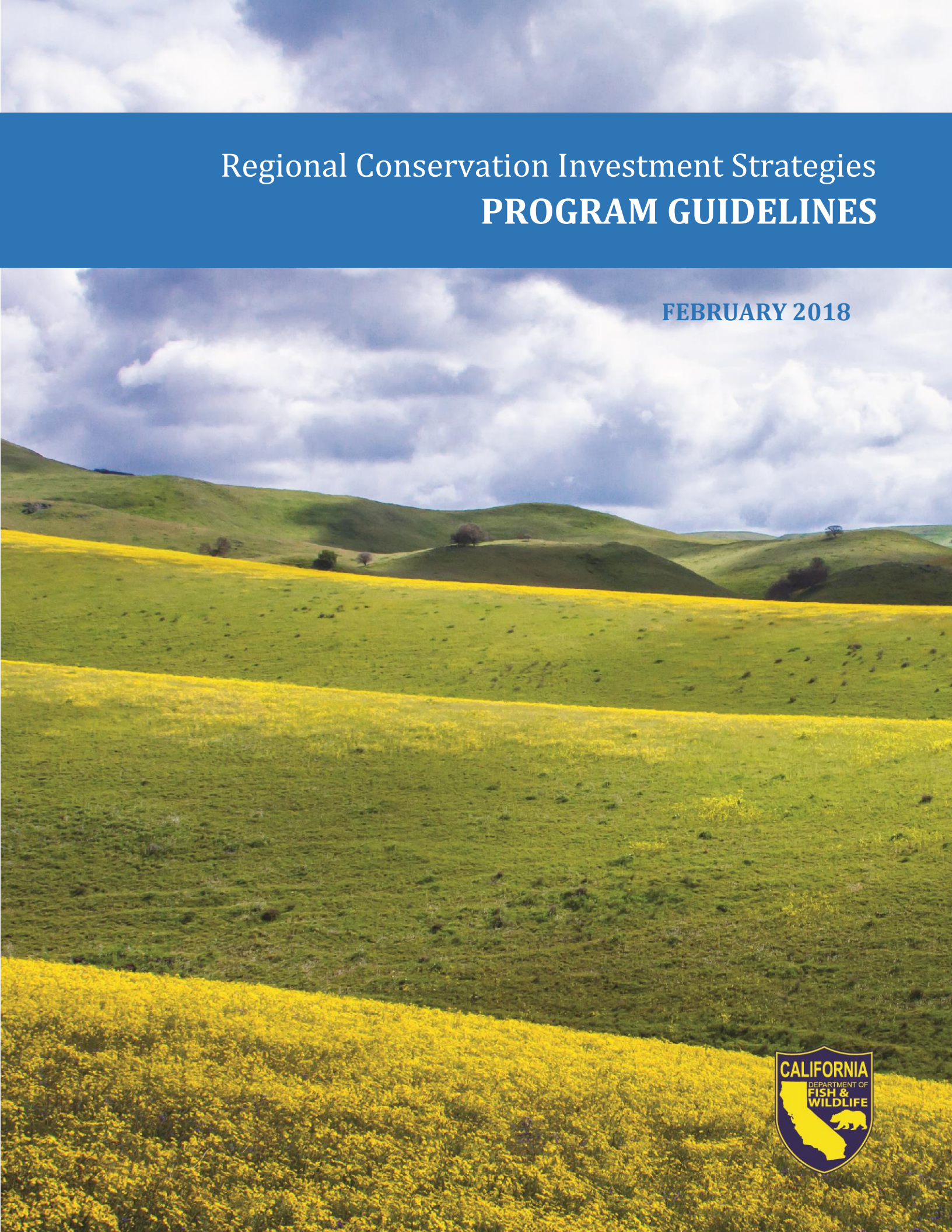
Regional Conservation Investment Strategies
PROGRAM GUIDELINES

FEBRUARY 2018



REGIONAL CONSERVATION INVESTMENT STRATEGIES PROGRAM GUIDELINES

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February 12, 2018

California Department of Fish and Wildlife. 2018. *Regional Conservation Investment Strategies Program Guidelines*. February 12. Sacramento, CA.

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Section 1
Program Overview

1.1 Introduction

On September 22, 2016, **Assembly Bill** (AB) 2087 (Levine) was signed into law and became effective on January 1, 2017, officially creating the **California Department of Fish and Wildlife**'s (CDFW) Regional Conservation Investment Strategies Program (Program). The new Program encourages public agencies to develop regional **conservation** planning documents, using the best available science to identify regional **conservation priorities** and other actions to help California's species populations that may be vulnerable or declining by protecting, restoring, creating, and reconnecting their **habitats**. The Program provides additional tools and mechanisms that will complement and enhance existing programs and increase options for project proponents, including public infrastructure agencies, to create **compensatory mitigation** that supports regional conservation priorities in advance of impacts. The goal of the Program is to achieve higher-quality conservation outcomes by guiding investments in conservation and compensatory mitigation that support regional conservation priorities and that enhance the resilience of species and their habitats to the impacts of climate change and other **pressures**. Public agencies and other entities can use the Program to determine strategies for achieving conservation priorities and to assist in other land use planning efforts, to help minimize impacts to resources, maximize conservation investments, and reduce mitigation costs.

This is a non-regulatory and voluntary Program that consists of three primary components: **Regional Conservation Assessment** (RCA), **Regional Conservation Investment Strategy** (RCIS), and **Mitigation Credit Agreement** (MCA). RCAs are assessments at the **ecoregional** scale that provide an overview of the area's **ecological resources** and ecological processes, and the pressures and **stressors** on those resources and processes. RCAs provide the context for conservation strategies and actions and identify areas with the greatest probability for long-term **ecosystem** conservation success.[1] RCAs are optional and not required to prepare an RCIS or MCA.

RCISs are strategies to identify and prioritize **conservation actions** and **habitat enhancement actions** for **focal species** and other **conservation elements** at the **sub-ecoregional** scale. RCISs include **conservation actions** and **habitat enhancement actions** that would advance the conservation of **focal species**, **habitat**, and other **natural resources** and provide nonbinding, voluntary guidance for the identification of wildlife and habitat conservation priorities, investments in ecological resource

[1] Fish & G. Code, § 1851, subdivision (k)

conservation, or identification of locations for compensatory mitigation for impacts to species and natural resources.[2] An RCIS may be proposed by CDFW or any other public agency, and shall be developed in consultation with local agencies that have land use authority within the geographic area of the RCIS.[3] Fish and Game Code section 1861 provides that CDFW can review and approve a maximum of eight RCISs.[4] However, an RCIS submitted with a letter from a state water or transportation infrastructure agency requesting that CDFW approve the RCIS is exempt from this maximum.[5]

MCAs are agreements that enable mitigation credits to be used to fulfill compensatory mitigation requirements established under any state or federal environmental law, as determined by the applicable local, state, or federal regulatory agency, including under the **California Endangered Species Act** (CESA)[6], CDFW's **Lake and Streambed Alteration** (LSA)[7] program, or the **California Environmental Quality Act** (CEQA)[8]. Under an approved RCIS, any entity may prepare MCAs as an **advance mitigation** tool to create credits. An RCIS must be in place before an MCA can be approved. MCAs are based on conservation and habitat enhancement actions in an approved RCIS. Consultation, review, and approval of a specific RCA, RCIS, or MCA will be conducted through CDFW's Habitat Conservation Planning Branch in Sacramento.

RCAs and RCISs are intended to provide scientific information for the consideration of public agencies and other entities. Information in RCAs and RCISs may benefit public agencies and other entities in land use considerations and conservation investments. RCISs and MCAs can also benefit public agencies and other entities in providing efficient mitigation delivery for infrastructure, development, and other project needs in the RCIS area. However, RCAs and RCISs are nonbinding, voluntary, and do not create, modify, or impose regulatory requirements or standards, regulate the use of land, establish land use designations, or affect the land use authority of, or the exercise of discretion by, any public agency.[9] RCAs and RCISs must comply with all applicable state and local requirements and do not preempt the authority of local agencies to implement infrastructure and urban development in local general plans.[10]

[2] Fish & G. Code, § 1851, subdivision (l)

[3] Fish & G. Code, § 1852, subdivision (a)

[4] Section 2 of Senate Bill (SB) 103 eliminated the original January 1, 2020 end date by which time RCAs, RCISs, and MCAs could be approved by CDFW.

[5] Sts. & Hy. Code § 800.6(j). Passage of SB 103 (Section 12) created an exemption from the maximum.

[6] Fish & G. Code, §§ 2080 – 2085

[7] Fish & G. Code, §§ 1600 – 1617

[8] Pub. Resources Code, §§ 21000 – 21189

[9] Fish & G. Code, § 1851, subdivisions (k) and (l)

[10] Fish & G. Code, §§ 1852, subdivision (c)(7) and 1853, subdivision (c)(8)

1.2 Purpose and Use of Guidelines

CDFW is providing these Regional Conservation Investment Strategies Program Guidelines (**Guidelines**) to implement Fish and Game Code sections 1850–1861. These Guidelines incorporate all relevant documents and Program guidance and apply to all RCAs and RCISs submitted as of the date of these Guidelines.[11] These Guidelines are intended to clarify and provide instructions or guidance related to the development, review, and approval of RCAs, RCISs, and MCAs to assist state and local public agencies, private entities, the public, and CDFW staff in implementing the Program. The Guidelines include instructions on where and how to submit individual Program documents and notices. CDFW may liberally interpret these Guidelines to accomplish the purposes of AB 2087 and the Program.

CDFW intends that these Guidelines will be a "living document" available on CDFW's website (see Section 1.4 – Program Contacts). CDFW, in coordination with interested parties, may update these Guidelines as additional relevant documentation or guidance becomes available.

Terms defined in Section 2—Standard Terminology are bolded with their first mention in each section of the Guidelines. The remainder of these Guidelines is divided into three main sections: Section 3—Regional Conservation Assessments, Section 4—Regional Conservation Investment Strategies, and Section 5—Mitigation Credit Agreements.

1.3 Fees

Fish and Game Code section 1857 authorizes CDFW to collect fees or other compensation to pay for all or a portion of CDFW's costs relating to an RCA, RCIS, or MCA. The fee schedule for the Program's components is posted on CDFW's website (see Section 1.4 – Program Contacts).

[11] Fish & G. Code, § 1858

1.4 Program Contacts

Information about the Program can be found on CDFW's website at:

https://www.wildlife.ca.gov/Conservation/Planning/Regional-Conservation

General inquiries, notifications of a proponent's intent to develop an RCA or RCIS, and requests for the list of entities that have filed a written request to CDFW for RCIS Program notices, must be directed to CDFW's Landscape Conservation Planning Program Manager:

Ron Unger
Manager, Landscape Conservation Planning Program
rcis@wildlife.ca.gov
916-653-3779

State agency letters requesting the approval of an RCIS must be sent to CDFW's Director:

Charlton Bonham
Director
California Department of Fish and Wildlife
P.O. Box 944209
Sacramento, CA 94244-2090

All document submittals, including draft and final RCAs, RCISs, MCAs; copies of state agency letters requesting RCIS approvals; and any RCA, RCIS, or MCA updates or amendments, must be sent by email and, if desired, hardcopy to CDFW's Habitat Conservation Planning Branch Chief:

Richard Macedo
Chief, Habitat Conservation Planning Branch
California Department of Fish and Wildlife
rcis@wildlife.ca.gov
P.O. Box 944209
Sacramento, CA 94244-2090

Alternatively, draft and final RCAs, RCISs, and MCAs may be uploaded to CDFW's File Transfer Protocol (FTP) site after notification has been sent to CDFW's Habitat Conservation Planning Branch Chief. The RCA proponent must request that CDFW provide a link to the FTP site, which will remain active for approximately two weeks.

Section 2
Standard Terminology

2.1 Terms, Abbreviations, Acronyms, and Definitions

Term/Acronym/ Abbreviation	Definition[12]
AB – Assembly Bill	A draft of a proposed law introduced by a Member of the California Assembly.[13]
ACE—Areas of Conservation Emphasis	A project that provides data to help guide and inform conservation priorities in California launched by CDFW in 2010,[14] or the latest update of that analysis.
adaptive management and monitoring strategy	A component of an RCIS that incorporates an adaptive management process that is informed by periodic monitoring of the implementation of both conservation actions and habitat enhancement actions. Adaptive management means using the results of new information gathered through a monitoring program to adjust management strategies and practices to help provide for the conservation of focal species and their habitats. A monitoring strategy is the periodic evaluation of monitoring results to assess the adequacy of implementing a conservation action or habitat enhancement action and to provide information to direct adaptive management activities to determine the status of the focal species, their habitats, or other natural resources.[15]
administrative draft NCCP	A substantially complete draft of a Natural Community Conservation Plan (NCCP) that is released after January 1, 2016, to the general public, plan participants, and CDFW.
advance mitigation	Compensatory mitigation for impacts on ecological resources (species and their habitats) and other natural resources that is implemented prior to impacts occurring.

[12] Unless cited otherwise, all definitions are excerpted or modified from AB 2087 or are modified from the State Wildlife Action Plan.

[13] California State Legislature Glossary of Legislative Terms, definition of "Bill" http://www.legislature.ca.gov/quicklinks/glossary.html.

[14] https://www.wildlife.ca.gov/Data/Analysis/Ace

[15] Adapted from Fish and Game Code section 2805(a) and (g)

Term/Acronym/ Abbreviation	Definition[12]
biodiversity	The full array of living things considered at all levels, from genetic variants of a single species to arrays of species and arrays of genera, families, and higher taxonomic levels; includes natural communities and ecosystems.
CDFW – California Department of Fish and Wildlife	California Department of Fish and Wildlife
CEHC—California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California	A statewide assessment of essential habitat connectivity completed by consultants and commissioned by CDFW and Caltrans;[16] the assessment used the best available science, data sets, and spatial analysis and modeling techniques to identify large remaining blocks of intact habitat or natural landscape and model linkages between them that need to be maintained, particularly as corridors for wildlife.
CEQA – California Environmental Quality Act	California Environmental Quality Act (California Public Resources Code, sections 21000 - 21178, and Title 14 CCR, section 753, and Chapter 3, sections 15000 - 15387).
CESA – California Endangered Species Act	California Endangered Species Act (Fish and Game Code § 2050-2115.5).
climate change vulnerability	Refers to the degree to which an ecological system, habitat, or individual species is likely to be adversely affected as a result of changes in climate and is often dependent on factors such as exposure, sensitivity, and adaptive capacity.
CNDDB – California Natural Diversity Database	California Natural Diversity Database is an inventory of the status and locations of rare plants and animals in California.[17]
compensatory mitigation	Actions taken to fulfill, in whole or in part, mitigation requirements under state or federal law or a court mandate.
conservation, conserve	The use of habitat and other natural resources in ways such that they may remain viable for future generations. This generally includes permanent protection of such resources. See “permanently protect.”

[16] *California Essential Habitat Connectivity Project*. Available: https://www.wildlife.ca.gov/conservation/planning/connectivity/CEHC.

[17] https://www.wildlife.ca.gov/Data/CNDDB

Term/Acronym/ Abbreviation	Definition[12]
conservation action	An action identified in an RCIS that, when implemented, would permanently protect or restore, and perpetually manage, conservation elements, including focal species and their habitats, other natural communities, ecological processes, and wildlife corridors. In contrast, a habitat enhancement action would have long-term durability but would not involve acquiring land or permanently protecting habitat – see habitat enhancement action. A conservation action is developed to achieve one or more conservation objectives. A conservation action may be implemented through a variety of conservation investments or MCAs. A conservation action that is implemented through an MCA would create conservation credits to be used as compensatory mitigation.
conservation easement	Any limitation in a recorded instrument that contains an easement, restriction, covenant, condition, or offer to dedicate, which is or has been executed by or on behalf of the owner of the land subject to that limitation and is binding upon successive owners of the land, and the purpose of which is to retain land predominantly in its natural, scenic, historical, agricultural, forested, or open-space condition.[18]
conservation element	An element with ecological functions within an RCIS, including focal species and their habitats, wildlife corridors and linkages, and other natural resources.
conservation goal	Broad, guiding principle that describes a desired future condition for a focal species, other species, or other important conservation elements. Each conservation goal is supported by one or more conservation objectives.
conservation investment	Conservation actions or habitat enhancement actions that are implemented under an approved RCIS but the implementer does not create credits through an MCA with CDFW. Conservation investments are typically funded by public agencies and nonprofit or other philanthropic organizations.
conservation objective	A concise, measurable statement of what is to be achieved and that supports a conservation goal.

[18] "Conservation easement" includes a conservation easement as defined in Civil Code section 815.1, an open-space easement as defined in Civil Code section 51075, and an agricultural conservation easement as defined in Public Resources Code section 10211.

