made available through auctions held by CARB, subject to a minimum "reserve" price that increases each year[51], a maximum price ceiling that also increases annually[52], and intermediate pricing constraints.[53] The combination of a declining annual cap and increasing minimum prices for

[49] Cal. Code Regs., title 17, § 95811.
[50] Cal. Code Regs., title 17, § 95812.
[51] Cal. Code Regs., title 17, § 95911(b),(c),(d).
[52] Cal. Code Regs., title 17, § 95915.
[53] Cal. Code Regs., title 17, § 95913(h).

auctioned allowances "creates a steady and sustained carbon price signal to prompt action to reduce GHG emissions,"[54] according to CARB.

### B. Offsets issued by CARB

Offsets issued by CARB represent a GHG emission reduction or GHG removal enhancement, not otherwise required by law or counted against legal requirements, that is real, additional, quantifiable, permanent, verifiable, and enforceable.[55] California has a robust system for the creation, verification and monitoring of offsets.[56]

- Offsets may be issued only if the emission reduction achieved is real, permanent, quantifiable, verifiable, enforceable, and additional to any GHG emission reduction otherwise required by law or regulation, and any other GHG emission reduction that otherwise would occur.[57]

- Offsets must adhere to specific protocols approved by CARB, rather than being analyzed on a case-by-case basis.[58] So far, the only protocols that have approved pertain to (1) ozone-depleting substances, (2) livestock projects, (3) urban forest projects, (4) U.S. forest projects, (5) mine methane capture projects, and (6) rice cultivation projects.[59] The protocols must state where the protocol is applicable.[60] Importantly for our purposes, the geographic boundary must be within the United States or United States Territories.[61]

- Under the CCTP, the offsets used to meet compliance obligations shall not exceed 4% of the total compliance obligation for the data years 2021 through 2025, and 6% for data years 2026 through 2030.[62] This is known as the quantitative usage limit.

- Further, for offsets surrendered to meet compliance obligations for the data years 2021-2030, no more than one-half of the quantitative usage limit may be sourced from projects that do not provide "direct environmental benefits in the State,"[63] which is defined to mean "the reduction or avoidance of emissions of any air pollutant in the state or the reduction or avoidance of any pollutant that could have an adverse impact on waters of the state" (identified herein as the "State Direct Benefit Limitation")[64]

Under the approved protocols, the geographic boundary for an offset project must be within the United States or United States Territories. This means that it will not be possible to

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[54] Cap-and-Trade Program | California Air Resources Board
[55] Cal. Code Regs., title 17, § 95970(a)(1).
[56] Cal. Code Regs., title 17, § 95970 *et seq.*
[57] California Health & Safety Code §38562(d) (1) and (2).
[58] Cal. Code Regs., title 17, § 95970(a)(2).
[59] Cal. Code Regs., title 17, § 97973(a)(2)(C)
[60] Cal. Code Regs., title 17, § 95972(c).
[61] *Id.*
[62] Cal. Code Regs., title 17, § 95854(c), (d).
[63] Cal. Code Regs., title 17, § 95854(e).
[64] Cal. Code Regs., title 17, § 95802.

generate CARB-issued offsets from Mexico. This applies without reaching the quantitative usage limit or the State Direct Benefit Limitation. However, as we will see, those limitations apply to the other offset mechanisms that might be available for projects located in Mexico.

### C. Allowances or offsets issued by an External Greenhouse Gas Emissions Trading System to which California has linked its Cap-and-Trade Program

A compliance instrument (i.e. both allowances and offsets) issued by an External GHG ETS, which may include a foreign national or subnational trading system, may be used to meet CCTP requirements if both the External GHG ETS and the compliance instrument have been approved pursuant to the law and regulations of the CCTP. [65]

CARB may approve a linkage after the Governor of California has made specific findings required by statute,[66] including the following:

- The jurisdiction proposed for linkage "has adopted program requirements for greenhouse gas reductions, including, but not limited to, requirements for offsets, that are equivalent to or stricter than those required" by specified provisions of California law on GHG reporting and the CCTP.

- The proposed linkage provides for enforcement of applicable laws by CARB or by the linking jurisdiction "of program requirements that are equivalent to or stricter than those required" by specified provisions of California law on GHG reporting and the CCTP.

Once the governor has made the necessary findings, CARB may approve the linkage by adopting a regulation to that effect under California law, which required compliance with the California Administrative Procedures Act.

After the linkage is approved by adoption of the necessary regulation, allowances from the GHG ETS can be used to meet the CCTP obligations, without any quantitative limitation.[67] Offsets from the GHG ETS can also be used, but they will be subject to the same quantitative limitations as offsets issued by CARB, both in terms of limits on the percentage of the compliance obligation that can be met with offsets and the percentage of the offsets that must have a "direct environmental benefit in the State."

Currently, there is only one External GHG ETS that is linked to the California system and that is the Government of Quebec, Canada.[68] The Government of Ontario, Canada, had a linked system during the period January 1, 2018 - June 15, 2018, and compliance instruments issued during that period and held by specified parties as of June 15, 2018 can still be used for compliance and trading purposes.[69]

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[65] Cal. Code Regs., title 17, § 95940.
[66] California Government Code § 12894(f).
[67] Cal. Code Regs., title 17, § 95942(b).
[68] Cal. Code Regs., title 17, § 95943(a)(1).
[69] Cal. Code Regs., title 17, § 95943(a)(2).