Term/Acronym/ Abbreviation	Definition[12]
conservation priority	A conservation or habitat enhancement action (e.g., land acquisition, restoration, or habitat enhancement) that is ranked based on its importance for contributing to the conservation and recovery of focal species and their habitats, or other conservation elements within an RCIS area.
conservation purpose	Statement or statements in an RCIS that identify focal species and other conservation elements within the RCIS area and which outline conservation actions or habitat enhancement actions that, if implemented, will sustain and restore these resources.
creation (of natural community or focal species' habitat)	The creation of a specified resource condition where none existed before. See "establishment."
critical habitat	Habitat designated as critical[19] refers to specific areas occupied by a federally-listed species at the time it is listed, and that are essential to the conservation of the species and that may require special management considerations or protection. Critical habitat also includes specific areas outside occupied habitat into which the species could spread and that are considered essential for recovery of the species.
CWHR—California Wildlife Habitat Relationships	System that contains the life history, geographic range, habitat relationships, and management information for over 700 regularly occurring species of amphibians, reptiles, birds, and mammals in the state; allows users to produce queries to generate lists of species by geographic location or habitat type and provides information on expert opinion–based habitat suitability ranks for each species within each habitat type.[20]
ecological resources	Species, habitats, biological resources, and natural resources identified in an RCA or RCIS. See "conservation element" and "natural resources."

[19] 16 U.S.C. § 1532(5)(a)

[20] https://www.wildlife.ca.gov/Data/CWHR

Term/Acronym/ Abbreviation	Definition[12]
ecoregion, sub-ecoregion	As used in this document, ecoregion means a USDA Section[21] and sub-ecoregion means a portion of the USDA Section or USGS Hydrological Units (assigned hydrological unit codes; HUC).[22] The U.S. Department of Agriculture (USDA) describes four geographic levels of detail in a hierarchy of regional ecosystems including domains, divisions, provinces, and sections. Sections are subdivisions of provinces based on major terrain features, such as a desert, plateau, valley, mountain range, or a combination thereof.
ecosystem	A natural unit defined by both its living and non-living components; a balanced system of the exchange of nutrients and energy. Compare with "habitat."
ecosystem function	The ecosystem processes involving interactions between biotic and abiotic components (e.g., dynamic river meander, bank erosion, nutrient cycling) necessary to sustain the ecosystem and the species that depend on it.
ecosystem services	The beneficial outcomes to humans from ecosystem functions such as supplying of oxygen; sequestering of carbon; moderating climate change effects; supporting the food chain; harvesting of animals or plants; providing clean water; recharging groundwater; abating storm, fire, and flood damage; pollinating and fertilizing for agriculture; and providing scenic views.
endemic	A species, subspecies, or variety found only in a specified geographic region.
enhancement	A manipulation of an ecological resource or natural resource that improves a specific ecosystem function. An enhancement does not result in a gain in protected or conserved land, but it does result in an increase in ecological function.

[21] Goudey, C.B., and D.W. Smith, eds. 1994. Ecoregions California07_3. McClellan, CA. Remote Sensing Lab. Updated with ECOMAP 2007: Cleland, D.T.; Freeouf, J.A.; Keys, J.E., Jr.; Nowacki, G.J.; Carpenter, C; McNab, W.H. 2007. Ecological Subregions: Sections and Subsections of the Conterminous United States [1:3,500,000] [CD-ROM]. Sloan, A.M., cartog. Gen. Tech. Report WO-76. Washington, DC: U.S. Department of Agriculture, Forest Service. Miles and Goudey 1997. *Ecological Subregions of California.* Technical Report R5-EM-TP-005, USDA Forest Service, Pacific Southwest Region, San Francisco, CA.

[22] The United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), the United States Geological Survey (USGS), and the Environmental Protection Agency (EPA). The Watershed Boundary Dataset (WBD) was created from a variety of sources from each state and aggregated into a standard national layer for use in strategic planning and accountability. Available: http://datagateway.nrcs.usda.gov

Term/Acronym/ Abbreviation	Definition[12]
essential connectivity areas	Those areas essential for ecological connectivity between natural landscape blocks, as depicted in the Essential Connectivity Map prepared as part of CEHC Project,[23] or other connectivity report, plan, or map approved by the CDFW.
establishment	The manipulation of the physical, chemical, or biological characteristics present on a site to develop an aquatic or terrestrial habitat resource for Focal Species. Establishment will result in a gain in resource area and/or function. See "creation."
focal species	Species that are identified and analyzed in an RCIS that will benefit from conservation actions and habitat enhancement actions set forth in the RCIS.
Guidelines	Regional Conservation Investment Strategies Program Guidelines
habitat	An ecological or environmental area that is, or may be inhabited by a particular species of animal, plant or other type of organism. It is also the physical and biological environment that surrounds, influences, and is utilized by a species population and is required to support its occupancy. For the purposes of this document, habitat, natural communities, and vegetation communities are used synonymously.
habitat connectivity	The capacity of habitat to facilitate the movement of species and ecological processes.

[23] *California Essential Habitat Connectivity Project*. Available: https://www.wildlife.ca.gov/conservation/planning/connectivity/CEHC.

Term/Acronym/ Abbreviation	Definition[12]
habitat enhancement action	An action identified in an RCIS that, when implemented, is intended to improve the quality of wildlife habitat, or to address risks or stressors to wildlife. A habitat enhancement action is developed to achieve one or more conservation objectives. A habitat enhancement action would have long-term durability but would not involve acquiring land or permanently protecting habitat. In contrast, a conservation action would permanently protect or restore, and perpetually manage, conservation elements – see Conservation Action. Examples of habitat enhancement actions include improving in-stream flows to benefit fish species, enhancing habitat connectivity, and controlling or eradicating invasive species. A habitat enhancement action may be implemented through a variety of conservation investments or MCAs. A habitat enhancement action that is implemented through an MCA would create habitat enhancement credits intended for use as compensatory mitigation for temporary impacts.
HCP – Habitat Conservation Plan	Habitat Conservation Plan. A planning document that is required as part of an application for an incidental take permit under the federal Endangered Species Act. HCPs provide for partnerships with non-federal parties to conserve the ecosystems upon which listed species depend, ultimately contributing to their recovery. They describe the anticipate effects of the proposed taking, how those impacts will be minimized or mitigated, and how the HCP is to be funded.[24]
HUC – Hydrologic Unit Code	A code identifying a unique hydrologic unit.[25]
Implementing Entity	The organization designated in an NCCP and associated Implementing Agreement that is responsible for implementing the NCCP. Implementing Entities can be non-profit organizations, joint-powers authorities, local governments (such as cities or counties), or others.

[24] https://www.fws.gov/endangered/esa-library/pdf/hcp.pdf

[25] The United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), the United States Geological Survey (USGS), and the Environmental Protection Agency (EPA). The Watershed Boundary Dataset (WBD) was created from a variety of sources from each state and aggregated into a standard national layer for use in strategic planning and accountability. Available: http://datagateway.nrcs.usda.gov

Term/Acronym/ Abbreviation	Definition[12]
indicator species	A species, the presence or absence of which is indicative of a particular habitat, community, or set of environmental conditions.[26]
invasive species	Invasive species means, with regard to a particular ecosystem, a non-native organism whose introduction causes or is likely to cause economic or environmental harm, or harm to human, animal, or plant health..[27]
LSA – Lake and Streambed Alteration	Lake and Streambed Alteration Program (Fish and Game Code sections 1600-1617).[28]
MCA—Mitigation Credit Agreement	An agreement between CDFW and a person or entity that identifies the type and number of credits a person or entity proposes to create by implementing one or more conservation actions or habitat enhancement actions. An MCA includes the terms and conditions under which those credits may be used. The person or entity may create and use, sell, or otherwise transfer the credits upon CDFW's approval that the credits have been created in accordance with the MCA. To enter into an MCA with CDFW, a person or entity shall submit a draft MCA to CDFW for its review, revision, and approval. An MCA may only be created within an area where an RCIS has been approved.
metric	The indicator (e.g., area, habitat quality) by which the net change can be measured, using existing technology, from implementation of the proposed conservation actions or habitat enhancement actions relative to performance standards, to determine achievement of the RCIS's goals and objectives.
natural community	A group of organisms living together and linked together by their effects on one another and their responses to the environment they share.[29] A general term often used synonymously with habitat or vegetation community.

[26] Lincoln, R., G. Boxshall, and P. Clark. 1998. *A Dictionary of Ecology, Evolution and Systematics*. Second Edition. Cambridge University Press, Cambridge, UK.

[27] Obama, Barack – the White House, Executive Order -- Safeguarding the Nation from the Impacts of Invasive Species. December 5, 2016. Available: https://obamawhitehouse.archives.gov/the-press-office/2016/12/05/executive-order-safeguarding-nation-impacts-invasive-species

[28] Fish & G. Code, §§ 1600 – 1617

[29] Sawyer, J.O., T. Keeler-Wolf, and J.E. Evens. 2009. *A Manual of California Vegetation*. Second Edition. Sacramento, CA: California Native Plant Society.

Term/Acronym/ Abbreviation	Definition[12]
natural resources	Biological and ecological resources that are in addition to species and their habitats, including Waters of the State, Waters of the United States, wetlands, and natural communities. See "ecological resources" and "conservation element."
NCCP—Natural Community Conservation Plan	A plan developed pursuant to the Natural Community Conservation Planning Act (Fish and Game Code sections 2800-2835) which identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity.[30] An NCCP allows for take of species listed under CESA, as well as other, non-listed species.
NCCPA – Natural Community Conservation Planning Act	Natural Community Conservation Planning Act (Fish and Game Code sections 2800-2835).
NEPA – National Environmental Policy Act	The National Environmental Policy Act requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions.[31]
NMFS – National Marine Fisheries Service	National Marine Fisheries Service, or the National Oceanic and Atmospheric Administration (NOAA) Fisheries, is the federal agency responsible for the stewardship of the nation's ocean resources and their habitat.
permanently protect	Permanent protection means: (1) recording a conservation easement and (2) providing secure, perpetual funding for management of the land, monitoring, and legal enforcement.
population	The number of individuals of a particular taxon inhabiting a defined geographic area.
pressure	See "stressor, pressure."

[30] Fish & G. Code, §§ 2800 – 2835

[31] Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, § 4(b), Sept. 13, 1982.

Term/Acronym/ Abbreviation	Definition[12]
RCA—Regional Conservation Assessment	An assessment that provides information and analyses that document the ecosystems, ecosystem functions, species, habitat, protected and conserved areas, and habitat linkages within an ecoregion to provide the appropriate context for nonbinding, voluntary conservation strategies and actions. These assessments include information for the identification of areas with the greatest probability for long-term ecosystem conservation success incorporating co-benefits of ecosystem services, such as carbon cycling, water quality, and agricultural benefits. An RCA may be used to provide context at an ecoregional or sub-ecoregional scale to assist with the development of an RCIS. RCAs are intended to provide scientific information for the consideration of public agencies and their preparation is voluntary.
RCA or RCIS area	The geographic area encompassed by an RCA or RICS.
RCA or RCIS proponent	The public agency or group of public agencies developing an RCA or RCIS for review and approval by CDFW and who are responsible for the technical and administrative updates of an RCA or RCIS.
RCIS—Regional Conservation Investment Strategy	Information and analyses to inform nonbinding and voluntary conservation actions and habitat enhancement actions that would advance the conservation of focal species, habitats, and other conservation elements. The RCIS provides nonbinding, voluntary guidance for the identification of conservation priorities, investments in ecological resource conservation, or identification of priority locations for compensatory mitigation for impacts on species and natural resources. RCISs are intended to provide scientific information for the consideration of public agencies and are voluntary. RCISs do not create, modify, or impose regulatory requirements or standards, regulate the use of land, establish land use designations, or affect the land use authority of or exercise of discretion by, any public agency. RCISs are required if MCAs are to be developed.

Term/Acronym/ Abbreviation	Definition[12]
recovery	The process by which the decline of an endangered or threatened species is halted or reversed or threats to its survival are neutralized, so that its long-term survival in nature can be ensured. Recovery entails actions to achieve the conservation and survival of a species,[32] including actions to prevent any further erosion of a population's viability and genetic integrity. Recovery also includes actions to restore or establish environmental conditions that enable a species to persist (i.e., the long-term occurrence of a species through the full range of environmental variation).
recovery plan	A document published by USFWS, NMFS, or CDFW that lists the status of a listed species and the actions necessary to remove the species from the endangered species list.
rehabilitation	Manipulation of a piece of land with the goal of repairing natural or historic ecosystem functions to degraded habitat or natural resources. This results in a gain in ecological functions but it does not result in a gain in area.
restore, restoration	Manipulation of a site with the goal of returning species, habitat, and ecosystem functions to a site that historically supported such species, habitat, and functions, but which no longer supports them due to the loss of one or more required ecological factors or as a result of past disturbance. Compare with "conservation," "preserve," and "rehabilitation."
SCV – Survey of California Vegetation	The Survey of California Vegetation is the vegetation mapping standard developed and maintained for the state by CDFW (Fish and Game Code 1940).[33]
special-status species	Any species identified by a state or federal agency, usually a plant or animal species for which population viability is a concern.

[32] U.S. Fish and Wildlife Service and National Marine Fisheries Service. 1998. *Recovery Plan for Upland Species of the San Joaquin Valley, California*. Portland, OR: Region 1.

[33] https://www.wildlife.ca.gov/Data/VegCAMP/Mapping-Standards

Term/Acronym/ Abbreviation	Definition[12]
SGCN – Species of Greatest Conservation Need	Species of Greatest Conservation Need are selected, for each state, to indicate the status of biological diversity in the state, specifying at-risk species that have the greatest need for conservation. The latest SGCN list for the state of California is found in the California State Wildlife Action Plan 2015 Update.[34]
SSC – Species of Special Concern	Species of Special Concern[35] is an administrative designation and carries no formal legal status. The intent of designating SSCs is to: 1) focus attention on animals considered potentially at conservation risk by CDFW, other state, local and federal governmental entities, regulators, land managers, planners, consulting biologists, and others; 2) stimulate research on poorly known species; and 3) achieve conservation and recovery of these animals before they meet CESA criteria for listing as threatened or endangered.
stressor, pressure	Stressor is a degraded ecological condition of a focal species or other conservation element that resulted directly or indirectly from a negative impact of pressures such as habitat fragmentation. A pressure is an anthropogenic (human-induced) or natural driver that could result in changing the ecological conditions of a focal species or other conservation element. Pressures can be positive or negative depending on intensity, timing, and duration. Negative or positive, the influence of a pressure to the target is likely to be significant.
sub-ecoregion	See "ecoregion, sub-ecoregion."

[34] California Department of Fish and Wildlife. 2015. *California State Wildlife Action Plan, 2015 Update: A Conservation Legacy for Californians. Appendix C: Species of Greatest Conservation Need.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109224&inline.

[35] https://www.wildlife.ca.gov/Conservation/SSC

Term/Acronym/ Abbreviation	Definition[12]
SWAP 2015 – California State Wildlife Action Plan 2015 Update	The California State Wildlife Action Plan 2015 Update (SWAP 2015) is a CDFW publication developed to address the highest conservation priorities of the state, providing a blueprint for actions necessary to sustain the integrity of California's diverse ecosystems.[36] CDFW also created companion plans to support SWAP 2015 implementation through collaboration with partner agencies and organizations. The companion plans identify shared priorities among partner organizations to conserve natural resources in nine sectors that are experiencing significant pressures affecting natural resources.[37]
USDA – U.S. Department of Agriculture	U.S. Department of Agriculture, the federal agency providing leadership on food, agriculture, natural resources, rural development, nutrition, and related issues based on public policy, the best available science, and effective management.
USFWS – U.S. Fish and Wildlife Service	U.S. Fish and Wildlife Service, the federal agency responsible for conserving, protecting and enhancing fish, wildlife and plants and their habitats.
USGS – U.S. Geological Survey	U.S. Geological Survey, the federal agency that provides science about natural hazards and natural resources.
VegCAMP – Vegetation Classification and Mapping Program	The Vegetation Classification and Mapping Program develops and maintains California's expression of the National Vegetation Classification System.[38]
watershed	An area or ridge of land that contains a common set of streams and rivers that all drain into one location such as a marsh, stream, river, lake, or ocean.
working land	An area where people live and work in a way that allows ecosystems or ecosystem functions to be sustained (e.g., farms, ranches). Human activities are done in a way that minimizes disturbance on native plants and animals while still retaining the working nature of the landscape.

[36] https://www.wildlife.ca.gov/SWAP/Final

[37] https://www.wildlife.ca.gov/SWAP/Final/Companion-Plans

[38] https://www.wildlife.ca.gov/Data/VegCAMP

Section 3

Regional Conservation Assessments

3.1 Introduction

This section provides an overview of the required information to develop a **Regional Conservation Assessment** (RCA), an optional tool that can provide valuable context for **Regional Conservation Investment Strategies** (RCISs). An RCA is not required for submitting an RCIS to the **California Department of Fish and Wildlife** (CDFW) for review and approval.[39] However, if an RCA that has been approved by CDFW encompasses or overlaps with the area of a proposed RCIS, the RCIS shall explain how and to what extent it has incorporated the RCA information and analysis.[40]

At an **ecoregional** scale, RCAs will identify areas with the greatest probability for long-term ecosystem **conservation** success with co-benefits of **ecosystem services** such as carbon sequestration, protection against flood damage and other risks, support of the food chain, and agricultural benefits, water quality, and scenic views. An RCA includes information and analyses that document species, **ecosystems**, ecosystem functions, protected and conserved lands, and wildlife corridors and linkages within an ecoregion. RCAs shall be ecologically based[41] and are expected to conform to ecoregional geographic areas. RCAs will serve as a valuable tool for assessing conservation values in an ecoregional area.