### D. Sector-Based Offset Credits

Sector-based offset credits are issued by a "Sector-Based Crediting Program," which is a GHG emissions-reduction crediting mechanism established by a country, region, or subnational jurisdiction in a developing country and covering a particular economic sector within that jurisdiction.[70] A program's performance is based on achievement toward an emissions reduction target for the particular sector within the boundary of the jurisdiction.[71] Sector-based offset credits may be generated through reduced or avoided GHG emissions from within, or carbon removed and sequestered from the atmosphere by, a specific sector in a particular jurisdiction.[72]

CARB may approve a sector-based crediting program in an eligible jurisdiction after public notice and opportunity for public comment in accordance with the Administrative Procedure Act.[73] There is no requirement for findings by the Governor, unlike with respect to an application for linkage of an External GHG ETS with the CCTP. The general requirements for a sector-based crediting program are as follows:[74]

- Sector Plan. The host jurisdiction has established a plan for reducing emissions from the sector.

- Monitoring, Reporting, Verification, and Enforcement. The program includes a transparent system that regularly monitors, inventories, reports, verifies, and maintains accounting for emission reductions across the program's entire sector, as well as maintains enforcement capability over its reference activity producing credits.

- Offset Criteria. The program has requirements to ensure that offset credits generated by the program are real, additional, quantifiable, permanent, verifiable and enforceable.

- Sectoral Level Performance. The program includes a transparent system for determining and reporting when it meets or exceeds its crediting baseline(s), and evaluating the performance of the program's sector during each program's crediting period relative to the business as usual or other emissions reference level.

- Public Participation and Participatory Management Mechanism. The program has established a means for public participation and consultation in the program design

[70] Cal. Code Regs., title 17, § 95802, definition of Sector-Based Crediting Program
[71] Ibid.
[72] Cal. Code Regs., title 17, § 95991.
[73] Cal. Code Regs., title 17, § 95992
[74] Cal. Code Regs., title 17, § 95994. The text provides that CARB "may" consider for approval a sector-based crediting program which "may" include specified sectoral requirements. This suggests a degree of discretion on the part of CARB, both in terms of considering approval and what requirements for approval will be applicable. At the same time, the title of the Regulation is much more direct: "Requirements for Sector-Based Offset Crediting Programs." A reasonable interpretation of this language is that the specified requirements are a minimum but that CARB retains discretion to consider other factors.

process.

- Nested Approach. If applicable, the program includes: (1) Offset project-specific requirements that establish methods to inventory, quantify, monitor, verify, enforce, and account for all project level activities; and (2) A system for reconciling offset project-based GHG reductions in sector-level accounting from the host jurisdiction.

The foregoing terms apply to approval of sector-based crediting *programs*. There are also provisions as to the *compliance instruments* issued by approved programs. The CCTP regulations state: "Provisions set forth in this article shall specify which compliance instruments issued by an approved sector-based crediting program may be used to meet a compliance obligation under this Article."[75] But this provision presents some uncertainties.

The CCTP regulations provide that "Sector-Based Offset Credits recognized pursuant to subarticle 14 [pertaining to recognition of compliance instruments from other programs]" constitute compliance instruments that may be used to meet a compliance obligation under the CCTP.[76] This establishes that sector-based offset credits issued by an approved sector-based crediting program *may* serve as compliance instruments within the CARB system. However, it is not clear what process will be used by CARB to evaluate recognition of Sector-Based Offset Credits issued by an approved program. For domestic offsets issued as registry offset credits by an Offset Project Registry, CARB will make an independent determination whether those registry offset credits comply with the CCTP regulations before they are validated and registered as CARB offsets.[77] It is likely that a similar process will be used for Sector-Based Offset Credits, but it will be necessary to consult with CARB to determine the specific approach and criteria that will be used.

The regulations provide that Sector-Based Offset Credits may be generated from "Reducing Emissions from Deforestation and Forest Degradation (REDD) Plans."[78] No other plans are identified as a permitted basis for generation of these offset credits. This suggests that *only* REDD plans can be used by an approved Sector-Based Crediting Program as the basis for issuance of Sector-Based Offset Credits.

There is no regulatory definition of what such REDD plans must include. However, CARB has endorsed a California Tropical Forest Standard ("CFTS") that will provide the guidelines for the REDD plan to be adopted.[79] The CTFS specifies that the purpose of the CFTS is "to establish robust criteria against which to assess jurisdictions seeking to link their sector-based crediting programs that reduce emissions from tropical deforestation with an emissions trading system

[75] *Id.*
[76] Cal. Code Regs., title 17, § 95821(d).
[77] Cal. Code Regs., title 17, § 95981 (b), (c).
[78] Cal. Code Regs., title 17, § 95993.
[79] "California Tropical Forest Standard: Criteria for Assessing Jurisdiction-Scale Programs that Reduce Emissions from Tropical Deforestation," California Tropical Forest Standard, endorsed by CARB by Resolution 19-21, September 19, 2019, Resolution California Tropical Forest Standard.

(ETS), such as California's Cap-and-Trade Program."[80] It is clear, then, that CARB will evaluate a request for approval of a Sector-Based Crediting Program and the Sector-Based Offset Credits to be issued by such program against the terms of the CFTS.

If sector-based offset credits are recognized by CARB as compliance instruments for purposes of the CCTP, they will be subject to the same quantitative limitations as offsets issued by CARB or a Linked System, both in terms of limits on the percentage of the compliance obligation that can be met with offsets and the percentage of the offsets that must have a direct environmental benefit in the State.[81]

To date, CARB has not approved any sector-based crediting program for issuance of sector-based offset credits to be used as compliance instruments under the CCTP.