Using existing geospatial information for species, the distribution of natural communities, standard vegetation classifications, and other standardized data, RCAs will identify and summarize relevant[42] regional conservation values, **pressures**, and **stressors** including, but not limited to, conservation areas, **habitat connectivity** values, and **climate change vulnerability**. The RCA will consider existing conservation plans such as the **California State Wildlife Action Plan 2015 Update** (SWAP 2015) and approved or **administrative draft Natural Community Conservation Plans** (NCCPs). Approved RCAs will be used to provide context at an ecoregional scale to assist with the development of subsequent, finer-scale regional RCISs and **Mitigation Credit Agreements** (MCAs).

[39] Fish & G. Code, § 1853, subdivision (a)

[40] Fish & G. Code, § 1853, subdivision (b)

[41] Fish & G. Code, § 1851, subdivision (k)

[42] Relevance pertains to identifying the conservation values, pressures, and stressors that can help determine in an RCIS achievable conservation goals and objectives for sustaining **focal species** and their habitats and other conservation elements.

RCAs shall include provisions ensuring compliance with all applicable state and local requirements. As a non-regulatory document, an RCA cannot preempt the authority of local agencies to implement infrastructure and urban development in local general plans. An RCA shall not create, modify, or impose regulatory requirements or standards, nor regulate the use of land, establish land use designations, or affect the land use authority or the exercise of discretion by any public agency.[43] An RCA may be proposed by CDFW or any other public agency. The public agency proposing and developing the RCA shall notify CDFW of its intent to develop an RCA (see Section 1.4 – Program Contacts).

3.2 Required Components of an RCA

The RCA shall identify and summarize the species, ecosystems, ecosystem functions, protected areas, conservation areas, and habitat connectivity relevant to the conservation assessment. It shall also identify and summarize the relevant regional pressures and stressors, including climate change vulnerability. An RCA shall be prepared using information from, at a minimum, SWAP 2015[44] (and the companion plans), approved NCCPs[45] that overlap the RCA, BIOS,[46] and other information available from CDFW. Data availability, currency, and quality vary throughout the state. An RCA shall use the most current, detailed, and accurate data and information that is consistent across the **RCA area**. At a minimum, an RCA shall use the best available scientific information including, but not limited to, peer-reviewed literature and datasets identified in this section to identify and summarize relevant regional conservation values, pressures, and stressors. A comprehensive map or maps of elements included in the assessment is preferred but not required.

3.2.1 Description of the RCA Area

The RCA shall include a concise description of: 1) the RCA's geographic area; 2) the rationale for why it was selected; and 3) the surrounding ecoregion(s) and any adjacent protected **habitat** areas or linkages that provide relevant context and rationale for the RCA's development.

[43] Fish & G. Code, § 1853, subdivision (c)(8)

[44] California Department of Fish and Wildlife. 2015. *California State Wildlife Action Plan, 2015 Update: A Conservation Legacy for Californians*. Edited by Armand G. Gonzales and Junko Hoshi. Prepared with assistance from Ascent Environmental, Inc., Sacramento, CA. Available: https://www.wildlife.ca.gov/SWAP.

[45] https://www.wildlife.ca.gov/Conservation/Planning/NCCP/Plans

[46] BIOS is CDFW's data catalogue of spatial data, including other species observation, distribution, and habitat datasets. Available: https://www.wildlife.ca.gov/Data/BIOS.

The RCA shall use the following ecoregional classifications for terrestrial and aquatic data to enable and promote consistency among RCAs throughout California:

a. USDA Ecoregion Sections — one or more **U.S. Department of Agriculture** (USDA) ecoregion Sections[47]

b. **U.S. Geological Survey** (USGS) **Hydrologic Unit Codes** (HUCs) — four-digit (HUC-4) or eight-digit (HUC-8) units[48]

3.2.2 Species and Natural Communities Information

The RCA shall identify the best available scientific information and analyses, including geospatial information regarding the distribution of species and natural communities.[49]

The RCA shall use CDFW's Natural Communities List[50] to enable and promote consistency with vegetation classifications in RCAs throughout California. This list is based on A Manual of California Vegetation, Second Edition (MCVII),[51] which is the California expression of the U.S. National Vegetation Classification,[52] and it is developed and maintained by CDFW's **Vegetation Classification and Mapping Program** (VegCAMP).[53] This list supersedes all other lists of terrestrial natural communities and vegetation types developed for the **California Natural Diversity Database** (CNDDB).[54]

The RCA shall include lists of rare natural communities or other high-priority natural communities[55] that occur within the RCA area. Information on the distribution and mapped locations of rare or other high-priority natural communities is available through, but not limited to, **Survey of California Vegetation** (SCV) vegetation maps, the CNDDB program, and the **Areas of Conservation Emphasis** (ACE) Sensitive Habitats dataset.

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[47] Goudey, C.B., and D.W. Smith, eds. 1994. Ecoregions California07_3. McClellan, CA. Remote Sensing Lab. Updated with ECOMAP 2007: Cleland, D.T.; Freeouf, J.A.; Keys, J.E., Jr.; Nowacki, G.J.; Carpenter, C; McNab, W.H. 2007. Ecological Subregions: Sections and Subsections of the Conterminous United States [1:3,500,000] [CD-ROM]. Sloan, A.M., cartog. Gen. Tech. Report WO-76. Washington, DC: U.S. Department of Agriculture, Forest Service. Miles and Goudey 1997. *Ecological subregions of California.* Technical Report R5-EM-TP-005, USDA Forest Service, Pacific Southwest Region, San Francisco, CA.

[48] The United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), the United States Geological Survey (USGS), and the Environmental Protection Agency (EPA). The Watershed Boundary Dataset (WBD) was created from a variety of sources from each state and aggregated into a standard national layer for use in strategic planning and accountability. Available: http://datagateway.nrcs.usda.gov

[49] Fish & G. Code, § 1853, subdivision (c)(2)

[50] California Department of Fish and Game. 2010. *List of Vegetation Alliances and Associations*. September. Vegetation Classification and Mapping Program. Sacramento, CA. Available: https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities/List.

[51] https://www.wildlife.ca.gov/Data/VegCAMP/Publications-and-Protocols/Vegetation-Manual

[52] https://www.fgdc.gov/standards/projects/FGDC-standards-projects/vegetation/NVCS_V2_FINAL_2008-02.pdf

[53] https://www.wildlife.ca.gov/Data/VegCAMP

[54] https://www.wildlife.ca.gov/Data/CNDDB

[55] https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities

RCA proponents shall check for the most recent version of the lists, associated vegetation descriptions, and any recent updates specific to the RCA area. Any vegetation information, including maps, developed for an RCA shall use the VegCAMP classification system and follow SCV standards.[56] If the RCA area has not been mapped to SCV standards, contact VegCAMP to determine the best available alternative vegetation map and associated descriptions.[57] If an approved NCCP in the RCA area uses a vegetation classification that differs from the Manual of California Vegetation, Second Edition, the RCA shall provide a cross-walk between the classifications to help ensure consistency between the RCA and the overlapping NCCP.

RCA proponents may add or emphasize species or taxonomic groups and their distribution information. for instance, if those species or taxonomic groups add additional conservation values in the RCA area that are not already considered in the ACE datasets as indicated in Section 3.2.3 - Biodiversity and Analysis. RCA proponents should consider the information in the following list, as practicable. RCA proponents shall indicate the reason for adding or emphasizing each of those species or taxonomic groups.

a. Covered species information from NCCPs that overlap the RCA area.

b. When available, existing species distribution models published by CDFW or in peer-reviewed literature. Any species distribution models otherwise used by or developed for an RCA should use modeling best practices including, at a minimum, documentation of the modeling process and methods and model evaluation metrics. Models developed for an RCA shall also be submitted to CDFW for inclusion in BIOS. The submittal shall include a description of the modeling process, methods, and metadata that meet CDFW's minimum metadata standards.[58]

c. Lists of wildlife species found in the RCA area using the Complete List of Amphibian, Reptile, Bird, and Mammal Species in California;[59] the list of **Species of Greatest Conservation Need** (SGCN),[60] as defined under SWAP 2015; and lists of special-status species. Special-status species lists include plant and animal species that are listed under the federal Endangered Species Act or **California Endangered Species**

[56] https://www.wildlife.ca.gov/Data/VegCAMP/Mapping-Standards

[57] https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Other-Info

[58] https://wildlife.ca.gov/Data/BIOS/Metadata

[59] California Department of Fish and Wildlife, California Wildlife Habitat Relationships Program. May 2016. *Complete List of Amphibian, Reptile, Bird and Mammal Species in California.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155&inline.

[60] California Department of Fish and Wildlife. 2015. *California State Wildlife Action Plan, 2015 Update: A Conservation Legacy for Californians Appendix C: Species of Greatest Conservation Need.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109224&inline.

Act (CESA),[61,62] CDFW animal **Species of Special Concern** (SSC),[63] California Fully Protected Animals,[64] and additional special-status species identified by the CNDDB special plants and special animal lists.[65,66] In addition, lists of terrestrial vertebrates can be generated by queries of CWHR.[67] The CWHR contains life history, geographic range, and habitat suitability information for regularly occurring species of amphibians, reptiles, birds, and mammals in the state. The CWHR allows users to produce queries to generate lists of species by geographic location (e.g., ecoregion, HUC) and/or by habitat type, and provides information on expert opinion–based habitat suitability ranks for each species within each habitat type.

d. Geospatial information on special-status species and their habitats in the RCA area. Reported information on the distribution of many of these species is available through, but not limited to, the CNDDB program and BIOS map viewer from CDFW's Biogeographic Data Branch.[68] The CNDDB is an inventory of GIS-mapped occurrence locations of special-status species in California. The BIOS spatial data catalog[69] includes additional geospatial information on the distributions of wildlife species (e.g., occurrence location data and species distribution models).

3.2.3 Biodiversity Information and Analysis

The RCA shall identify and summarize areas of high biological value within an RCA area using information from the most recent version of ACE.[70] ACE is a compilation and analysis of the best available statewide spatial information on California's biological richness, including species diversity, rarity, endemism, and sensitive habitats. In addition to ACE, RCA proponents may use other local or regional resources, as available. The ACE datasets identify and map the following:

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[61] California Department of Fish and Wildlife, Biogeographic Data Branch. October 2017. *State & Federally Listed Endangered & Threatened Animals of California.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline.

[62] California Department of Fish and Wildlife, Biogeographic Data Branch. October 2017. *State & Federally Listed Endangered, Threatened, and Rare Plants of California.* Available: http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline.

[63] https://www.wildlife.ca.gov/Conservation/SSC

[64] http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/fully_pro.html

[65] California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB). October 2017. *Special Vascular Plants, Bryophytes, and Lichens List.* Available: http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline.

[66] California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB). October 2017. *Special Animals List.* Available: http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline.

[67] https://www.wildlife.ca.gov/Data/CWHR

[68] https://www.wildlife.ca.gov/Explore/Organization/BDB

[69] The BIOS spatial data catalog can be searched by species name, or searched spatially by location.

[70] https://www.wildlife.ca.gov/Data/Analysis/ACE

a. Species diversity: The ACE Species Richness metric summarizes overall biodiversity, including sums of the total numbers of species potentially occupying each location, based on California Wildlife Habitat Relationships (CWHR) species ranges and models of species' predicted habitat.

b. Species rarity: The ACE Rare Species Richness metric summarizes the total number of rare species occupying each location based on known species occurrence locations from CNDDB and other BIOS data sources.

c. Endemism: The ACE Rarity-weighted Richness metric depicts a measure of endemism across the landscape by summarizing the total number of rare species, weighted by the total area occupied by each species as mapped by its documented occurrence locations. This metric highlights locations occupied by species with restricted distributions and areas occupied by multiple endemic species.

d. Sensitive Habitats: The ACE Sensitive Habitats data summarizes mapped locations of sensitive habitat data from multiple sources, including wetlands (palustrine, lacustrine, estuarine, and vernal pools), riparian areas, rare natural communities, and high-value salmonid watersheds. The Sensitive Habitats dataset also includes information on locations of flooded agricultural fields. The dataset can be used to identify generalized locations of sensitive habitats and provide additional information on original-source datasets with sensitive habitat maps.

3.2.4 Habitat Connectivity Values

RCA proponents shall conduct analyses or use existing analyses designed to identify areas for habitat connectivity. Habitat connectivity is important to maintaining viable ecosystem function, healthy wildlife **populations**, and gene flow. Habitat connectivity is a critical consideration when evaluating the location and association of protected lands within an RCA, and when determining how to provide for wildlife movement at different scales. Wildlife movement entails searches for food, shelter, and mates; dispersal as young find new territories; seasonal migration; and shifts to new ranges, when feasible, in response to climate change. Habitat connectivity and wildlife movement are also important to maintaining healthy gene flow of plants through pollination and seed dispersal. RCA proponents shall use habitat connectivity data and information including, but not limited to:

a. The **California Essential Habitat Connectivity Project** (CEHC),[71] a statewide assessment of essential habitat connectivity. The project identified large remaining blocks of intact, contiguous natural habitat (natural landscape blocks) and modeled linkages (**essential connectivity areas**) between them to best maintain habitat connectivity across the landscape.

[71] https://www.wildlife.ca.gov/conservation/planning/connectivity/CEHC

- Natural Landscape Blocks identify remaining intact lands across the state, independent of ownership. These lands contribute to habitat connectivity and are expected to have high conservation and climate resilience value because of their size, intactness, and connectedness with other natural habitats. Although the CEHC only used large natural landscape blocks (greater than 2,000 acres) due to the statewide nature of its analysis, smaller landscape blocks were identified and should be used for evaluating connectivity at a regional scale.[72]
- Modeled Linkages, or Essential Connectivity Areas, represent coarse-scale, generalized habitat connections between natural landscape blocks. These connections provide a broad-scale view of habitat connectivity needs at the statewide scale, but they should be supplemented with, or superseded by, fine-scale connectivity analyses at a regional scale, when available.

b. Regional, fine-scale connectivity analyses are refinements of the CEHC at a regional scale using finer-scale datasets and based on species movement needs. Regional, fine-scale connectivity analyses have been completed for several ecoregions in the state. When available, these spatial datasets[73] and project reports[74] should be used in preparing an RCA. These datasets can be used to identify overall fine-scale habitat connections between landscape blocks within an ecoregion, as well as critical movement corridors for individual species that may be of high priority for conservation.

c. CDFW's Guidance for Fine-Scale Wildlife Connectivity Analysis[75] is a report that provides guidance to complete a fine-scale wildlife connectivity analysis that meets CDFW standards. The report includes information on species selection criteria and landscape block identification, and details the model development process, using examples from CDFW's case study analysis of wildlife connectivity across the northern Sierra Nevada foothills that was conducted after the completion of the CEHC project. RCA proponents are not required to develop a fine-scale connectivity analysis; however, if RCA proponents choose to develop this type of analysis, CDFW's guidance should be used.

d. Fish Passage Assessment Database[76] and/or CDFW Fisheries Branch list of priority fish barriers. The Fish Passage Assessment Database is an ongoing inventory of known and potential barriers to anadromous fish in California. It compiles currently

[72] This data is available in BIOS as two layers: "Natural Landscape Blocks" shows blocks that are more than 2,000 acres in size, and "Natural Areas Small" shows blocks that are less than 2,000 acres in size.

[73] Available in BIOS: https://www.wildlife.ca.gov/Data/BIOS.

[74] https://www.wildlife.ca.gov/Conservation/Planning/Connectivity

[75] California Department of Fish and Wildlife, Biogeographic Data Branch. December 2014. *Guidance Document for Fine-Scale Wildlife Connectivity Analysis.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=93018&inline.

[76] https://nrm.dfg.ca.gov/PAD/

available fish passage information from more than two hundred data sources, and allows past and future barrier assessments to be standardized and stored in one place. The inventory is to be used to identify barriers suitable for removal or modification to restore access to spawning and rearing habitat. Contact CDFW Fisheries Branch for their list of priority fish barriers in the RCA area.

3.2.5 Existing Conservation Areas

RCA proponents shall conduct analyses or use existing spatial analyses to identify ecological relationships between existing conservation areas and other existing protected areas. The spatial analysis should identify the degree to which conservation elements are captured in existing protected areas including, but not limited to, the total acreage and percent of the RCA area currently in conservation protection and the acreage and percent of each habitat type currently in conservation protection. The analysis should consider the location, size, habitats, and level of connectivity of the protected areas to help identify priority areas for additional conservation efforts. At a minimum, the analysis shall include the following, where applicable:

a. Reserve networks within any NCCPs that overlap the RCA area
b. The California Protected Areas Database (CPAD)[77]
c. Protected Areas Database of the United States (PAD-US)[78]
d. Federally owned/managed lands including National Forests, National Parks, National Monuments, Bureau of Land Management lands, and other federal lands
e. California's network of Marine Protected Areas, Areas of Biological Significance, and other areas of special biological significance to coastal, marine, and aquatic ecosystems
f. CDFW owned/managed lands
g. California Department of Parks and Recreation–owned/managed lands
h. California Conservation Easement Database (CCED)[79]
i. National Conservation Easement Database (NCED)[80]

While not required, it is recommended that protected lands' management strategies be taken into consideration by the RCA proponent when evaluating the level of conservation protection on existing protected lands. The protected lands' management

[77] http://www.calands.org/
[78] https://gapanalysis.usgs.gov/padus/
[79] http://www.calands.org/cced; additional conservation easement information may be available from local land trusts
[80] https://www.conservationeasement.us/

strategies are captured by the Gap Analysis Program (GAP) Status Rank[81] as provided in CPAD and PAD-US. The GAP Status Rank, when available, gives an indication of the level of conservation protection afforded to various lands based on their management strategies.

3.2.6 Pressures and Stressors

The RCA shall identify the pressures and stressors for the ecoregion(s) that occur in the RCA area. An RCA is not required to include pressures and stressors for each identified species in the RCA. An RCA shall identify and summarize relevant regional pressures and stressors, including those associated with climate change and **invasive species**. As a starting point, RCA proponents shall indicate and reference pressures and stressors provided in SWAP 2015 Tables 1.5-2 and 1.5-3, and identify, summarize, and reference additional regional pressures and stressors indicated in approved NCCPs within the RCA area.

3.2.6.1 Climate Change Vulnerability Assessments

RCA proponents shall conduct analyses or use existing analyses and information to identify exposure of the RCA area to climate change (e.g., magnitude of projected changes in temperature and precipitation, sea level rise), climate vulnerable resources in the RCA (e.g., vulnerable fish, wildlife, and plant species), and areas that may be resilient to the impacts of climate change.

For existing information on climate vulnerability of California species and habitats and links to associated datasets, please refer to CDFW's climate change vulnerability assessment website.[82] This website will be maintained to provide relevant resources that will aid proponents in developing content for this section of the RCA in accordance with the list of requirements below.

At a minimum, an RCA shall include summaries of the following relevant existing data, when available:

a. Lists of climate-vulnerable species or species groups and natural communities developed or supported by CDFW. These include species, species groups, and natural communities recognized in climate vulnerability assessments for birds, mammals, reptiles, amphibians, fish, and plants in California including those listed in SWAP 2015 (Criteria 3 in the SGCN list).[83] Vulnerable vegetation assessments may

[81] https://gapanalysis.usgs.gov/padus/data/

[82] https://www.wildlife.ca.gov/Conservation/Climate-Science/Resources/Vulnerability

[83] California Department of Fish and Wildlife. 2015. *California State Wildlife Action Plan, 2015 Update: A Conservation Legacy for Californians. Appendix C: Species of Greatest Conservation Need.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109224&inline.

be found in *A Climate Change Vulnerability Assessment of California's Terrestrial Vegetation*.[84]

b. Other factors that may contribute to climate resilience such as diverse land facets[85] (geophysical features expected to support biodiversity in a changing climate) and high levels of connectivity (corridors to facilitate movement as species ranges and species habitats shift in response to climate change). Where available, data or information should be included that demonstrate how land facets and/or corridors within the RCA may promote climate resilience.

c. Geospatial information on climate exposure with respect to species, including information from existing projected range shift models for wildlife species developed for CDFW climate vulnerability analyses, where available.

d. Geospatial information on landscape-scale climate exposure, such as:

   - High-climate-exposure **natural community** areas as identified by the Climate Change Vulnerability Assessment of California's Terrestrial Vegetation.[86] These represent habitats that are expected to experience major changes in composition, such as habitat type conversion, due to changes in temperature and water availability.
   - Coastal areas expected to be impacted by sea level rise. Tools such as Cosmos,[87] CalAdapt,[88] the NOAA Sea Level Rise viewer,[89] the Coastal Conservancy's Climate Ready Program,[90] and California's Climate Change web page on coastal and ocean resources[91] may assist in identifying stressors associated with sea level rise.

e. Geospatial information on landscape-scale climate resilience, such as:

   - Climate-resilient natural community areas, representing habitats expected to remain stable in the face of climate change (i.e., potential climate refugia).

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[84] Thorne, J.H., R.M. Boynton, A.J. Holguin, J.A.E. Stewart, & J. Bjorkman. (2016) *A Climate Change Vulnerability Assessment of California's Terrestrial Vegetation*. California Department of Fish and Wildlife (CDFW), Sacramento, CA. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=116208&inline

[85] https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/oregon/science/Documents/PNW Terrestrial Climate Resilience Report March3 2015.pdf

[86] Thorne, J.H., R.M. Boynton, A.J. Holguin, J.A.E. Stewart, & J. Bjorkman, California Department of Fish and Wildlife. 2016. *A Climate Change Vulnerability Assessment of California's Terrestrial Vegetation.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=116208&inline.

[87] https://walrus.wr.usgs.gov/coastal_processes/cosmos/

[88] http://cal-adapt.org/tools/slr-calflod-3d/

[89] https://coast.noaa.gov/slr/beta/#/layer/slr

[90] http://scc.ca.gov/climate change/

[91] http://www.climatechange.ca.gov/adaptation/coast_and_oceans.html

3.2.6.2 Invasive Species

The RCA shall include invasive species within the RCA area as a pressure or stressor to **conservation elements**. Information is available from CDFW's Invasive Species Program,[92] California Department of Food and Agriculture,[93] Invasive Species Council of California,[94] California Invasive Plant Council online inventory,[95] and county agricultural commissioner offices.[96]

3.2.7 Other Considerations

The RCA shall consider existing major water, transportation, and transmission infrastructure facilities in the assessment area and account for reasonably foreseeable development of major infrastructure facilities including, but not limited to, renewable energy and housing.[97] Reasonably foreseeable development may be identified through consideration of the following sources:

a. Renewable energy projects—information from the county or the California Energy Commission;

b. Infrastructure projects—identified in local, state, and federal agencies' plans and/or in **California Environmental Quality Act** (CEQA) and **National Environmental Policy Act** (NEPA) documents; and

c. Housing and other development—identified in city and county general and specific plans and in CEQA and NEPA documents.

3.2.8 Consistency and Compliance

An RCA shall be consistent with administrative draft and approved NCCPs, regional federal **Habitat Conservation Plans** (HCPs), and approved **recovery plans** within the ecoregion or sub-ecoregion included in the RCA.[98] An RCA shall include provisions ensuring that the RCA is consistent with and complements approved NCCPs and regional federal HCPs that overlap the RCA area.[99] The RCA shall also include an explanation of whether, and to what extent, the RCA is consistent with any previously approved or amended assessment, state or federal recovery plan, or other state or federal approved conservation strategy that overlaps with the RCA area.[100] This can be

[92] https://www.wildlife.ca.gov/Conservation/Invasives
[93] http://www.cdfa.ca.gov/plant/
[94] http://www.iscc.ca.gov/species.html
[95] http://cal-ipc.org/paf/
[96] http://www.cdfa.ca.gov/exec/county/county_contacts.html
[97] Fish & G. Code, § 1853, subdivision (c)(7)
[98] Fish & G. Code, § 1853, subdivision (c)(6)
[99] Fish & G. Code, § 1853, subdivision (c)(9)
[100] Fish & G. Code, § 1853, subdivision (c)(10)

accomplished by comparing information about the conservation priorities and conservation areas that are identified in these plans. If inconsistencies exist, explain the scientific basis for how and why the assessment is acceptable.

An RCA shall consider local general plans and include provisions ensuring that the RCA complies with all applicable state and local requirements and that the RCA and any RCIS within the RCA area do not preempt the authority of local agencies to implement infrastructure and urban development in local general plans.[101]

3.3 Data Sharing and Access

All spatial data created during RCA development shall be submitted to CDFW via a File Transfer Protocol (FTP) site for inclusion in BIOS. The RCA proponent shall compile input and summary data in an industry-standard (Environmental Systems Research Institute [ESRI]-readable) geospatial format and include metadata that meets CDFW's minimum metadata standards.[102] The RCA proponent must request that CDFW provide a link to the FTP site, which will remain active for approximately two weeks.

RCA proponents may also choose to upload this information onto another (non-CDFW) web portal for interactive use to allow all interested parties to generate queries of regional conservation values within the RCA area. The web portal should clearly display the process-related steps used to compile, develop, and derive RCA information. All spatial data included in the web portal shall have metadata meeting CDFW's minimum metadata standards and be available for download in an industry-standard geospatial format. Examples of an interactive platform include the Desert Renewable Energy Conservation Plan Gateway portal[103] and the Bay Area Conservation Lands Network Explorer Tool.[104]

3.4 Review Process for RCAs

This section provides an overview of CDFW's review and approval process for RCAs, which also applies to amended RCAs. An RCA is not required for CDFW approval of an RCIS.[105] However, if an RCA has been approved by CDFW, a proposed RCIS that overlaps the RCA area shall explain how and to what extent it has incorporated that RCA's

[101] Fish & G. Code, § 1853, subdivision (c)(8)
[102] https://wildlife.ca.gov/Data/BIOS/Metadata
[103] Desert Renewable Energy Conservation Plan (DRECP) Gateway: https://drecp.databasin.org
[104] http://www.bayarealands.org/explorer/
[105] Fish & G. Code, § 1853, subdivision (a)

information and analysis.[106] If inconsistencies exist, the RCIS shall include an explanation providing the scientific basis for how and why the RCIS is acceptable.

A public input and review process is not required prior to the approval by CDFW of an RCA or any subsequent amendments. While not required, CDFW recommends that the public agency consider public review of the draft RCA prior to submitting it to CDFW for approval.

3.4.1 CDFW Review and Approval Process

After an RCA is submitted to CDFW for its review and approval, CDFW shall determine that the RCA is complete or provide the RCA proponent with a written explanation of the information needed to complete the RCA. Once CDFW determines that an RCA is complete, CDFW shall make the RCA available to the public on CDFW's website (see Section 1.4 – Program Contacts).

3.4.2 Finalizing an RCA

After a final RCA is submitted to CDFW for its review and approval, CDFW shall approve the final RCA or provide the RCA applicant with a written explanation of the information needed to approve the RCA. CDFW shall make all approved RCAs available on its website.

3.5 Process to Update an RCA

RCAs are not required to be updated. However, CDFW recommends that an RCA be updated at least every ten years with current scientific information. The updated RCA shall include an explanation of the updates and whether, and to what extent, the RCA is consistent with the previously approved RCA or amended RCA. Upon completion of the update, the public agency responsible for updating the RCA shall submit it to CDFW for review and approval (see Section 1.4 – Program Contacts).

3.6 Fee Schedule for RCAs

The current fee schedule for RCAs is available on CDFW's website (see Section 1.4 – Program Contacts).

[106] Fish & G. Code, § 1853, subdivision (b)

Section 4

Regional Conservation Investment Strategies

4.1 Introduction

This section provides guidance on the information needed to develop a **Regional Conservation Investment Strategy** (RCIS).[107] An RCIS should be a comprehensive regional **conservation** strategy that enables the protection of the region's **focal species** and other **conservation elements**, and promotes resilience to foreseeable **pressures** and **stressors**. RCISs will include existing information and analyses of conservation elements at a **sub-ecoregional** scale, including focal species and their associated **habitats**, wildlife corridors and linkages, and other relevant **natural resources** within the **RCIS area**. The intent of the RCIS Program (Program) is to identify high-value conservation and habitat **enhancement** opportunities within the RCIS area. When implemented, RCIS-directed **conservation actions** and **habitat enhancement actions** will aid in species **recovery**, adaptation to climate change, and resiliency in the face of pressures and stressors.

Preparation of an RCIS by public agencies is voluntary. The use of an RCIS by any organization, entity, or individual is also voluntary. Each RCIS will incorporate the best available scientific data and existing information to identify **conservation goals** and measurable **objectives** for focal species and to identify conservation actions and habitat enhancement actions that, if implemented, will further those goals and objectives. The conservation actions and habitat enhancement actions will benefit the conservation of focal species, their habitats, and other conservation elements by addressing or responding to pressures and stressors affecting these resources. These actions may provide a basis for **conservation investments** or they may be used as the basis for developing **advance mitigation** opportunities through the creation of credits (see Section 5 – Mitigation Credit Agreements).

In addition to the above, it is also the intent of the Program that RCISs inform infrastructure planning and provide project proponents with additional mechanisms for identifying and developing **compensatory mitigation**. An RCIS may be used to assist in land use planning in conjunction with other land use considerations, such as physical geography, social, economic, and risk-reduction analyses.

An RCIS is nonbinding and the development of an RCIS shall not create, modify, or impose regulatory requirements or standards, regulate land use, establish land use

[107] Fish & G. Code, § 1861

designations, or affect the land use authority of a public agency.[108] An RCIS shall include provisions ensuring compliance with all applicable state and local requirements. As a non-regulatory document, an RCIS does not preempt the authority of local agencies to implement or regulate infrastructure and urban development.[109] Project proponents in need of compensatory mitigation are not required to use or implement any action described in an RCIS. Only entities that are a party to a **Mitigation Credit Agreement** (MCA) will be required to adopt, implement, or otherwise adhere to RCIS goals, objectives, and conservation and habitat enhancement actions that form the basis for the MCA.[110] Additionally, the preparation or approval of an RCIS does not alter the requirements of the **California Environmental Quality Act** (CEQA),[111] the **California Endangered Species Act** (CESA),[112] the **Natural Community Conservation Planning Act** (NCCPA),[113] or the **California Department of Fish and Wildlife**'s (CDFW's) **Lake and Streambed Alteration** (LSA)[114] and Conservation and Mitigation Bank[115] programs.

An RCIS may be proposed by CDFW or any other public agency and shall be developed in consultation with local agencies that have land use authority within the geographic area of the RCIS.[116] The public agency proposing the RCIS shall notify CDFW of its intent to develop an RCIS (see Section 1.4 – Program Contacts). Fish and Game Code section 1861 provides that CDFW can review and approve a maximum of eight RCISs.[117] However, an RCIS does not count toward this limit when a state water or transportation infrastructure agency has sent a letter to CDFW's Director (see Section 4.6.1.1 – State Agency Letter) requesting the approval of the RCIS. [118] CDFW may approve an RCIS for an initial period of up to ten years.[119]

4.2 Required Components of an RCIS

Unless otherwise indicated, the information below outlines required RCIS components pursuant to Fish and Game Code section 1852(c). Any maps provided in an RCIS should

[108] Fish & G. Code, § 1851, subdivisions (k) and (l)
[109] Fish & G. Code, §§ 1852, subdivision (c)(7) and 1853, subdivision (c)(8)
[110] Fish & G. Code, § 1855, subdivisions (a) and (c)
[111] Pub. Resources Code §§ 21000 – 21189
[112] Fish & G. Code, §§ 2080 – 2085
[113] Fish & G. Code, § 2035
[114] Fish & G. Code, §§ 1600 – 1613
[115] Fish & G. Code, §§ 1797 – 1799
[116] Fish & G. Code, § 1852, subdivision (a)
[117] Fish & G. Code, § 1861
[118] Sts. & Hy. Code, § 800.6(j). Passage of SB 103 (Section 12) created an exemption from the maximum of eight RCISs that CDFW can approve.
[119] Fish & G. Code, § 1854, subdivision (a)

include a level of detail commensurate with the scale of the RCIS area and its resources, but do not need to include individual parcel boundaries or other specific detail. A comprehensive map or maps of ecological resources and conservation priorities is preferred but not required. In lieu of a comprehensive map, separate maps may be considered for various conservation element groupings (as indicated in Sections 4.2.5 and 4.2.6).

4.2.1 Explanation of the RCIS's Conservation Purpose

An RCIS's **conservation purpose** should align with the goals and objectives of the **California State Wildlife Action Plan 2015 Update** (SWAP 2015) and any approved **Regional Conservation Assessment** (RCA) encompassing the RCIS area. It shall also be consistent with and complement any **Natural Community Conservation Plans** (NCCPs) or federal **Habitat Conservation Plans** (HCPs) that overlap the RCIS area. Generally, an RCIS's conservation purpose is to identify and prioritize conservation and habitat enhancement actions within the RCIS area that, if implemented, will sustain and **restore** the RCIS's conservation elements including focal species and their habitats and other natural resources.

The RCIS's conservation purpose shall be included in the approval request letter submitted by the state agency (see Section 4.6.1.1 – State Agency Letter).[120] This letter shall briefly state the purpose of the RCIS from both a conservation perspective and an infrastructure planning perspective, and it shall be a brief, one-page document.

4.2.2 Description of the RCIS Area

The RCIS area is the geographic area encompassed by an RCIS. The RCIS focal species and other key **ecological resources**—collectively called conservation elements—should be considered when determining the RCIS area. Criteria for selecting and defining the RCIS area shall be based on ecological considerations[121] and shall conform to prescribed subdivisions of one or more **U.S. Department of Agriculture** (USDA) ecoregions[122] or **U.S. Geological Survey** (USGS) **Hydrologic Unit Codes** (HUCs).[123] An

[120] Fish & G. Code, § 1852, subdivision (a)

[121] Fish & G. Code, § 1851, subdivision (k)

[122] Goudey, C.B., and D.W. Smith, eds. 1994. Ecoregions California07_3. McClellan, CA. Remote Sensing Lab. Updated with ECOMAP 2007: Cleland, D.T.; Freeouf, J.A.; Keys, J.E., Jr.; Nowacki, G.J.; Carpenter, C; McNab, W.H. 2007. Ecological Subregions: Sections and Subsections of the Conterminous United States [1:3,500,000] [CD-ROM]. Sloan, A.M., cartog. Gen. Tech. Report WO-76. Washington, DC: U.S. Department of Agriculture, Forest Service. Miles and Goudey 1997. *Ecological subregions of California.* Technical Report R5-EM-TP-005, USDA Forest Service, Pacific Southwest Region, San Francisco, CA.