[80] CFTS, § 1.1(a). The CFTS also provides that it "establishes the specific requirements any sector-based crediting program would need to meet to be considered by an ETS or other GHG emissions reduction program that utilizes the standard," § 1.1(d), supplementing the general requirements specified above.
[81] Cal. Code Regs., title 17, §§ 95993, 95854.

### E. Potential Use of the CCTP to Fund Protection of Blue Carbon Coastal Eco-Systems in B.C. and B.C.S.

The CCTP is a potential funding sources for protection of blue carbon coastal eco-systems in B.C. and B.C.S. under the following approaches:

- Mexico to Establish a Linked System. Mexico has a pilot program for a Cap and Trade System (*Sistema de Comercio de Emisiones*, or "SCE"), as discussed in the accompanying paper on Mexican legal issues. Assuming that this becomes fully operational, it could potentially be linked with the CCTP. Once SCE becomes a Linked System, an offset project operator could establish one or more "offset projects" with respect to blue carbon coastal eco-systems in B.C. and B.C.S. which could provide the basis for SCE to issue offsets. Then if CARB recognizes and registers those offsets, they could be sold to a covered entity under the CCTP, thereby providing funding for protection of the B.C. and B.C.S. eco-systems.

- Establishment of a Sector-Based Crediting Program in Mexico. Mexico, or a region of Mexico, or a subnational jurisdiction in Mexico could establish a Sector-Based Crediting Program covering a particular economic sector within the corresponding jurisdiction. Here we would propose a regional jurisdiction including at least B.C. and B.C.S. Since the CCTP regulations indicate that sector-based offset credits may be generated only from REDD plans, and CARB has indicated that the CFTS will be the guideline for evaluating the REDD plan adopted, the economic sector at issue would be forestry or perhaps tropical forests as defined by the CFTS. Once CARB approves the Mexico / B.C.-B.C.S. Sector-Based Crediting Program, that program could issued Sector-Based Offset Credits within the scope of the CFTS. Then if CARB recognizes those offset credits, they could be sold to a covered entity under the CCTP, thereby providing funding for protection of the eco-systems within the jurisdiction of the Sector-Based Crediting Program, including blue carbon coastal eco-systems in B.C. and B.C.S.

There are potential problems with each of these potential funding approaches, which are described in the following section of this chapter.

## II. Potential Problems with Linked System Offsets and Sector-Based Offset Credits

### A. Potential Problems in Linking Mexico's Emissions Trading System with the CCTP

Mexico, in accordance with its General Climate Change Law, has an incipient national emissions trading system (*Sistema de Comercio de Emisiones* or SCE) already in place, under a start-up testing program (*Programa de Prueba*).[82] With a national emissions trading system already in place, even in a start-up mode, it is unlikely that Mexico would establish a subnational cap and

[82] Ley General de Cambio Climático, Arts. 7 IX, 94. DECRETO por el que se reforman y adicionan diversas disposiciones de la Ley General de Cambio Climático, publicado en el Diario Oficial de la Federación (DOF) 13 de julio de 2018, Artículo Transitorio Segundo, Ley General de Cambio Climático (diputados.gob.mx). ACUERDO por el que se establecen las bases preliminares del Programa de Prueba del Sistema de Comercio de Emisiones, publicado 1 de octubre de 2019. https://www.dof.gob.mx/nota_detalle.php?codigo=5573934&fecha=01/10/2019.

trade system to cover only B.C. and B.C.S. Therefore, it will be necessary to work with the national SCE that is already in place[83]

The substantive requirements under the CCTP regulations and California law for linkage between the CCTP and an External Greenhouse Gas Emissions Trading System are rigorous. It may be difficult for Mexico to meet those requirements. As noted above, key requirements include the following, to be certified by the governor of California.:

- The jurisdiction proposed for linkage "has adopted program requirements for greenhouse gas reductions, including, but not limited to, requirements for offsets, that are equivalent to or stricter than those required" by specified provisions of California law on GHG reporting and the CCTP.

- The proposed linkage provides for enforcement of applicable laws by CARB or by the linking jurisdiction "of program requirements that are equivalent to or stricter than those required" by specified provisions of California law on GHG reporting and the CCTP.

Accordingly, the SCE, to link with the CCTP, will need (1) program requirements for GHG reporting, (2) program requirements for greenhouse gas reduction, including for offsets, and (3) means of enforcement of program requirements, where the program requirements in each case are equivalent to or stricter than the program requirements under the corresponding California law.

Currently, it appears that there is one key differential between the SCE regime in its current form and the CCTP regime that would bar linkage. The basic threshold for applicability of the CCTP is emission of 25,000 metric tons of carbon dioxide equivalent (MTCO2e) per year.[84] At least during in the testing program, the threshold for application of the SCE is 100,000 MTCO2e.[85] This by itself could cause SCE to fail the "equivalent to or stricter" test for its program requirements.

Of course, the comparison process would extend far beyond this single item. It would comprise all aspects of the SCE regime. The mechanism to establish that the applicable requirements are met is "findings" by the Governor of California. In making these findings, the Governor relies, among other things, upon analytical work by CARB. In the case of Quebec's linkage with the CCTP, CARB prepared a "Discussion of Findings Required by Government Code section 12894" to review Quebec's program requirements and enforcement mechanism, and how that compared with the California regime.[86] Accordingly, that Discussion provides a good roadmap for a future application for linkage by SCE.