[123] The United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), the United States Geological Survey (USGS), and the Environmental Protection Agency (EPA). The Watershed Boundary Dataset (WBD) was created from a variety of sources from each state and aggregated into a standard national layer for use in strategic planning and accountability. Available: http://datagateway.nrcs.usda.gov

RCIS area may also be further modified by administrative boundaries such as county lines or jurisdictional boundaries of the RCIS' proponent.

There is no minimum or maximum size for an RCIS area; however, multiple RCISs shall not overlap one another. Where multiple RCISs are adjacent or in close proximity, the RCISs may or may not address the same conservation elements but they should complement and be compatible with one another. At a minimum, the provisions of two RCISs that are adjacent or in close proximity shall not conflict nor shall the provisions of one RCIS undermine or be incompatible with the conservation purpose of another RCIS.

Other factors to consider when defining the RCIS area may include, but are not limited to:

a. Areas of resilient habitat (to climate change or other stressors and pressures), **U.S. Fish and Wildlife Service** (USFWS)–defined designated **critical habitat** or recovery units for one or more focal species, or distinct population segments or ecological significant units (e.g., **National Marine Fisheries Service** (NMFS) equivalent for fish).

b. Areas where conservation actions or habitat enhancement actions, when implemented, may contribute to species recovery or sustain focal species populations.

c. Areas where NCCPs and HCPs have not been developed and are unlikely to be developed or where conservation or mitigation banks have not been established.

While not required, RCIS proponents are encouraged to work with CDFW early in the process when determining RCIS areas.

The RCIS shall include a concise description of the RCIS's geographic area and the rationale for why it was selected. This shall include identification of the USDA Ecoregional Section or sub-ecoregions and the USGS HUC 10 or HUC 12 that overlap with the RCIS area (in part or in whole). The description shall also identify the surrounding ecoregion(s) and describe any adjacent protected habitat areas (see Section 4.2.9.6 – Existing Protected or Conserved Areas) or linkages (see Section 4.2.9.5 – Habitat Connectivity) that provide relevant context and rationale for the RCIS.[124]

An RCIS may be amended or updated any time after its initial approval to incorporate additional geographical areas, ecological resources, or new information (see Section 4.8 – Updating and Extending an RCIS).

[124] Fish & G. Code, § 1852, subdivision (c)(2)

4.2.3 Summary of Mitigation and Conservation Banks within an RCIS Area

The RCIS shall include a summary of mitigation banks and conservation banks approved by CDFW,[125] USFWS,[126] **National Marine Fisheries Service** (NMFS), and/or the U.S. Army Corps of Engineers that are located within the RCIS area or whose service area overlaps the RCIS area. The summary shall include information on the types of credits available and where information can be found on the number of available credits.

4.2.4 Consistency and Compliance

An RCIS must be consistent with NCCPs, HCPs, **recovery plans**, and RCAs within the RCIS area. The RCIS must also consider existing and reasonably foreseeable land uses including agriculture and major infrastructure. To ensure this, an RCIS shall be developed in consultation with local agencies that have land use authority within the geographic area of the RCIS.[127] An RCIS should also be developed in consultation with any applicable HCP and NCCP Implementing Entities and others within the geographic area of the RCIS. CDFW recommends that RCIS proponents also consult with local public agencies with land use authority adjacent to or in close proximity to the proposed RCIS area. At a minimum, consultation with each local public agency or entity with land use authority shall include notification prior to or when the Notice of Intent (NOI) for preparing an RCIS is filed, an invitation to participate in the RCIS planning process, a good faith effort to work together, and consideration of general plan and other land use authority designations.

Conservation actions and habitat enhancement actions should be developed in consideration of existing and reasonably foreseeable land uses including conservation, agriculture, and major infrastructure. Those actions should focus on conserving focal species and other conservation elements with existing and reasonably foreseeable land uses in mind. Those actions may also assist in satisfying mitigation requirements for reasonably foreseeable land uses.

An RCIS is nonbinding and voluntary. An RCIS shall not create, modify, or impose regulatory requirements or standards, nor regulate the use of land, establish land use designations, or affect the land use authority or the exercise of discretion by any public agency.[128] An RCIS must comply with all applicable state and local requirements and

[125] https://www.wildlife.ca.gov/Conservation/Planning/Banking/Approved-Banks
[126] https://ribits.usace.army.mil/ribits_apex/f?p=107:2
[127] Fish & G. Code, § 1852, subdivision (a)
[128] Fish & G. Code, § 1851, subdivisions (k) and (l)

must not preempt the authority of local agencies to implement infrastructure and urban development in local general plans.[129]

4.2.4.1 Consistency with RCAs, Land Uses, and Foreseeable Development

If a CDFW-approved RCA encompasses or overlaps with a proposed RCIS area, the RCIS shall explain how and to what extent it has incorporated the RCA's information and analysis.[130] An RCIS shall consider existing land uses, including major water, transportation, and transmission infrastructure facilities and urban development areas in the RCIS area.[131] An RCIS shall consider the conservation benefits of preserving **working lands** for agricultural uses.[132]

Reasonably foreseeable development may be identified through consultation with infrastructure agencies and by reviewing city and county general plan designations,[133] state water and transportation plans, and regional transportation plans. Information on renewable energy projects may be obtained from the county and the California Energy Commission.

An RCIS shall indicate how reasonably foreseeable development of major infrastructure facilities, including, but not limited to, renewable energy and housing, was considered in developing the RCIS. The RCIS shall should include a discussion of how reasonably foreseeable infrastructure was considered in the development and selection of conservation priorities and other conservation and habitat enhancement actions. Consideration of the reasonably foreseeable development should result in an RCIS that is reasonably implementable and should inform goals, objectives, and actions.

As a non-regulatory document, impacts that may be associated with foreseeable developments should not be included in an RCIS. However, the RCIS may be used to identify suitable compensatory mitigation opportunities and to voluntarily implement specific conservation actions or habitat enhancement actions to create mitigation credits through MCAs.

Conservation actions and habitat enhancement actions should be developed to conserve focal species and other conservation elements with existing and reasonably foreseeable land uses in mind. Those actions may also assist in satisfying mitigation requirements for reasonably foreseeable land uses.

[129] Fish & G. Code, §§ 1852, subdivision (c)(7) and 1853, subdivision (c)(8)
[130] Fish & G. Code, § 1853
[131] Fish & G. Code, § 1852, subdivision (c)(6)
[132] Fish & G. Code, § 1852, subdivision (e)(1)
[133] Fish & G. Code, § 1852, subdivision (c)(6) and (e)(2-4)

An RCIS shall include provisions ensuring that the RCIS complies with all applicable state and local requirements and that the RCIS does not preempt the authority of local agencies to implement infrastructure and urban development in local general plans.[134]

4.2.4.2 Consistency with NCCPs and HCPs

An RCIS's goals, objectives and actions shall be consistent with and complement those of **administrative draft NCCPs**, approved NCCPs, federal HCPs, and approved state or federal recovery plans within the RCIS area.[135] Requisite information depends on the plan type and is as follows:

a. Consistency Comparison – The RCIS shall include a narrative that summarizes how the RCIS goals, objectives and actions for each focal species are consistent and compatible (i.e., not in conflict) with the HCP/NCCP biological goals and objectives (BGOs) for each of those HCP/NCCP covered species that are also RCIS focal species. The narrative should also generally address consistency between all RCIS goals, objectives, and actions and the HCP/NCCP BGOs, not just those that are species-specific. The requirement is to ensure that all RCIS goals, objectives, and actions are consistent with those for the same species or habitat types in the HCP/NCCP as well as with all HCP/NCCP BGOs in general.

b. Inconsistencies Explanation – The RCIS shall include an explanation of any inconsistencies and conflicts that may exist and provide the ecological rationale that justifies those differences.

c. Consistency Letter – The RCIS proponent shall submit a letter indicating consistency and compatibility between the RCIS goals, objectives and actions and the HCP/NCCP BGOs, signed by the regional HCP/NCCP **Implementing Entity**. The letter should include language, consistent with Fish and Game Code section 1852(c)(10), such as:

   "We, the _____ NCCP Implementing Entity, reviewed the draft _____ RCIS and determined that it is consistent with and complements the _____ NCCP. The draft _____ RCIS includes provisions ensuring that the RCIS's goals, objectives and actions will not preclude the _____ NCCP from achieving its goals, objectives, and actions or the NCCP's conservation strategy."

d. Comparison Table - If a consistency letter is not submitted, then, in addition to the narrative consistency comparison and inconsistency explanation, the RCIS proponent shall provide a table to directly compare the RCIS goals, objectives, and actions to the HCP/NCCP BGOs (by their identification numbers).

[134] Fish & G. Code, § 1852, subdivision (c)(7)

[135] Fish & G. Code, § 1852, subdivisions (c)(10) and (c)(11)

e. Consistency with Small or Old HCPs and Recovery Plans - For small (i.e., non-regional HCPs for discrete projects) or old HCPs (i.e., if the HCP permit term has expired) and old approved state or federal recovery plans (i.e., older than 25 years), the RCIS shall address consistency as noted in "a" through "d", above, with the exception that a letter or table will not be required. If documentation of specific BGOs are unavailable for small or old HCPs, consistency may be addressed in a general way.

4.2.5 Focal Species and Other Species Information and Analysis

The RCIS shall provide an overview of the RCIS area's conservation elements including focal species, other species, their habitats, and key ecological resources. RCIS proponents shall use the best available scientific information on focal species and other conservation elements to develop the RCIS's goals, measurable objectives, and conservation actions and habitat enhancement actions.

Focal species and other species must be native species. Focal species and other species must be included in an RCIS to be considered for credits in an MCA. However, to have a comprehensive RCIS, focal species and other species in the RCIS should not be restricted solely to those species with anticipated compensatory mitigation needs. The final focal species list must represent all major and unique vegetation communities within the RCIS area such that the RCIS includes large and connected habitat areas with enhanced adaptation to pressures and stressors.

To facilitate development of a comprehensive RCIS, species may be grouped by vegetation communities/habitats, taxonomic groups, ecosystem functions (e.g., dynamic river's eroding bank), and/or other appropriate groups (see Section 4.2.5.2 – Required Focal Species Information).

To ensure the RCIS meets the intent of the RCIS Program, the focal species list shall include all of the following elements occurring in the RCIS area:

a. At least one **indicator species** for each major and unique vegetation community and ecosystem function;

b. At least one representative species from each of the following taxonomic groups: mammals, birds, reptiles, amphibians, fish, and invertebrates;

c. Wide-ranging species requiring **habitat connectivity** at a range of scales;

d. All species designated as "climate vulnerable" in the **Species of Greatest Conservation Need** (SGCNs) under SWAP 2015, unless exclusion of a species can be justified;

e. Any federal- or state-listed species or SWAP SGCNs that may be considered for MCA credits (see Section 4.2.5.1(e), below for clarifications and exceptions).

The subsections below provide further details on the focal species selection process, information required for focal species, and requirements for other species.

4.2.5.1 Focal Species Selection Process

To determine the final focal species list, a preliminary list of species should be developed. The preliminary RCIS species list should consist of an extensive range of native species from all taxonomic groups that may be found within the RCIS area, including common species, wide-ranging species, climate-vulnerable species, and special-status species.

The preliminary list shall be developed using the best available scientific information (see Section 4.2.9.3 – Focal Species) and must be refined to create the proposed final focal species list. The RCIS must include a description of the method for refining the preliminary list, including the reasons for excluding species.[136] At a minimum, the RCIS focal species list shall include species in the RCIS area that meet the following criteria:

a. Indicator Species – For each major and unique vegetation community type and ecosystem function (e.g., dynamic river's eroding bank) in the RCIS area, there must be at least one focal species which serves as an indicator for that habitat (and that habitat must be the primary habitat type used by that species). For example, oak woodland may be the major vegetation community, but within it there may also be blue oak woodland and vernal pools as unique community types. In this example, at least one indicator species must be listed as a focal species for each of the following community types: oak woodland, blue oak woodland, and vernal pools. An indicator species can be a special-status or common species; however, it must represent the ecological needs of many other species that share its habitat. The indicator species should enable the development of goals, objectives, and actions that would effectively and efficiently benefit most of the other species sharing the same habitat areas and conditions.

b. Taxonomic Group Representation – The focal species list must have at least one species represented from each of the following taxonomic groups, so long as at least one representative of each of the following taxonomic groups occurs in the RCIS area: mammals, birds, reptiles, amphibians, fish, invertebrates, and plants.

c. Wide-ranging Species – The RCIS focal species list shall include one or more wide-ranging species that require contiguous (i.e., connected) blocks of habitat and represent the wildlife connectivity needs in the RCIS area. These species' ecological requirements should provide a basis for conservation actions and habitat

[136] Fish & G. Code, § 1852, subdivision (c)(4)

enhancement actions involving habitat connectivity and other key ecological processes within the RCIS area. Connectivity must be considered at multiple scales, as applicable.

d. SWAP 2015 Climate-Vulnerable Species – All SGCNs designated as "climate-vulnerable" under SWAP 2015 must be included in the focal species list. However, one or more climate-vulnerable species do not need to be focal species if justification can be provided.

e. Anticipated MCA Species – In order to get MCA credit for a federal- or state-listed species or SWAP SGCN species, it must also be listed as a focal species. (Note that federal- or state-listed species, or SWAP SGCNs do not need to be included as focal species unless they are going to be considered for MCA credits.)

To reduce redundancy for focal species whose ecological requirements or pressures and stressors information are largely similar, any focal species may be grouped by habitat types, taxonomic groups, ecosystem functions (e.g., dynamic river's eroding bank), and/or other appropriate groups (see Section 4.2.5.2 – Required Focal Species Information).

4.2.5.2 Required Focal Species Information

The RCIS shall include focal species and/or focal species group summaries that provide a sufficient basis for the RCIS goals, measurable objectives, conservation actions, and habitat enhancement actions. These focal species summaries may be provided as appendices and shall be properly cited using the best available scientific resources (see Section 4.2.9 – Best Available Scientific Information). Focal species summaries shall be sufficiently detailed so that CDFW and RCIS users will understand the rationale for conservation actions and habitat enhancement actions.

If an HCP or NCCP overlaps with the RCIS area and an RCIS focal species is covered by the HCP or NCCP, the HCP or NCCP covered species information and analysis may be used in the RCIS focal species summaries.

At a minimum, the summaries shall include the following information for each focal species:

a. The focal species selection criteria (see Section 4.2.5.1 – Focal Species Selection Process) that is satisfied by the species.

b. A text summary and map of the species' range within the state.

c. The species' regulatory status, if any.

d. Maps and/or description of the known occurrences and potential distribution based on existing habitat within the RCIS area[137] (see section 4.2.9.4 – Distribution of Focal

[137] Fish & G. Code, § 1852, subdivision (c)(3)

Species and Natural Communities). When appropriate, multiple species occurrences may be shown in one map.

e. The species' ecological requirements (i.e., habitat components, functions, and biotic and abiotic conditions) that would be necessary to provide a basis for determining and indicating pressure-stressor effects and developing conservation and habitat enhancement actions for the focal species. The summaries should also include any aspects of the species' life history that alters its ecological requirements (e.g., provide the seasonal time frame during which a migratory bird would be present in the RCIS area and using the RCIS's ecological resources).

f. A summary of historic, current, and projected pressures and stressors on the focal species in the RCIS area, including climate change, land use changes, **invasive species** (see Section 4.2.9.8 – Invasive Species), and others. The climate change summary must include a **climate change vulnerability** assessment (see Section 4.2.9.7 – Climate Change Vulnerability Assessment) of the focal species.[138]

NOTE: To reduce redundancy for focal species whose ecological requirements or pressures and stressors are largely similar, the focal species information section may be grouped by habitat types, taxonomic groups, ecosystem functions (e.g., dynamic river's eroding bank), and/or other appropriate groups. The full description of ecological requirements and pressures and stressors for the indicator species of its group can represent the other focal species in that group. A brief summary of each grouped focal species' (taxonomic group representative, climate-vulnerable, federal- or state-listed, and SWAP SGCN) ecological requirements should be provided to justify its inclusion in that group. However, if a species in a group has unique ecological requirements or pressures and stressors, they must be described for that species to support the development of conservation actions or habitat enhancement actions for that species. Wide-ranging species may not fit into a single group and, therefore, would require full descriptions of their ecological requirements and pressures and stressors.

4.2.5.3 Other Species Information

Other, non-focal species may be considered for MCA credits if their ecological requirements are covered by those of a focal species, habitat, taxonomic group, or ecosystem function (e.g., dynamic river's eroding bank), such that the goals, objectives, and actions for the focal species, habitat, taxonomic group, or ecosystem function also apply to the non-focal species. Using scientifically sound evidence, the RCIS must specify which focal species, habitat, taxonomic group, or ecosystem function shares ecological requirements with the non-focal species.

To be considered for MCA credits, ecological requirements must be included in the RCIS for non-focal species having unique ecological requirements that are not covered by the

[138] Fish & G. Code, § 1852, subdivision (c)(5)

focal species, habitat, taxonomic group, or ecosystem function that the non-focal species is grouped with. The ecological requirements must support the development of conservation or habitat enhancement actions for that non-focal species.

Note that federal- or state-listed species or SWAP SGCNs must be included as a focal species if they are to be considered for MCA credits.

4.2.6 Information and Analysis of Other Important Conservation Elements

An RCIS shall include other conservation elements within the RCIS area such as key ecological resources and functions, natural communities, existing protected areas (see Section 4.2.9.6 – Existing Protected or Conserved Areas), and other conservation elements, as applicable, along with an explanation of the criteria, data, and methods used to identify those important conservation elements.[139]

RCIS proponents shall use the information on ecological resources, processes, and other conservation elements to develop the RCIS's goals, measurable objectives, and conservation actions and habitat enhancement actions for conservation elements. When considering which ecological resources, processes, and other conservation elements to include, RCIS proponents should focus on those conservation elements that are most resilient to pressures, such as climate change, and that provide long-term ecosystem functions and **ecosystem services** in the RCIS areas to be conserved and enhanced.

At a minimum, RCIS proponents shall select ecological resources and other conservation elements for inclusion in the RCIS by using the following criteria:

a. Natural Communities – The RCIS shall include natural communities that provide habitat for focal species (and closely-associated non-focal species that may be indicated in the RCIS), and natural communities considered sensitive, vulnerable, and declining as indicated in **Areas of Conservation Emphasis** (ACE) or other sources. Natural communities should be largely characterized by native species. Other natural communities may be considered if they have conservation benefits, such as providing ecosystem services benefits including carbon sequestration; protection against flood, fire, or storm damages; open space and park values; agriculture and cultural values; or other benefits.

b. Water Resources – The RCIS should include wetlands, Waters of the United States, and Waters of the State, particularly if they are likely to incur permitting needs that may be mitigated through an MCA. Water resources provide ecological functions to focal species and other species, and provide ecosystem services to people such as quality drinking water, surface water, and groundwater recharge.

[139] Fish & G. Code, § 1852, subdivision (c)(4)

4.2.6.1 Required Ecological Resource and Natural Communities Information

The RCIS shall include summaries for ecological resources, natural communities, and other important conservation elements that sufficiently provide a basis for the RCIS's goals, measurable objectives, conservation actions, and habitat enhancement actions. These summaries may be provided as appendices and shall be properly cited using the best available scientific resources (see Section 4.2.9 – Best Available Scientific Information). Summaries for ecological resources, natural communities, and other important conservation elements shall be sufficiently detailed so that CDFW and RCIS users will understand the rationale for conservation actions and habitat enhancement actions. At a minimum, and for consideration for credits in an MCA, the following information shall be included in the summaries for each ecological resource, **natural community**, and other important conservation element:

a. Description of the natural community, water resource, ecological resource, or other conservation element, including its characteristics and status (i.e., sensitive, declining, vulnerable, etc.);

b. Description and map of the current known or estimated extent within the RCIS area (see Section 4.2.9.4 – Distribution of Focal Species and Natural Communities);

c. Ecological functions;

d. Ecosystem services;

e. A summary of historic, current, and projected pressures and stressors on the natural community, water resource, ecological resource, or other conservation element in the RCIS area, including a climate-change vulnerability assessment (see Section 4.2.9.7 – Climate Change Vulnerability Assessment).[140]

4.2.7 Conservation Goals and Measurable Objectives

Conservation goals and measurable objectives for the focal species and other conservation elements identified in the RCIS shall address or respond to the identified pressures on focal species and other important conservation elements.[141] Goals and objectives must also describe how they provide for adaptation opportunities against negative effects of climate change for the focal species.[142] RCIS proponents should consider the conservation goals, strategies, and objectives discussed in SWAP 2015. Goals and objectives may be grouped by habitats, taxonomic groups, ecosystem functions (e.g., dynamic river's eroding bank), and/or other groups if a goal or objective largely addresses the ecological needs of the group and pressures affecting the group. If

[140] Fish & G. Code, § 1852, subdivision (c)(5)
[141] Fish & G. Code, § 1852, subdivision (c)(8)
[142] Fish & G. Code, § 1852, subdivision (c)(13)

a focal species or other conservation element has unique ecological requirements that are not fully covered by its group, specific goals and objectives must be included to support conservation or habitat enhancement actions for that species or other conservation element, and to be considered to receive MCA credits.

The RCIS's goals shall reflect broad, desired outcomes for focal species and other conservation elements within the RCIS area. Examples of potential conservation goals include achieving sustainable native species populations and natural community persistence in the RCIS area, supporting stability and recovery of focal species, restoring and enhancing habitat, reconnecting fragmented habitat blocks, maintaining and enhancing ecological functions and ecosystem services, and improving connectivity by increasing permeability for wildlife movement and migration corridors.

A **conservation objective** is a concise statement of a target outcome for a focal species or other conservation element. Conservation objectives shall be measurable (e.g., percent or estimated number of acres conserved, by habitat, or habitat quality, size, connectivity) to identify the types of habitat and ecological functions that need protection or enhancement to benefit the species or other conservation element. The conservation objectives should also be linked to locations within the RCIS area where those objectives, if implemented, would provide the greatest conservation benefit. In developing the objectives, the RCIS should consider the size, location, habitat type, and degree of connectivity of existing protected areas with respect to the needs of focal species and other conservation elements. Analyses and information to support the development of these objectives are described in Section 4.2.9 - Best Available Scientific Information, particularly in Section 4.2.9.4 - Distribution of Focal Species, Section 4.2.9.5 - Habitat Connectivity, and Section 4.2.9.6 - Existing Protected or Conserved Areas. Conservation objectives shall be prioritized and the RCIS shall include the rationale for the prioritization based on focal species' or other conservation elements' needs. Measurable objectives in the RCIS should be achievable through conservation actions or habitat enhancement actions.

In describing conservation objectives, consistent **metrics** shall be used to measure both the area and quality of the target ecological resource, such as a focal species' habitat or a conservation element's ecological function (e.g., a dynamic river's eroding bank) or ecosystem service (e.g., carbon sequestration, water quality or agricultural benefit, or specific risk reduction). The metrics shall be used to measure the net change resulting from the implementation of conservation actions and habitat enhancement actions.[143]

4.2.8 Conservation Actions and Habitat Enhancement Actions

An RCIS shall identify conservation actions or habitat enhancement actions that support the RCIS's conservation goals and objectives, including provisions for climate-change

[143] Fish & G. Code, § 1854, subdivision (e)

adaptation, for focal species and other conservation elements. RCIS proponents should consider the conservation actions discussed in SWAP 2015. The RCIS shall include a description of how conservation actions or habitat enhancement actions were selected in relation to the goals and measureable objectives.[144] Examples of these actions may include, but are not limited to, **creation** or **establishment** of habitat, restoration or **rehabilitation** of habitat and other conservation elements on public[145] or private land, installation of wildlife crossings, and removal of fish barriers.

Conservation actions and habitat enhancement actions may be grouped by habitats, taxonomic groups, ecosystem functions (e.g., dynamic river's eroding bank), and/or other groups if an action largely addresses the ecological needs of the group along with pressures affecting that group. If a focal species or other conservation element has unique ecological requirements that are not covered by a focal species, habitat, taxonomic group, or ecosystem function (e.g., dynamic river's eroding bank), specific conservation or habitat enhancement actions that address those requirements must be included in order for MCA credits to be developed for that species.

Conservation priorities shall be indicated among the conservation actions and habitat enhancement actions. Conservation priorities are those actions that achieve the RCIS' priority objectives. Key locations for conservation priorities shall be indicated by description, map, or both, along with an explanation as to why those key locations were selected. See Section 4.2.4 – Consistency and Compliance, regarding consistency of conservation and habitat enhancement actions and priorities with existing and reasonably foreseeable land uses within the RCIS area.

4.2.9 Best Available Scientific Information

The RCIS shall incorporate and cite the best available scientific information for the RCIS area for identifying and summarizing focal species, habitats, and other conservation elements; for identifying pressures and stressors and their effects on those conservation elements; and for determining conservation and habitat enhancement actions and conservation priorities. The best available scientific information includes, but is not limited to, peer-reviewed literature and datasets identified in this section. The RCIS shall also provide a brief description of gaps in relevant scientific information that may not allow for a full analysis of the conservation elements or that may result in uncertainties in any portion of the RCIS. Some examples of potential scientific

[144] Fish & G. Code, § 1852, subdivision (c)(9)

[145] Conservation or habitat enhancement actions may be proposed on public lands, subject to the written approval of the landowner and title restrictions. However, if the actions will result in mitigation credits, the relative value of the mitigation credits must be equal to or greater than they would be if the same mitigation credits were situated on non-public or non-conserved lands. See MCA Guidelines section regarding "mitigation on public lands" for more information.

information gaps include key ecological information, distribution information, or management uncertainties for focal species or other conservation elements.

The following subsections provide additional details regarding best available scientific information sources.

4.2.9.1 Use of Standard Vegetation Classifications

The RCIS shall use CDFW's Natural Communities List[146] to enable and promote consistency with vegetation classifications in RCISs throughout California. This list is based on A Manual of California Vegetation, Second Edition (MCVII),[147] which is the California expression of the National Vegetation Classification,[148] and is developed and maintained by CDFW's **Vegetation Classification and Mapping Program** (VegCAMP).[149] This list replaces all other lists of terrestrial natural communities and vegetation types developed for the **California Natural Diversity Database** (CNDDB).[150] Currently included in this list are 350 alliances, 2,140 associations, 82 provisional alliances, 66 provisional associations, 96 semi-natural stands, 15 stand types (within semi-natural category), and 15 special stands.

The RCIS proponent shall check for the most recent version of the list, associated vegetation descriptions, and any recent updates specific to the RCIS area. Any vegetation maps and other information developed for an RCIS shall use this classification system and follow the **Survey of California Vegetation** (SCV) standards.[151] If the RCIS area has not been mapped to SCV standards, proponents shall contact VegCAMP to determine the best available vegetation map.[152] If an approved NCCP in the RCIS area uses a vegetation classification that differs from the Manual of California Vegetation, Second Edition, the RCIS shall provide a cross-walk between the classifications to help ensure consistency between the RCIS and the overlapping NCCP.

4.2.9.2 Aquatic Resources

The RCIS shall use the best available data sources to assess inland, coastal marine, and other aquatic resources. These may include USGS topographic maps, local wetland delineation reports, USFWS National Wetlands Inventory,[153] the State Water Resources

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[146] California Department of Fish and Game. 2010. *List of Vegetation Alliances and Associations*. September. Vegetation Classification and Mapping Program. September. Sacramento, CA. Available: https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities/List

[147] https://www.wildlife.ca.gov/Data/VegCAMP/Publications-and-Protocols/Vegetation-Manual

[148] https://www.fgdc.gov/standards/projects/FGDC-standards-projects/vegetation/NVCS_V2_FINAL_2008-02.pdf

[149] https://www.wildlife.ca.gov/Data/VegCAMP

[150] https://www.wildlife.ca.gov/Data/CNDDB

[151] https://www.wildlife.ca.gov/Data/VegCAMP/Mapping-Standards

[152] https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Other-Info

[153] https://www.fws.gov/wetlands/

Control Board's marine Areas of Special Biological Significance,[154] California's network of Marine Protected Areas,[155] sea level rise mapping and other climate change adaptation planning documents (see Section 4.2.9.7 – Climate Change Vulnerability Assessment), the most up-to-date list of California's Impaired Water Bodies (i.e., Clean Water Act section 303(d) List/ 305(b) Report),[156] and the California Ocean Protection Council's resources.[157]

4.2.9.3 Focal Species

For information regarding focal species, their habitats, and other conservation elements, the RCIS proponent shall use, at a minimum, SWAP 2015 and the companion plans, approved NCCPs that overlap the RCIS area, and CDFW data resources found in BIOS (CDFW's map-based spatial data warehouse) or otherwise published by CDFW. In addition to CDFW data, RCIS proponents may use other local or regional resources, as available. Data vary throughout the state, and the most current, detailed, and accurate data shall be used, as practicable.

The RCIS shall include a brief explanation of the criteria and methods used to identify the focal species. The RCIS proponents are not required to create new and independent species models. They shall provide information on each focal species including their currently known or estimated population status such as may be found in CDFW **Species of Special Concern** (SSC) reports, periodic status reports on threatened and endangered species, CNDDB, and other published literature. The RCIS shall also include a summary of historic, current, and future pressures and stressors including climate change vulnerability on the focal species and their habitats.

Resources that shall be used to create the preliminary species list include the following:

a. SWAP 2015 SGCN lists;[158]

b. The Complete List of Amphibian, Reptile, Bird, and Mammal Species in California;[159]

c. Lists of special-status species to include:

[154] http://www.waterboards.ca.gov/water_issues/programs/ocean/asbs_map.shtml

[155] https://www.wildlife.ca.gov/Conservation/Marine/MPAs

[156] http://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml

[157] http://www.opc.ca.gov/2012/06/coastal-and-ocean-impacts-from-land/

[158] California Department of Fish and Wildlife. 2015. *California State Wildlife Action Plan, 2015 Update: A Conservation Legacy for Californians Appendix C: Species of Greatest Conservation Need.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109224&inline.

[159] California Department of Fish and Wildlife, California Wildlife Habitat Relationships Program. May 2016. *Complete List of Amphibian, Reptile, Bird and Mammal Species in California.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155&inline.

- Plant and animal species that are listed under the federal Endangered Species Act or CESA;[160,161]
- CDFW Animal SSC;[162]
- California Fully Protected Animals;[163]
- Additional special-status species identified by the CNDDB special plants and special animal lists.[164,165]

In addition, lists of terrestrial vertebrates can be generated by queries of the California Wildlife Habitat Relationships (CWHR) Program.[166] The CWHR contains life history, geographic range, and habitat suitability information for regularly occurring species of amphibians, reptiles, birds, and mammals in the state. The CWHR allows users to produce queries to generate lists of species by geographic location (e.g., ecoregion, HUC) and/or by habitat type and provides information on expert opinion–based habitat suitability ranks for each species within each habitat type.

4.2.9.4 Distribution of Focal Species and Natural Communities

The RCIS shall identify and describe the distribution of focal species and natural communities using, at a minimum, the following information:

a. Geospatial information on the distribution of the focal species in the RCIS area. The CWHR[167] contains life history, geographic range, and habitat relationship information on regularly occurring species of amphibians, reptiles, birds, and mammals in the state. The CWHR can be used to generate lists of species by geographic location (e.g., ecoregion, HUC) and/or by habitat type. The CWHR provides 1) geographic range data representing the maximum, current (within the past 20 years) extent of a species distribution for most regularly occurring vertebrates in the state and 2) predicted habitat distributions, showing areas of potentially suitable habitat within each species' range based on CWHR habitat

[160] California Department of Fish and Wildlife, Biogeographic Data Branch. October 2017. *State & Federally Listed Endangered & Threatened Animals of California.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline.

[161] California Department of Fish and Wildlife, Biogeographic Data Branch. October 2017. *State & Federally Listed Endangered, Threatened, and Rare Plants of California.* Available: http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline.

[162] https://www.wildlife.ca.gov/Conservation/SSC

[163] http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/fully_pro.html

[164] California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB). October 2017. *Special Vascular Plants, Bryophytes, and Lichens List.* Available: http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline.

[165] California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB). October 2017. *Special Animals List.* Available: http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline.

[166] https://www.wildlife.ca.gov/Data/CWHR

[167] https://www.wildlife.ca.gov/Data/CWHR

suitability ranks. The BIOS spatial data catalog[168] includes additional geospatial information on the distributions of wildlife species (e.g., occurrence location data and species distribution models).

b. Geospatial information on the special-status species. Reported information on the distribution of many of these species is available through, but not limited to, the CNDDB program and BIOS map viewer from CDFW's Biogeographic Data Branch.[169] The CNDDB is an inventory of GIS-mapped occurrence locations of special-status species in California. BIOS is CDFW's data catalogue of spatial data, including other species observation, distribution, and habitat datasets (e.g., USFWS critical habitat datasets, fish distribution maps for some salmonids).

c. While not required, the RCIS may incorporate existing species distribution models published by CDFW or in peer-reviewed literature. Any species distribution models otherwise developed for an RCIS shall use modeling best practices including, at a minimum, full documentation of the modeling process and methods, model evaluation metrics, and review by a recognized expert[170] on the focal species. If habitat distribution models are developed for the focal species, the modeling methods and analysis major assumptions shall be described and the modeling details included in the RCIS as an appendix. Any models developed for an RCIS shall be submitted to CDFW (see Section 4.4 – Data Sharing and Access) along with modeling process, methods, expert review documentation, and metadata meeting CDFW's minimum metadata standards.[171]

d. Lists of rare natural communities or other high-priority natural communities[172] that occur within the RCIS area. Information on the distribution and mapped locations of rare or other high-priority natural communities is available through, but not limited to, SCV vegetation maps, the CNDDB program, and the ACE sensitive habitats dataset.

e. Information on the RCIS's focal species, natural communities, or other conservation elements from any NCCPs that overlap the RCIS area.

4.2.9.5 Habitat Connectivity

The RCIS shall incorporate existing analyses or data that identify areas for habitat connectivity, which are needed to maintain ecosystem function, wildlife populations, and gene flow. Habitat connectivity is a critical consideration when evaluating the location and association of protected lands within an RCIS, when determining how to

[168] The BIOS spatial data catalog can be searched by species name, or searched spatially by location. Available: https://www.wildlife.ca.gov/Data/BIOS.