[83] The climate change law specifically provides that this national system will be able to link with emissions trading systems of other countries. Ley General de Cambio Climático, Art. 95.
[84] Cal. Code Regs., title 17, § 95812.
[85] ACUERDO por el que se establecen las bases preliminares del Programa de Prueba del Sistema de Comercio de Emisiones, publicado 1 de octubre de 2019, Art. Octavo.
[86] CARB Document: https://www.arb.ca.gov/regact/2012/capandtrade12/2nd15dayatta6.pdf.

SCE will begin operations after the completion of its testing program, which will end on December 31, 2022.[87] Only when the SCE becomes operational will it be plausible to evaluate its program requirements in comparison with the corresponding California requirements. This presents the need for delay in bringing application to CARB for linkage. On the other hand, it provides time for SCE to work with CARB in fashioning the program requirements of the SCE regulatory regime so that they are equivalent to or stricter than the corresponding program requirements in California.

### B. Potential Problems in Building a "Sector-Based Crediting Program" in Mexico or Subnational Jurisdiction (B.C., B.C.S. or both together).

The fundamental challenge to Mexico, together with B.C. and B.C.S., establishing or participating in a Sector-Based Crediting Program in Mexico is that no Sector-Based Crediting Program has ever been approved in California. The regulatory requirements for approval - described in Section I.D. of this chapter above -- are rigorous and detailed. But there is also uncertainty on how those requirements would be applied in practice. Since they have never been applied before, CARB would have a learning curve in considering what is needed to satisfy those requirements.

With the uncertainty presented by a first-time use of the regime for a Sector-Based Crediting Program and issuance , Mexico, together with B.C. and B.C.S., would need to work closely and consult regularly with CARB to form their joint jurisdiction to establish their sector-based crediting program; establish protocols for issuance of sector-based offset credits under the program; and put in place policies and procedures for submission and evaluation of applications for issuance of sector-based offset credits under those protocols. This would present a serious challenge and require substantial effort. The process could be burdensome and time-consuming.

### C. Limits on Use of Offsets from a Linked System or Sector-Based Offset Credits Under the CCTP

There are also strict limitations on the use of Offsets from a Linked System or Sector-Based Offset Credits to meet compliance obligations under the CCTP. Under current law, for the period 2021-2025, only 4% of compliance obligations can be met with (1) offset issued by CARB (which must be derived from domestic projects located in the United States or its territories), (2) international offsets issued by Linked Systems (such as SCE if it were linked with the CCTP), and (3) Sector-Based Offset Credits. For the period 2026-2039, that figure goes up to 6%. Further, no more than 50% of the instruments used may be sourced from projects that do not provide "direct environmental benefits" in California. In this regard, "direct environmental benefits in the State" is defined to mean "reduction or avoidance of emissions of any air

[87] ACUERDO por el que se establecen las bases preliminares del Programa de Prueba del Sistema de Comercio de Emisiones, publicado 1 de octubre de 2019, Art. Sexto. https://www.dof.gob.mx/nota_detalle.php?codigo=5573934&fecha=01/10/2019.

pollutant in the state or the reduction or avoidance of any pollutant that could have an adverse impact on waters of the state."[88]

Because there are already a large number of domestic out-of-state offsets being generated in the U.S. for use ihe CCTP,[89] the percentage limitations will constrain the available market for international offset credits issued by Linked Systems and Sector-Based Offset Credits. The 50% "direct environmental benefits in California" limitation is an additional constraint. It is unlikely that the B.C. and B.C.S. projects could meet the requirement for direct environmental benefits in California.

The result is that only 2% of the compliance obligations for the period 2021-2025 and 3% for the period 2026-2030 would be available as a potential market for Linked System offsets or Sector-Based Offset Credits from B.C. and B.C.S. Considering the competition from existing projects, it is not clear that there would be a sufficient market for instruments from B.C. and B.C.S. to justify the creation of those instruments.

[88] Cal. Code Regs., title 17, § 95802.

[89] The California Air Resources Board reports on all CARB offsets issued at the website https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fww3.arb.ca.gov%2Fcc%2Fcapandtrade%2Foffsets%2Fissuance%2Farboc_issuance.xlsx&wdOrigin=BROWSELINK. The website shows whether an offset has direct environmental benefits in the state (DEBS) or not (column R of table). A substantial number of the offsets already issued are non-DEBS projects.

# Chapter Four
# Potential Funding through Greenhouse Gas Offsets under the California Environmental Quality Act

## I. Introduction to CEQA and GHG Mitigation Through Offsets

The California Environmental Quality Act (CEQA) generally requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of proposed projects, and to reduce those environmental impacts to the extent feasible.[90] According to the California Supreme Court:

> With narrow exceptions, CEQA requires an [Environmental Impact Report (EIR)] whenever a public agency proposes to approve or to carry out a project that may have a significant effect on the environment. The basic purpose of an EIR is to provide public agencies and the public in general with detailed information about the effect that a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.' Sierra Club v. County of Fresno (2018) 6 Cal.5th 502, 511-512.

With respect to mitigation measures and the disclosure of those measures in the EIR, the key general requirements include the following:

- The EIR shall describe feasible measures which could minimize significant adverse impacts.
- Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments.
- Mitigation measures must be consistent with all applicable constitutional requirements, including (1) that there must be an essential nexus (i.e. connection) between the mitigation measure and a legitimate governmental interest, and (2) The mitigation measure, including any payment obligation, must be "roughly proportional" to the impacts of the project.[91]

There are additional specific requirements regarding mitigation measures related to GHG emissions:

- Consistent with the general requirements for mitigation measures summarized above, mitigation measures for GHG emissions must be feasible, supported by substantial evidence and subject to monitoring or reporting. The measures may include, among others:

[90] California Governor's Office of Planning and Research, CEQA: The California Environmental Quality Act, CEQA: the California Environmental Quality Act - Office of Planning and Research

[91] Cal. Code Regs., title 14, § 15126.4 (a).

- Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's[92] decision.

- Reductions in emissions resulting from a project through implementation of project features, project design, or other measures.

- Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions. (Emphasis added.)

- Measures that sequester greenhouse gases.

- In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by-project basis.[93]

As noted, the CEQA regulatory framework specifically permits offsets as a mitigation measure for GHG emissions. However, as with other GHG mitigation measures, offsets must comply with the general requirements for mitigation measures, i.e. feasibility, minimization of adverse impacts, enforceability and consistency with applicable constitutional requirements.

This broad regulatory framework leaves open many questions, which must necessarily be filled by reference to court decisions.

## II. Case Law Guidance on Use of Offsets, including Out-of-Country Offsets, as a GHG Mitigation Measure for Land Development Projects – The Golden Door Case

The leading case on use of offsets as a GHG mitigation measure with respect to land development projects under the auspices of local governments is *Golden Door Properties, LLC, v. County of San Diego* (June 12, 2020) 50 Cal.App.5th 467.

That case grew out of a CEQA attack on the GHG mitigation measures included in a County of San Diego EIR, which permitted a project developer, under certain circumstances, to purchase

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[92] For purposes of CEQA, "lead agency means the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment". California Public Resources Code § 21067.

A lead agency has broad responsibilities under CEQA. For all discretionary projects subject to the CEQA process, the lead agency will determine whether there is "substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment," in which case "an environmental impact report shall be prepared." California Public Resources Code § 21067. Further, if the project may have a significant effect on the environment and the agency proposes to carry out or approve that project, then the lead agency shall prepare, or cause to be prepared by contract, and certify the completion of, an environmental impact report on the project. California Public Resources Code § 21100 (State Agencies. Boards and Commissions); California Public Resources Code § 21151 (Local Agencies).

[93] Cal. Code Regs., title 14, § 15126.4(c).

offset credits originating anywhere in the world to mitigate project GHG emissions. The Court of Appeals found that this measure violated CEQA – expressing particular concern as to out-of-country offsets. At the same time, the Court provided guidance on how offsets, if properly structured, could meet the requirements of CEQA. We discuss below the background to the case, the case holding, and the implications of the case for our B.C./B.C.S. blue carbon coastal eco-systems Project.

### A. Background to the Golden Door Case

The *Golden Door* decision was based on the following facts: The County of San Diego had adopted a 2018 Climate Action Plan ("CAP") as required by its 2011 General Plan Update ("GPU"). The County as the lead agency determined that the CAP could potentially result in new significant environmental effects not covered in the original EIR for the GPU. Therefore, a supplemental EIR ("SEIR") was necessary to consider the environmental impacts of the CAP.

The SEIR included a GHG mitigation measure, M-GHG-1, which applied only to land development projects that required an amendment to the GPU ("GPA") because such projects would increase density or intensity of land use above what is allowed in the GPU. M-GHG-1 provided that such projects could mitigate GHG emissions first through all feasible onsite design features, such as land use and design features that reduce VMT [Vehicle Miles Traveled], promote transit-oriented development, and foster public transit, biking, and walking. If onsite design features were insufficient to fully mitigate GHG emissions, the project could then use offsite mitigation, including in some cases purchasing offset credits originating from projects anywhere in the world.

The Sierra Club and a private company, Golden Door Properties, LLC, each sued the County of San Diego under CEQA, seeking to set aside the County's approval of the CAP and the SEIR. The primary issue was whether M-GHG-1 was CEQA compliant. The two cases (plus a third case) were consolidated, and the trial court ruled in favor of the plaintiffs. The County then appealed, resulting in the Court of Appeals decision.

### B. The Holding in the Case

The Court of Appeals first pointed out that M-GHG-1 relied upon the CCTP statutory framework as to issuance of offsets by means of the following text: "Carbon offset credits must be purchased through [certain named registries or through] . . . any other reputable registry or entity that issues carbon offsets consistent with . . . [California Health and Safety Code] section 38562(d)(1) [which requires that "greenhouse gas emission reductions achieved are real, permanent, quantifiable, verifiable, and enforceable" by CARB]." On this basis, the Court determined that M-GHG-1 had "self-imposed" the CCTP requirements.[94] That being the case, M-GHG-1 failed those requirements in many respects:

- M-GHG-1 offsets are validated through specification of the offset registries that can issue the offsets, but this is not enough under the CCTP, since the protocols to be used by the

[94] 50 Cal.App.5th at 507, n.21

offset registries under the CCTP must also be approved, i.e. they must be CARB-approved Compliance Offset Protocols.