[169] https://www.wildlife.ca.gov/Explore/Organization/BDB

[170] As shown by peer-reviewed publication record or oversight responsibilities at CDFW, USFWS, or NMFS.

[171] https://wildlife.ca.gov/Data/BIOS/Metadata

[172] https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities

provide for wildlife movement at different scales, including daily movements to find food cover and mates, dispersal by young to find new territories, seasonal migration, and movement in response to climate change. An RCIS shall use habitat connectivity data and information including, but not limited to:

a. The **California Essential Habitat Connectivity Project** (CEHC),[173] a statewide assessment of essential habitat connectivity. The project identified large remaining blocks of intact, contiguous natural habitat (natural landscape blocks) and modeled linkages (**essential connectivity areas**) between them to best maintain habitat connectivity across the landscape and includes:

   - Natural Landscape Blocks identify remaining intact lands across the state, independent of ownership. These lands contribute to habitat connectivity and are expected to have high conservation and climate resilience value because of their size, intactness, and connectedness with other natural habitats. Although the CEHC only used large natural landscape blocks (greater than 2,000 acres) due to the statewide nature of its analysis, smaller landscape blocks were identified and should be used for evaluating connectivity at a regional scale.[174]

   - Modeled Linkages, or Essential Connectivity Areas, represent coarse-scale, generalized habitat connections between natural landscape blocks. These connections provide a broad-scale view of habitat connectivity needs at the statewide scale, but they should be supplemented with or superseded by fine-scale connectivity analyses at a regional scale, when available.

b. Regional, fine-scale connectivity analyses are refinements of the CEHC at a regional scale using finer-scale datasets and based on species' movement needs. Regional, fine-scale connectivity analyses have been completed for several ecoregions in the state. When available, these spatial datasets[175] and project reports[176] shall be used by an RCIS. These datasets can be used to identify overall fine-scale habitat connections between landscape blocks within an ecoregion, as well as critical movement corridors for individual species that may be of high priority for conservation.

c. CDFW's Guidance for Fine-Scale Wildlife Connectivity Analysis[177] is a report that provides guidance to complete a fine-scale wildlife connectivity analysis that meets

[173] https://www.wildlife.ca.gov/conservation/planning/connectivity/CEHC

[174] This data is available in BIOS as two layers: "Natural Landscape Blocks" shows blocks that are more than 2,000 acres in size, and "Natural Areas Small" shows blocks that are less than 2,000 acres in size. Available: https://www.wildlife.ca.gov/Data/BIOS.

[175] Available in BIOS: https://www.wildlife.ca.gov/Data/BIOS.

[176] https://www.wildlife.ca.gov/Conservation/Planning/Connectivity

[177] California Department of Fish and Wildlife, Biogeographic Data Branch. December 2014. *Guidance Document for Fine-Scale Willife Connectivity Analysis.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=93018&inline.

CDFW standards. The report includes information on species selection criteria, landscape block identification, and details the model development process using examples from CDFW's case study analysis of wildlife connectivity across the northern Sierra Nevada foothills that was conducted after the completion of the CEHC project. RCIS proponents are not required to develop a fine-scale connectivity analysis; however, if RCIS proponents choose to develop this type of analysis, CDFW's guidance should be used.

d. Fish Passage Assessment Database[178] and/or CDFW Fisheries Branch list of priority fish barriers. The Fish Passage Assessment Database is an ongoing inventory of known and potential barriers to anadromous fish in California. It compiles currently available fish passage information from more than two hundred data sources, and allows past and future barrier assessments to be standardized and stored in one place. The inventory is to be used to identify barriers suitable for removal or modification to restore access to spawning and rearing habitat. Contact CDFW Fisheries Branch for their list of priority fish barriers in the RCIS area.

4.2.9.6 Existing Protected or Conserved Areas

The spatial analysis shall identify the degree to which conservation elements are captured in existing protected areas including, but not limited to, the total acreage and percent of the RCIS area currently in conservation protection and the acreage and percent of each habitat type currently in conservation protection. At a minimum the analysis shall include the following sources:

a. Reserve networks within any NCCPs that overlap the RCIS area;

b. The California Protected Areas Database (CPAD);[179]

c. Protected Areas Database of the United States (PAD-US)[180]

d. California's network of Marine Protected Areas, Areas of Biological Significance, and other areas of special biological significance to coastal, marine, and aquatic ecosystems;

e. CDFW owned/managed lands;

f. Federally owned/managed lands including National Forests, National Parks, National Monuments, Bureau of Land Management, and other federal lands;

g. California Department of Parks and Recreation–owned/managed lands;

h. California Conservation Easement Database (CCED).[181]

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[178] https://nrm.dfg.ca.gov/PAD/

[179] http://www.calands.org/

[180] https://gapanalysis.usgs.gov/padus/

[181] http://www.calands.org/cced; additional conservation easement information may be available from local land trusts.

i. National Conservation Easement Database (NCED)[182]

While not required, it is recommended that protected land's management strategies be considered when evaluating the level of conservation protection on existing protected lands. The protected lands' management strategies are captured by the USGS National Gap Analysis Program (GAP) Status Rank[183] as provided in CPAD and PAD-US. The GAP Status Rank, when available, gives an indication of the level of conservation protection afforded to various lands based on their management strategies.

4.2.9.7 Climate Change Vulnerability Assessment

The RCIS shall incorporate existing analyses and information to identify climate change vulnerability of the RCIS focal species and natural communities, exposure of the RCIS area to climate change (e.g., magnitude of projected changes in temperature and precipitation, sea level rise), and areas that may be resilient to the impacts of climate change. The climate vulnerability information assembled for the RCIS should include climate change threats at mid-century (2050) and end-of-century (2100) for both a hotter and drier future climate scenario and a warmer and wetter future climate scenario where possible. The future climate scenarios used in existing studies may vary, and these differences and their implications should be explicitly indicated and addressed in the RCIS.

Climate science and modeling is a rapidly evolving field, and the best available, most current information should be identified for each RCIS. For all new analyses, global climate models selected for the state's most recent California Climate Change Assessment[184] should be used. For information on climate vulnerability of California species and habitats and links to associated datasets, please refer to CDFW's climate change vulnerability assessment website.[185] This website will be maintained to provide relevant resources that will aid proponents in developing the RCIS. At a minimum, an RCIS shall be informed by:

a. Lists of climate-vulnerable species and natural communities developed or supported by CDFW, for example, those recognized under the climate vulnerability assessments for vegetation,[186] birds, mammals, reptiles, amphibians, fish, and plants in California and SWAP 2015 (Criteria 3 in the SGCN list).[187]

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[182] https://www.conservationeasement.us/

[183] https://gapanalysis.usgs.gov/padus/data/

[184] http://climatechange.ca.gov/climate_action_team/reports/climate_assessments.html

[185] https://www.wildlife.ca.gov/Conservation/Climate-Science/Resources/Vulnerability

[186] Thorne, J.H., R.M. Boynton, A.J. Holguin, J.A.E. Stewart, & J. Bjorkman. (2016) *A climate change vulnerability assessment of California's terrestrial vegetation*. California Department of Fish and Wildlife (CDFW), Sacramento, CA. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=116208&inline

[187] California Department of Fish and Wildlife. 2015. *California State Wildlife Action Plan, 2015 Update: A Conservation Legacy for Californians. Appendix C: Species of Greatest Conservation Need.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109224&inline.

b. Other factors that may contribute to climate resilience such as diverse land facets[188] (geophysical features expected to support **biodiversity** in a changing climate) and high levels of connectivity (corridors to facilitate movement as species and their habitats move in response to climate change). Where available, data or information should be included that demonstrate how land facets and/or corridors within the RCIS area may promote climate resilience.

c. Geospatial information on climate exposure with respect to species, including projected range shift models for wildlife species developed for CDFW climate vulnerability analyses where available.

d. Geospatial information on landscape-scale climate exposure, such as:

   - High-climate-exposure natural community areas as identified by the Climate Change Vulnerability Assessment of California's Terrestrial Vegetation.[189] These represent habitats that are expected to experience major changes in composition, such as type conversion, due to changes in temperature and water availability.
   - Coastal areas expected to be impacted by sea level rise. Tools such as Cosmos,[190] CalAdapt,[191] the NOAA Sea Level Rise viewer,[192] the Coastal Conservancy's Climate Ready Program,[193] and California's Climate Change web page on coastal and ocean resources[194] may assist in identifying stressors associated with sea level rise.

e. Geospatial information on landscape-scale climate resilience, such as:

   - Climate-resilient natural community areas, representing habitats expected to remain stable in the face of climate change (i.e., potential climate refugia).

4.2.9.8 Invasive Species

RCIS proponents shall include invasive species within the RCIS area as a pressure or stressor to focal species and other conservation elements. Information is available from CDFW's Invasive Species Program,[195] California Department of Food and Agriculture,[196]

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[188] https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/oregon/science/Documents/PNW Terrestrial Climate Resilience Report March3 2015.pdf

[189] Thorne, J.H., R.M. Boynton, A.J. Holguin, J.A.E. Stewart, & J. Bjorkman, California Department of Fish and Wildlife. 2016. *A Climate Change Vulnerability Assessment of California's Terrestrial Vegetation.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=116208&inline.

[190] https://walrus.wr.usgs.gov/coastal_processes/cosmos/

[191] http://cal-adapt.org/sealevel/

[192] https://coast.noaa.gov/slr/beta/#/layer/slr

[193] http://scc.ca.gov/climate change/

[194] http://www.climatechange.ca.gov/adaptation/coast_and_oceans.html

[195] https://www.wildlife.ca.gov/Conservation/Invasives

[196] http://www.cdfa.ca.gov/plant/

Invasive Species Council of California,[197] California Invasive Plant Council online inventory,[198] and county agricultural commissioner offices.[199]

4.2.10 Other Considerations

The RCIS shall consider existing major water, transportation, and transmission infrastructure facilities in the assessment area and shall consider reasonably foreseeable development of major infrastructure facilities including, but not limited to, renewable energy and housing.[200] Reasonably foreseeable development may be identified through consideration of the following sources:

a. Renewable energy projects—information from the county or the California Energy Commission

b. Infrastructure projects—identified in local, state, and federal agencies' plans and/or in CEQA and **National Environmental Policy Act** (NEPA) documents

c. Housing and other development—identified in city and county general and specific plans and in CEQA and NEPA documents

4.3 Additional Requirements to Create MCAs

Any focal species, other species, ecological resource, or natural community meeting the minimum requirements (see Sections 4.2.5 and 4.2.6) may be considered for MCA credits. To create mitigation credits through an MCA (See Section 5 – Mitigation Credit Agreements), the RCIS shall also include the items in the list below.[201] The RCIS proponent is responsible for all items in the list below unless responsibility is transferred to another entity and such transfer is mutually agreed to in writing by all parties and with CDFW's written approval by the RCIS Program Manager. All MCA proponents shall contribute to collecting data and providing the data to the RCIS proponent to assist with the implementation and completion of the items below.

a. An **adaptive management and monitoring strategy** for focal species, conserved habitat, and other conserved natural resources.

b. A process for updating the scientific information that pertains to focal species and other conservation elements, and goals, objectives, and conservation and habitat enhancement actions pertaining to those elements. The updates should occur

[197] http://www.iscc.ca.gov/species.html
[198] http://www.cal-ipc.org/plants/inventory/
[199] http://www.cdfa.ca.gov/exec/county/county_contacts.html
[200] Fish & G. Code, § 1852, subdivision (c)(6)
[201] Fish & G. Code, § 1856, subdivision (b)

whenever necessary, but must occur at least once every ten years until all mitigation credits are used. Refer to Section 4.8 – Updating and Extending an RCIS.

c. A process for tracking the effectiveness of conservation actions and habitat enhancement actions in achieving the goals and objectives for focal species and other conservation elements, including offsetting the effects of identified pressures and stressors. At a minimum, the process shall specify the metrics (i.e., area, habitat quality)[202] by which the effectiveness will be assessed and the frequency of assessment. The process shall also specify the contents to be included in the report submitted to CDFW at the end of the RCIS ten-year term, and prior to renewal. The process shall also indicate responsibilities of MCA proponents in the RCIS area for contributing to the report. The report shall indicate the progress of conservation and habitat enhancement actions in achieving the RCIS' goals and objectives. The report shall include, at a minimum, a summary of all MCA progress reports, including conservation land acquisitions and other conservation and habitat enhancement actions completed under MCAs. To the extent feasible, the report shall also include a summary of other conservation and habitat enhancement actions undertaken. The report shall summarize the net change in the area and quality of the target ecological resources and ecological functions. For example, the report shall summarize the increased acreage of focal species' habitat types and the quality of a dynamic river's eroding bank for bank swallow habitat. Approval of the report is required in order for the RCIS to be extended and for any MCAs within the RCIS area to continue selling or utilizing credits; otherwise the RCIS will be considered expired after the ten-year period and no credits can be sold or used until the RCIS is extended. Refer to Section 4.8 – Updating and Extending an RCIS.

d. Identification of a public or private entity that will be responsible for the completion and approval by CDFW of RCIS updates, effectiveness evaluation, and the effectiveness report.

e. The level of information required from MCA proponents to the RCIS proponent for completion of the items in the list above.

4.4 Data Sharing and Access

All spatial data created during RCIS development shall be submitted to CDFW via a File Transfer Protocol (FTP) site for inclusion in BIOS. The RCIS proponent shall compile input and summary data in an industry-standard (Environmental Systems Research Institute [ESRI]-readable) geospatial format and include metadata that meets CDFW's

[202] Fish & G. Code, § 1854, subdivision (e)

minimum metadata standards.[203] The RCIS proponent must request that CDFW provide a link to the FTP site, which will remain active for approximately two weeks.

RCIS proponents may choose to upload this information onto another (non-CDFW) web portal for interactive use to allow all interested parties to generate queries of regional conservation values within the RCIS area. The web portal should clearly display the process-related steps used to compile, develop, and derive RCIS information. All spatial data included in the web portal shall have metadata meeting CDFW's minimum metadata standards and be available for download in an industry-standard geospatial format. Examples of an interactive platform include the Desert Renewable Energy Conservation Plan Gateway portal[204] and the Bay Area Conservation Lands Network Explorer Tool.[205]

4.5 Accessibility

CDFW follows the Web accessibility standards of California Government Code 11135[206] and the U.S. Rehabilitation Act section 508. Since draft and final RCISs will be posted to CDFW's website (see Section 1.4 – Program Contacts), RCIS proponents must ensure that the standards for adequate accessibility to people with disabilities are met for all draft and final RCISs and associated submittals. The Seven Steps to Creating an Accessible Word Document[207] are as follows:

a. Use appropriate font style and size;

b. Use color appropriately;

c. Add alternative texts and captions;

d. Format tables according to guidance;

e. Use meaningful hyperlink text;

f. Use built-in formatting styles;

g. Use Word accessibility checker.

For guidance on compliance with these standards and for assistance with other document formats (e.g., PDFs), refer to the following resources:

a. Seven Steps to Creating an Accessible Word Document;[207]

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[203] https://wildlife.ca.gov/Data/BIOS/Metadata

[204] Desert Renewable Energy Conservation Plan (DRECP) Gateway: https://drecp.databasin.org

[205] http://www.bayarealands.org/explorer/

[206] https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=11135

[207] Seven Steps to Creating an Accessible Word Document: http://www.dor.ca.gov/DisabilityAccessInfo/DAS-Docs/Seven-Steps-to-Creating-an-Accessible-Word-document-rev-062016.pdf

b. U.S. Department of Health and Human Services section 508 Accessibility checklists;[208]

c. California Department of Rehabilitation Disability Access Services website.[209]

4.6 Review and Approval Process

This section provides guidance on the timing and requirements for preparing and submitting an RCIS to CDFW; reviews conducted by CDFW, cities, counties, and the public; responses to comments; revising and submitting the final RCIS; and CDFW's consideration of approval of the final RCIS.[210, 211] All steps of the process described below apply to both original and amended RCISs.

Figure 1 provides a flowchart to help orient RCIS proponents with the review and approval process; however, RCIS proponents should refer to Fish and Game Code Section 1854 and these Guidelines for the detailed requirements.

[208] U.S. Department of Health and Human Services section 508 Accessibility checklists

[209] California Department of Rehabilitation Disability Access Services website

[210] Fish & G. Code, § 1854, subdivisions (a-c)

[211] In the event of any inconsistency between Fish and Game Code sections 1850-1861 and these Guidelines, the provisions of the Fish and Game Code govern the interpretation of these Guidelines.

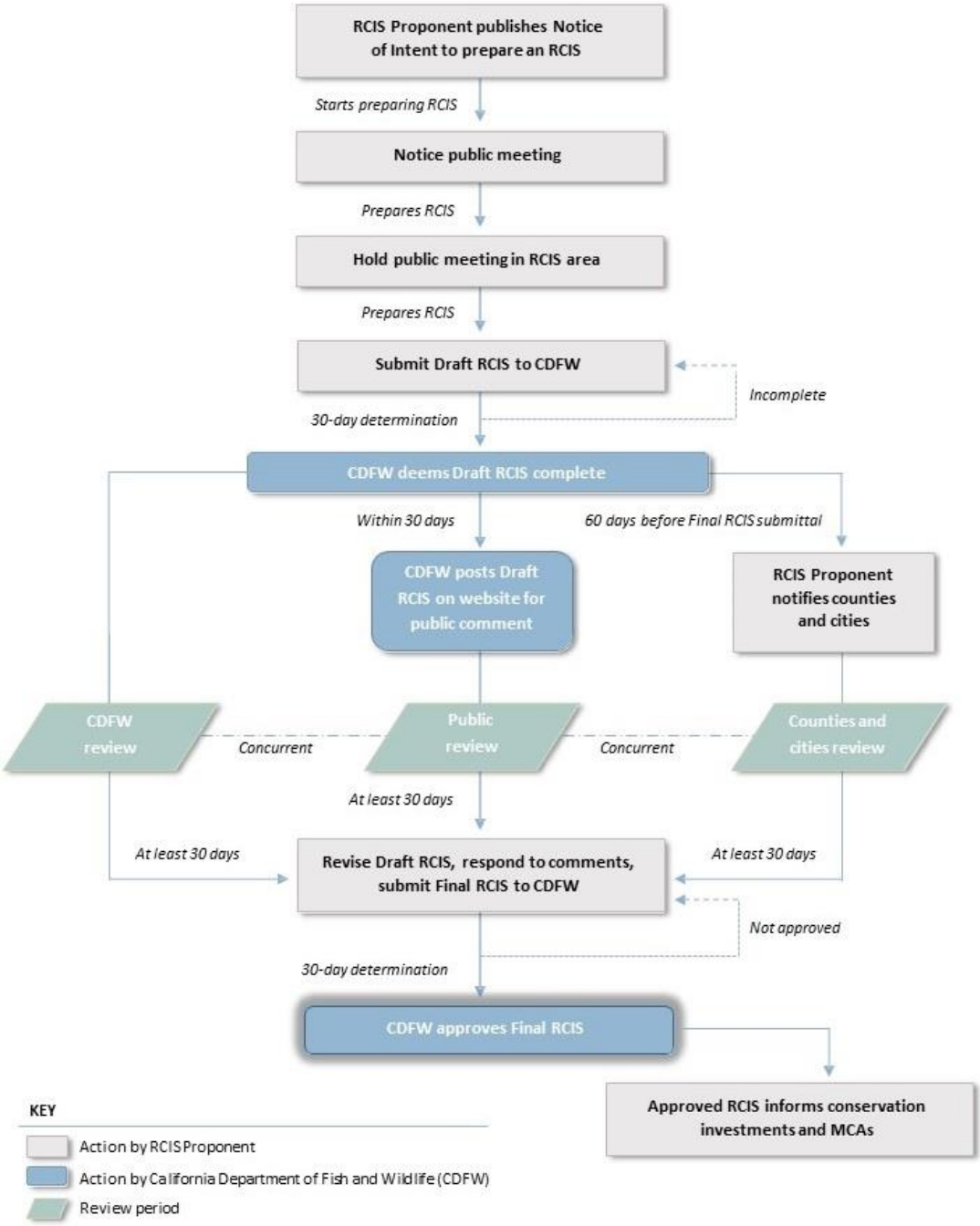

Figure 1. Process for Regional Conservation Investment Strategy Approval

4.6.1 Pre-Submittal Steps

This section provides an overview of the responsibilities of the RCIS proponent prior to submitting a draft RCIS to CDFW. Steps include consultation with CDFW, agencies with land use authority, and at least one state agency willing to write a letter in support of the RCIS; submission of an NOI to the Governor's Office of Planning and Research; and conducting and advertising public meetings, and publishing notices and draft RCISs on the RCIS proponent's website. The process described below applies to both original and amended RCISs.

4.6.1.1 State Agency Letter

An RCIS can be prepared and submitted by any public agency in California, including CDFW.[212] If the RCIS proponent is not a state agency, the proponent must find a state agency to write a letter to the CDFW Director requesting approval of the RCIS.[213] The letter shall not be construed as a commitment by the State agency to consult on, or implement, any part of the RCIS. The letter shall briefly (i.e., within one page) state the purpose of the RCIS from both a conservation perspective and an infrastructure planning perspective. The letter should include language, consistent with Fish and Game Code section 1852(a), such as:

> "We, the _____, a state agency, request approval of the _____ RCIS as it would contribute to meeting state conservation goals and public infrastructure and/or forest management goals."

CDFW can generally approve a maximum of eight RCISs.[214] However, an RCIS is exempt from this cap if it is accompanied by a letter to the CDFW Director from a state water or transportation infrastructure agency requesting the RCIS's approval. To qualify for the exemption, the RCIS must be able to be used to facilitate mitigation for an infrastructure project.[215] State agency letters should be obtained during the pre-submittal phase and a copy should be included with the draft RCIS package. The letter should include language, consistent with Streets and Highways Code section 800.6(j), such as:

> "We, the _____, a state water or transportation infrastructure agency, request approval of the _____ RCIS as it may be used to facilitate mitigation for an infrastructure project."

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[212] Fish & G. Code, § 1852, subdivision (a)

[213] Fish & G. Code, § 1852, subdivision (a). If the letter is from a state water or transportation infrastructure agency and meets the requirements of Streets and Highways Code section 800.6(j), the RCIS will not count toward the limit on the total number of RCISs that CDFW can approve under Fish and Game Code section 1861.

[214] Fish & G. Code, § 1861

[215] Sts. & Hy. Code § 800.6(j). Passage of SB 103 (Section 12) created an exemption from the maximum of eight RCISs that CDFW can approve.

A single letter from one state water or transportation infrastructure agency may be used to satisfy the requirements of Fish and Game Code section 1861 and Streets and Highways Code section 800.6(j) if all of the requirements outlined in this section are met. RCIS proponents are encouraged to identify and coordinate early in the RCIS development process with the state agency or agencies willing to submit letters in support of the RCIS. A commitment from a state agency to write a letter does not obligate them to consult with the RCIS proponent on the preparation of the RCIS, nor does it obligate them to implement any part of the RCIS.

4.6.1.2 Consultation with Other Agencies

Early consultation with CDFW and a state agency willing to write a letter of support (see Section 4.6.1.1 – State Agency Letter) is recommended. Additionally, an RCIS proponent must develop the RCIS in consultation with all local public agencies that have land use authority within the geographic area of the RCIS.[216] An RCIS should also be developed in consultation with HCP and NCCP Implementing Entities within the geographic area of the RCIS. CDFW recommends that the RCIS proponent invite Tribes with cultural interests in the RCIS area to participate throughout the RCIS development process. CDFW also recommends that RCIS proponents consult with local public agencies with land use authority adjacent to or in close proximity to the proposed RCIS area. At a minimum, consultation with each agency or entity shall include: notification prior to or when the NOI for preparing an RCIS is filed, an invitation to participate in the planning process, and a good faith effort to work together. The RCIS proponent can prepare an RCIS collaboratively with other public agencies or other stakeholders, including non-profit organizations or other interested parties. An RCIS proponent may also elect to engage one or more consultants to assist in the preparation of the RCIS and related documents. However, the RCIS must be submitted to CDFW and proposed by a public agency.

4.6.1.3 Notice of Intent

The RCIS proponent shall publish an NOI to create an RCIS by filing the NOI with the Governor's Office of Planning and Research and the county clerk of each county in which the RCIS area overlaps (in part or in whole).[217] Additionally, a copy of the NOI shall either be emailed to CDFW at rcis@wildlife.ca.gov or mailed to CDFW's Habitat Conservation Planning Branch Chief (see Section 1.4 – Program Contacts).

[216] Fish & G. Code, § 1852, subdivision (a)

[217] Fish & G. Code, § 1854, subdivision (c)(1). If the RCIS proponent began preparation of the RCIS prior to January 1, 2017, the NOI is not required.

4.6.1.4 Public Involvement

After publishing the NOI and at least 30 days prior to submitting the draft RCIS to CDFW, the RCIS proponent shall hold at least one public meeting within or near the RCIS area.[218] At a minimum, the public meeting shall be held within the county, or one of the counties, in which the RCIS is located in whole or in part. The purpose of the public meeting is to provide interested persons and entities with meaningful information about the draft RCIS early in the process. The RCIS proponent shall provide adequate opportunity for interested persons and entities to provide oral or written comments. The public meeting may be supplemented with an online meeting.

At least 30 days before holding a public meeting to distribute information about the development of a draft RCIS or amended RCIS, the RCIS proponent shall provide notice of an RCIS or amended RCIS public meeting as follows:[219]

a. To CDFW via email at rcis@wildlife.ca.gov;

b. On the public agency's internet website and any relevant LISTSERV;

c. To each city and county within or adjacent to the RCIS area (CDFW recommends sending the notification to the city and county clerks);

d. To the Implementing Entity for each NCCP or federal regional HCP that overlaps with the RCIS area;

e. To each public agency, organization, or individual who has filed a written request for the notice, including any agency, organization, or individual who has filed a written request to CDFW for notices of all RCIS public meetings. CDFW will provide a list of these entities to the RCIS proponent upon written request (see Section 1.4).

Prior to submitting the draft RCIS to CDFW, the RCIS proponent shall review all oral and written comments received and shall incorporate responses to such comments into the body of the draft RCIS.[220] The RCIS must also include a section that lists all public comments and brief descriptions of how the comments were addressed.

4.6.2 Completeness Review

A draft RCIS submitted to CDFW (see Section 1.4 – Program Contacts) shall contain all of the information required by Fish and Game Code section 1852(c) and these Guidelines. For the RCIS package to be deemed complete, the RCIS proponent must also

[218] Fish & G. Code, § 1854, subdivision (c)(3)(A). If the RCIS proponent began preparation of the RCIS prior to January 1, 2017 and held a public meeting that meets the requirements set forth above prior to January 1, 2017, no further public meeting is required.

[219] Fish & G. Code § 1854, subdivision (c)(4)

[220] Fish & G. Code, § 1854, subdivision (c)(3)(B)

include a copy of the state agency approval request letter sent to the Director.[221] If applicable, a copy of the letter from a state water or transportation infrastructure agency requesting approval of the RCIS must also be included. A single letter may be submitted if all required aspects of each of the two letters can be incorporated into one letter from the infrastructure agency (see Section 4.6.1.1 – State Agency Letter). Once the RCIS proponent submits a draft RCIS to CDFW for approval, CDFW shall have thirty (30) days within which to deem the draft RCIS complete or to explain in writing to the RCIS proponent what additional information is required to complete the draft RCIS.[222] CDFW will deem the RCIS package complete if the RCIS proponent provides information in response to each of the required elements and sub-elements listed in Fish and Game Code section 1852(c) and provides a copy of the state agency approval request letter sent to the Director. However, a determination that an RCIS is complete does not indicate that CDFW has concluded that the draft RCIS contains all of the information necessary for CDFW to approve it as a final RCIS; during the course of its substantive review of the draft RCIS, CDFW may identify additional information or provisions the RCIS will need before CDFW can approve it as a final RCIS.

4.6.3 Review of the Draft RCIS

Once CDFW deems an RCIS complete, substantive review of the RCIS commences. Within thirty (30) days of deeming the RCIS complete, CDFW shall make the draft RCIS available to the public on the CDFW website for review and comment. At that time, CDFW shall send an email notification to announce the availability of the draft RCIS to any public agency, organization, or individual who has filed a written request to CDFW to receive such notifications.[223] The notification will indicate the process for submitting public comments. The RCIS proponent shall also send a notification of the availability of the draft RCIS to the entities and individuals that expressed their interest in the RCIS to the RCIS proponent.

Depending on the scope, length, and complexity of the draft RCIS, CDFW will determine an appropriate public review and comment period; provided, however, that the public review and comment period shall extend for at least thirty (30) days after posting of the draft RCIS on the CDFW website.[224] CDFW shall conduct its substantive review of the draft RCIS concurrent with the public review period and shall submit written comments to the RCIS proponent by the close of the public review and comment period.

[221] Fish & G. Code, § 1852, subdivision (a). If the letter is from a state water or transportation infrastructure agency and meets the requirements of Streets and Highways Code section 800.6(j), the RCIS will not count toward the limit on the total number of RCISs that CDFW can approve under Fish and Game Code section 1861.

[222] Fish & G. Code, § 1854, subdivision (c)(2)

[223] Fish & G. Code, § 1854, subdivision (c)(2)

[224] Fish & G. Code, § 1854, subdivision (c)(2)

After CDFW deems the draft RCIS complete and at least sixty (60) days prior to submitting the final RCIS to CDFW for review and approval, the RCIS proponent shall notify, in writing, the boards of supervisors and the city councils in each county within which the RCIS is located in whole or in part, of the draft RCIS. The RCIS proponent shall provide those entities at least thirty (30) days in which to submit written comments to the RCIS proponent.[225] CDFW strongly encourages RCIS proponents to coordinate with CDFW to schedule concurrent reviews by the public, CDFW, and cities and counties.

Within thirty (30) days of the close of the public review and comment period and the city and county review and comment period, and at least thirty (30) days prior to submitting the final RCIS to CDFW, the RCIS proponent shall provide CDFW with copies of all written comments received on the draft RCIS.

4.6.4 Submission and Review of the Final RCIS

In preparing a final RCIS, the RCIS proponent shall review all oral and written comments received from CDFW, cities and counties, and the public. Responses to such comments shall be incorporated into the body of the final RCIS. The final RCIS must also contain a section that lists all public comments and descriptions of how the comments were addressed.

Once the RCIS proponent submits the final RCIS to CDFW for review and approval, CDFW shall have thirty (30) days in which to approve the final RCIS or to explain in writing to the RCIS proponent what additional information or provisions are required for CDFW to approve it.[226] If the proponent resubmits the final RCIS for approval and CDFW again determines not to approve the RCIS, CDFW may, in its discretion, grant the RCIS proponent an additional opportunity to revise the RCIS or it may issue a final disapproval. CDFW shall make all approved RCISs available on its website.[227]
CDFW may approve a final RCIS for up to ten years, although it retains discretion to approve an RCIS for a shorter period of time.

4.7 Amending an RCIS

CDFW has defined two types of RCIS amendments: simple and complex. A simple amendment would include small or minor changes to the document that are more than a data update (see Section 4.8 – Updating and Extending an RCIS), but that do not result in substantial changes, as determined by CDFW. A complex amendment would result in a substantial change to the document, such as changes to the geographic area, focal species, or other conservation elements, as determined by CDFW.

[225] Fish & G. Code, § 1854, subdivision (c)(5)
[226] Fish & G. Code, § 1854, subdivision (c)(6)
[227] Fish & G. Code, § 1854, subdivision (d)

An amended RCIS shall include the reason(s) for the amendment, a summary of the amended information, and the extent to which the RCIS is consistent with an approved or amended RCA covering the RCIS area, if applicable. The complex RCIS amendment is subject to the same public notice requirements and review and approval processes required for original RCISs (see Section 4.6 – Review and Approval Process).

An amended RCIS can be submitted by either the original RCIS proponent, CDFW, or by a third-party public agency with the express written authorization of the original RCIS proponent. If a third-party public agency wishes to amend an approved RCIS and the original RCIS proponent declines to so amend the RCIS or to authorize the third-party public agency to do so, the third-party public agency may seek authorization from CDFW to amend the RCIS. CDFW may, in its sole discretion, authorize a third-party public agency to amend an RCIS if it determines that the proposed amendment will provide a substantial conservation benefit and will not unduly prejudice the rights or interests of the original RCIS proponent. CDFW may also, in its sole discretion, amend an RCIS if it determines that an amendment is necessary to conform to new or amended federal, state, or local laws or regulations, or if it determines that the proposed amendment will provide a substantial conservation benefit and will not unduly prejudice the rights or interests of the original RCIS proponent.

4.8 Updating and Extending an RCIS

In contrast to an amendment, an update to an RCIS means updates to the best available scientific information contained in a previously approved RCIS. A data update is generally the submission of GIS data or minor changes to numbers or text in the document that require less than two hours of CDFW staff time. It does not include updates or amendments to the geographic area, focal species, or other conservation elements. An RCIS proponent may update the scientific information in the RCIS at any time.

CDFW may extend the duration of an approved RCIS for additional periods of up to ten years after the scientific information has been updated. If the RCIS is intended to be used to create mitigation credits pursuant to Fish and Game Code section 1856, the public or private entity identified in the RCIS as the party responsible for updating scientific information and evaluating effectiveness shall complete such updates and evaluation at least once every ten years after CDFW approves the RCIS.[228] In the event the entity assigned to update the RCIS elects not to do so any longer, and there are MCA credits in the RCIS area that remain unsold, the affected MCA proponents can elect to take on the duty of updating the RCIS at their own expense. CDFW may also elect to

[228] Fish & G. Code, § 1856, subdivisions (a) and (b)

update and renew an RCIS itself if there are unused MCA credits and the RCIS still has utility.

If CDFW determines that an approved RCIS needs to be updated or evaluated more frequently and the RCIS proponent or responsible party declines to do so, MCA proponents or CDFW may elect to update the RCIS. Any such updates shall become part of the approved RCIS, pending an evaluation by CDFW.

4.9 RCIS Fee Schedule

The current fee schedule for RCISs is available on CDFW's website (see Section 1.4 – Program Contacts).

Section 5

Mitigation Credit Agreements

The Guidelines will be updated to include this section.