- M-GHG-1 offsets are not required to comply with CARB-authorized Compliance Offset Protocols, while CARB-issued offsets can be issued *only* in accordance with such protocols.[95]

- M-GHG-1 offsets are not required to meet the test of "additionality," while CARB-issued offsets must meet this requirement.[96]

- M-GHG-1 permits offsets in jurisdictions where the County of San Diego has no have enforcement authority, putting in doubt the enforceability of the offsets, another CCTP requirement: "The fundamental problem, unaddressed by M-GHG-1, is that the County has no enforcement authority in another state, much less in a foreign country."[97]

- M-GHG-1 permits out-of-country offsets that are not subject to a vetting process for the out-of-country issuing authority, while offsets from a foreign jurisdiction under the CCTP are recognized by CARB only if there is a formal linkage process requiring formal findings by the California governor.[98] With respect to developing countries, the Court highlighted the risk of corruption in the absence of such vetting.[99]

Even as it held that M-GHG-1 violated CEQA, the Court made it clear that its decision was limited to the particular facts of the case: "Our decision is not intended to be, and should not be construed as, blanket prohibition on using carbon offsets—even those originating outside of California—to mitigate GHG emissions under CEQAs

The Court pointed out that lead agencies have some discretion in crafting EIRs and will not be overruled as to factual determinations underlying the EIR unless there is no substantial evidence for those determinations. Taking account of the discretion permitted to local agencies, the court suggested that if lead agencies take into consideration the following factors, those factors would provide grounds for approval of an offset plan included in the EIR:

- If the local land use agency sets its own rules for use of offsets and those rules are sufficiently robust, the local agency need not rely on the CCTP offset rules to comply with CEQA.

- Offsets may be issued only if the emission reduction achieved is real, permanent, quantifiable, verifiable, enforceable, and additional to any GHG emission reduction otherwise required by law or regulation, and any other GHG emission reduction that otherwise would occur.

[95] Cal. Code Regs., title 17, § 95970(a)(2).
[96] Cal. Health and Safety Code § 38562(d)(2); Cal. Code Regs., title 17, § 95970(a)(1).
[97] 50 Cal.App.5th at 512-13.
[98] Cal. Code Regs., title 17, §§ 95940, 95941; Cal. Gov. Code § 12894(f).
[99] 50 Cal.App.5th at 510.

- Offsets should be issued by reference to specific identified protocols, which have been vetted to ensure that the offsets issued pursuant to such protocols are real, permanent, quantifiable, verifiable, enforceable, and additional.

- Offsets should be issued by official registries that are credible, which can be established if a registry has been approved for use by CARB, so long as the protocols that the registries use are also credible.

- Offsets should be used as a last resort only after other mitigation efforts that are directed to benefitting the local jurisdiction are exhausted or otherwise not available. Further, there should be some objective criteria regarding the unavailability of local mitigation opportunities, since this issue cannot be left to the unfettered discretion of a local official. Further, Courts will look favorably on percentage limitations upon use of non-local offsets.

- There should be mechanism in place to ensure enforcement, which may be through the registries if they take on that role.

- It may be particularly difficult to establish that out-of-country offsets are valid because of the risk of corruption in establishing and administering the offsets, and because of uncertainty as to foreign enforcement of the offsets.

### C. Lessons from the Golden Door case

The Golden Door case offers important lessons for our Project:

- It will be essential to engage with the regulatory authority for California development projects, i.e. county or city government, to see if they will incorporate offsets in their GHG mitigation strategy, and in particular out-of-country offsets.

- Where a GHG mitigation plan permits the use of offsets, the plan should incorporate the factors listed above.

- The provisions regarding out-of-country offsets will need to be particularly rigorous to overcome judicial skepticism. Corruption and enforceability are the critical issues. Therefore, the offsets must be issued in a process that excludes corruption and must be "self-executing" without discretionary enforcement, e.g. through recorded easements that would prevent development.

*Golden Door* also comments favorably on a County of San Diego mitigation measure pertaining to direct investment in offset projects rather than purchase of the offsets derived from those projects. The offsets must still be real, permanent, quantifiable, verifiable, enforceable, and additional, but a direct investment in the project rather than purchase of the offsets could potentially provide an alternative source of funding for out-of-country projects. This should also be explored in depth.

Each California city and county government has its own land use measures and GHG mitigation mechanisms. For our Project, it will be necessary to identify those jurisdictions where there is substantial development and, accordingly, a large potential market for offsets. Then the critical issue is whether it will be possible to incorporate out-of-country offsets in the GHG mitigation strategies for those jurisdictions.

# Chaper Five
# Conclusion and Recommendations

## I. Conclusions – Overview and Summary of the Opportunities and Challenges

This paper has examined the potential for cross-border funding under California law from (1) the California regulatory regime for protection of specified species and related habitats under the auspices of the California Department of Fish and Wildlife ("CDFW"); (2) the California Cap-and-Trade Program ("CCTP"), and (3) the California Environmental Quality Act ("CEQA") with respect to mitigation of greenhouse gas ("GHG") emissions. We summarize below the opportunities and challenges with respect to each of these three funding sources.

### D. Funding from Mitigation of Adverse Impacts on California Species and Habitats

Chapter Two of this paper presented the legal framework for CDFW mitigation obligations and the ways in which those obligations can be satisfied. Because the U.S. Army Corps of Engineers ("ACE") will have overlapping jurisdiction in many cases, it will be necessary to comply not only with California law but with the 2011 inter-agency MOU among CDFW, the ACE and other state and federal agencies discussed above.

The opportunity presented is that there is a path under California law and the 2011 MOU whereby blue carbon projects on the Baja Peninsula in Mexico could be used to satisfy the CDFW and ACE mitigation obligations to compensate for adverse impacts on species and habitats in California. The corresponding challenges involve uncertainties in the interpretation of applicable law, regulations and the 2011 MOU.

This paper outlines the arguments that could be made within the terms of California law and the MOU to seek the necessary approvals from state and federal officials in California under applicable law, regulations and the 2011 MOU. Taking account of California law and the terms of the MOU, the arguments presented will be most effective if the following conditions are met: (1) the impacts to species and habitats in California, particularly on endangered, rare or threatened species, are unavoidable; (2) there are no suitable mitigation opportunities in California; (3) the species and habitats on the Baja Peninsula are the same as impacted species and habitats in California, particularly if there is a linkage between the two jurisdictions, e.g. with respect to migratory boards that fly between California and the Baja Peninsula; (4) the mitigation project in Mexico will be effective in providing compensatory mitigation for the adverse impacts on affected species and habitats in California, whether through rehabilitation, enhancement, restoration or in some cases preservation of the mitigation site in Mexico; and (5) the mitigation project in Mexico can be protected, managed and financed for the indefinite future to the satisfaction of state and federal authorities in California.

### E. Funding from the CCTP

Chapter Three outlined the terms of the CCTP, administered by the California Air Resources Board ("CARB"), which was designed as a means of controlling GHG emissions by covered entities in California. The opportunity presented is two-fold:

- Mexico could link its own cap and trade system, identified as the Emissions Trading System (*Sistema de Comercio de Emisiones,* or "SCE"), with the CCTP, and then issue offsets derived from blue carbon coastal eco-systems in B.C. and B.C.S. Then if CARB recognizes and registers those offsets, they could be sold to a covered entity under the CCTP, thereby providing funding for protection of the B.C. and B.C.S. eco-systems.

- Mexico, acting for itself or for B.C. and B.C.S., could establish a Sector-Based Crediting Program covering the tropical forest sector, including mangroves, in the identified geographic area. If CARB were to adopt protocols for other blue carbon resources, such as wetlands, a Sector-Based Crediting Program could be established for those resources as well. Once CARB approves the Mexico / B.C.-B.C.S. Sector-Based Crediting Program(s), the program(s) could issue Sector-Based Offset Credits based on (1) protection of all mangroves and other tropical forest resources, or (2) other carbon resources within the scope of CARB protocols. Then if CARB recognizes those offset credits, they could be sold to a covered entity, thereby providing funding for protection of the identified resources within the jurisdiction of the Sector-Based Crediting Program.

The challenges to the identified opportunity grow out of the fact that the standards for approval of linkage of an external greenhouse gas emissions trading system ("External GHG ETS") with the CCTP and the establishment of a Sector-Based Crediting Program are very rigorous. In the case of the linkage, the program requirements of the External GHG ETS and enforcement of those requirements must be "equivalent to or stricter than" the corresponding requirements and enforcement in California. Mexico's SCE, as a program in the testing phase to be followed by a transition phase to full operation, does not currently meet the specified standards. In the case of the Sector-Based Crediting Program, the standards for approval are difficult on their face and open to interpretation. Also, CARB has never approved any such program to date.

Beyond these difficulties, all offsets and offset credits are subject to limitations on use as compliance instruments by covered entities. If such offsets or offset credits do not provide "direct environmental benefits in the state" of California (non-DEBS offsets or offset credits), then covered entities can use these non-DEBS instrument for only 2% of their CCTP compliance obligations during the period 2021-2025 and for 3% of their CCTP compliance obligations during the period 2026-2030. There are already numerous non-DEBS offset projects outside of California but within the U.S. and there is a risk that the supply of non-DEBS instruments may exceed supply considering the percentage limitations on use. If supply does exceed demand, Mexico could find itself unable to sell offsets or offset credits to covered entities in California or else be forced to sell at low prices to beat the competition.

### F. Funding from CEQA GHG Mitigation

Chapter Four of this paper provided an overview of the CEQA provisions regarding disclosure and mitigation of GHG emissions. For the mitigation of GHG emissions, CEQA specifically permits off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions.[100]

For local land development projects under the auspices of city and county governments, those jurisdictions as "lead agencies" for purposes of CEQA have substantial discretion in the mitigation remedies they establish. This presents the opportunity that local governments could permit offsets from B.C./B.C.S. to mitigate GHG emissions of development projects within the local jurisdiction.

The challenge is that the courts scrutinize local jurisdiction exercise of discretion with respect to offsets. In the *Golden Door* case, discussed above, the court rejected a GHG mitigation measure included in a County of San Diego EIR, which permitted a project developer, under certain circumstances, to purchase offset credits originating anywhere in the world to mitigate project GHG emissions.[101] However, in rejecting that specific measure, the court suggested a framework whereby use of offsets might be an acceptable exercise of local jurisdiction discretion. Those criteria were as follows:

- If the local land use agency sets its own rules for use of offsets and those rules are sufficiently robust, the local agency need not rely on the CCTP offset rules to comply with CEQA.

- Offsets may be issued only if the emission reduction achieved is real, permanent, quantifiable, verifiable, enforceable, and additional to any GHG emission reduction otherwise required by law or regulation, and any other GHG emission reduction that otherwise would occur.

- Offsets should be issued by reference to specific identified protocols, which have been vetted to ensure that the offsets issued pursuant to such protocols are real, permanent, quantifiable, verifiable, enforceable, and additional.

- Offsets should be issued by official registries that are credible, which can be established if a registry has been approved for use by CARB, so long as the protocols that the registries use are also credible.

- Offsets should be used as a last resort only after other mitigation efforts that are directed to benefitting the local jurisdiction are exhausted or otherwise not available. Further, there

[100] Cal. Code Regs., title 14, §15126.4(c)(3).

[101] Similarly, the court in *Sierra Club v. County of San Diego* (October 7, 2021), rejected the use of offsets for GHG emission mitigation because the County had not devised a proper framework for oversight of the offsets in question, citing the Golden Door case. https://oag.ca.gov/system/files/attachments/press-docs/Otay%2014%20Decision.pdf.

should be some objective criteria regarding the unavailability of local mitigation opportunities, since this issue cannot be left to the unfettered discretion of a local official. Further, Courts will look favorably on percentage limitations upon use of non-local offsets.

- There should be mechanism in place to ensure enforcement, which may be through the registries if they take on that role.

- It may be particularly difficult to establish that out-of-country offsets are valid because of the risk of corruption in establishing and administering the offsets, and because of uncertainty as to foreign enforcement of the offsets.

Beyond the issue of court review, another challenge is local political resistance to use of offsets that do not benefit the local community. It is noteworthy that after the *Golden Door* case, the County of San Diego gave up on out-of-country offsets in an apparent effort to strengthen the GHG mitigation plan against court challenges using only in-country offsets.

## II. Recommendations

We present a series of recommendations that are designed to explore in more depth the challenges described above, in the hope that it will be possible to overcome those challenges.

### A. Species and Habitat Protection – Engage with CDFW and the Mexican Government to Propose Habitat for Habitat Compensatory Mitigation

In the summary regarding species/habitat mitigation above, we identified five conditions, based on California law and the terms of the 2011 Inter-agency MOU, that would strengthen the argument for cross-border species/habitat mitigation. We recommend that proponents of cross-border species/habitat mitigation approach CDFW and environmental groups on the Baja California to explore if those five conditions can be satisfied.

The CDFW will be able to identify habitat areas where developers will likely be seeking permits or authorization to carry out development projects, and whether impacts are unavoidable (condition 1). The CDFW will also be able to advise on the availability of alternative mitigation sites in California (condition 2).

If impacts are unavoidable and there are not alternate mitigation sites in California, the proponents can work with B.C./B.C.S. environment groups to identify habitats on the Baja Peninsula that have matching characteristics to projected impacted habitats in California, particularly if migratory birds are involved (condition 3). If this condition can be met, the next step is for the proponents to develop ecological, management and legal strategies whereby the mitigation project in Mexico will be effective in providing compensatory mitigation (condition 4) and can be protected, managed and financed for the indefinite future (condition 5).

With satisfaction of these conditions, the proponents should then propose to CDFW and the Mexican government a habitat for habitat compensatory mitigation plan, whereby the "matching" habitats in B.C./B.C.S. could be placed in conservation or mitigation banks to provide mitigation credits for development projects in California. This proposal should be accompanied by evidence as to the projected effectiveness of the proposed compensatory mitigation, and plans for the protection, management and financing of the bank and the site for the indefinite future.

If these initial steps are promising, then the proponents should approach CDFW and ACE with a more formal petition for interpretation of California law and the 2011 inter-agency MOU in such a way as to permit the proposed habitat for habitat compensatory mitigation.

### B. CCTP – Exploration of Potential Linkage between the CCTP and Mexico's SCE or Establishment of Sector-Based Offset Program in B.C./B.C.S.

With respect to the CCTP, as a first step we recommend obtaining information on the likely market in coming years for non-DEBS offsets. This will need to take into account the limited demand for non-DEBS offsets due to the percentage limitations discussed above (2% of compliance obligations for 2021-2025 and 3% for 2026-2030) and the existing non-DEBS offset projects located outside of California but within the United States. The market analysis will necessarily also include the forecast availability of allowances in future years and the auction prices for allowances, since allowances are the initial compliance instrument that covered entities will rely upon to meet their compliance obligations, with offsets in a make-up-the-difference role or an alternative role if offsets provide better pricing.

If the market analysis indicates that there will be sufficient demand for non-DEBS offsets at acceptable prices to justify development of non-DEBS projects, we recommend as a next step approaching the Mexican government to discuss the market analysis and the related funding opportunities, the requirements for linkage of the SCE with the CCTP and the issues involved in setting up a Sector Based Crediting Program. If the Mexican government responds positively, we recommend then facilitating talks between CARB and the Mexican government for the two sides to explore more deeply the issues involved in obtaining necessary approvals.

### C. CEQA-GHG Offsets – Engage with Southern California governments to Explore Opportunities Presented by the *Golden Door* Case

The key recommendation here is to approach local governments in Southern California, and perhaps further north in the state, to explain how GHG mitigation rules and plans could be structured to allow offsets from B.C./B.C.S. projects within the terms set forth in the *Golden Door* case. That would necessarily involve sketching out a structure for creation, monitoring and enforcement of offsets in such a way that the fundamental requirement is satisfied: that the emission reduction achieved is real, permanent, quantifiable, verifiable, enforceable, and additional to any GHG emission reduction otherwise required by law or regulation, and any other GHG emission reduction that otherwise would occur.

Local governments are inherently political so it will be necessary to make an argument that the foreign offsets do not broadly permit GHG emissions in the local jurisdiction while benefitting the foreign jurisdiction. As a first step, this will require a hierarchy of mitigation tools that uses all available tools in the local jurisdiction, with out-of-state and particularly foreign offsets in a subordinate position. It will also be appropriate to have a percentage limitation on offsets and perhaps out-of-state offsets. It will also be helpful if an argument can be made that there are indirect benefits to California, e.g. with respect to migratory birds. Finally, it will necessary to highlight the public benefit of protecting blue carbon coast eco-systems in B.C./B.C.S. to counter the argument that the foreign offsets are nothing more than a money-making enterprise.