

CALIFORNIA FISH AND GAME COMMISSION
FINDING OF EMERGENCY AND
STATEMENT OF PROPOSED EMERGENCY REGULATORY ACTION

Emergency Action to
Add Section 749.12,
Title 14, California Code of Regulations
Re: Incidental Take of Western Joshua Tree

Date of Emergency Statement: December 2, 2020

I. Statement of Facts Constituting the Need for Emergency Regulatory Action

On October 21, 2019, the Fish and Game Commission (Commission) received a petition from the Center for Biological Diversity to list the western Joshua tree (*Yucca brevifolia*, WJT) as threatened under the California Endangered Species Act (CESA). California Fish and Game Code (FGC) Section 2073.5 requires that the California Department of Fish and Wildlife (Department) evaluate the petition and submit a written evaluation with a recommendation to the Commission, which was received at the Commission's April 2020 meeting. CESA, and case law interpreting it, make clear that the Commission must accept a petition when the petition contains sufficient information to lead a reasonable person to conclude that there is a substantial possibility the requested listing could occur. Based upon the information contained in the petition and other relevant information, the Department determined in its 90-day evaluation that there is sufficient scientific information available to indicate that the petitioned action may be warranted.

On September 22, 2020, the Commission determined that listing may be warranted pursuant to FGC Section 2074.2. Western Joshua tree became a candidate species under CESA, effective upon publication of the notice of findings on October 9, 2020 (Office of Administrative Law notice number Z2020-0924-01). Pursuant to FGC Section 2074.6, the Department will undertake a one-year status review. After the Commission receives the Department's status review, the Commission will make a final decision on listing.

Statutory Authority

Candidate species are protected from take under CESA pursuant to FGC Section 2085 during the remainder of the CESA status review period. Under FGC Section 2084, CESA provides that the Commission may adopt regulations to authorize take of candidate species, based on the best available scientific information, when the take is otherwise consistent with CESA. As with all regulations, the Commission may adopt a regulation under Section 2084 on an emergency basis when it determines that a situation exists which threatens public health and safety or general welfare. The County of San Bernardino, City of Palmdale, and the Town of Yucca Valley have submitted information to the Department indicating that certain projects scheduled to move forward in the next 6 months

within their jurisdictions meet those criteria and addressing the associated health and safety concerns may cause take of Joshua trees.

Another means to allow take of CESA candidate species is by Incidental Take Permit (ITP) issued by the Department pursuant to FGC Section 2081, subdivision (b). An ITP allows a permittee to take CESA listed or candidate species if such taking is incidental to, and for the purpose of, carrying out an otherwise lawful activity, including for research or monitoring activities of such activity. However, issuance of ITPs falls under Department authority and involves a more lengthy and costly permit approval process which is infeasible for the projects covered by this proposed emergency regulation.

Scope of Emergency

GROUNDWATER PROTECTION

The Town of Yucca Valley has not had a municipal sewage system, and residents have relied on individual septic systems. The increasing population of Yucca Valley led to a significant decline in groundwater levels. A groundwater recharge effort by the High Desert Water District (HDWD), which provides water to Yucca Valley, helped reverse the decline in groundwater levels but resulted in an increase in nitrate concentrations above USEPA drinking water maximum contaminant levels. The source of the nitrate was identified as leakage from residential, business, and commercial septic tank storage, thus harming current and future drinking water quality. High nitrate concentrations in domestic water supplies can cause methemoglobinemia (“blue baby syndrome”), which can be fatal in infants. The high concentrations of nitrates also violate the Colorado River Basin Region’s Plan for water quality objectives for groundwater.

In 2011, the Regional Water Quality Control Board for the Colorado River Basin Region (CRWQCB) adopted Resolution No. R7-2011-0004, which prohibited the Town of Yucca Valley from discharging wastewater from new or existing individual disposal systems. CRWQCB adopted an amendment to the Basin Plan to prohibit discharges of wastewater from septic systems. HDWD and Yucca Valley are in the process of designing and constructing a new municipal sewage collection system and wastewater treatment and reclamation facility to replace the reliance on septic systems. In 2016, CRWQCB adopted Resolution No. R7-2016-0001 to extend the timeframe for compliance by Yucca Valley and HDWD, which were experiencing delays in obtaining funding for the project. Phase 1 of the sewage system project has been completed (approximately 25%). The remaining phases, consisting of 75% of connections, are planned for late-2020 and 2021. Considering the presence of WJT on many of these parcels within the planned footprint of the connections or for staging purposes, direct impact (either take by removal or relocation, or indirect impacts) could occur to the species during construction of the connections.

Delay in the ability for residences to connect to the new sewer system as a result of western Joshua tree take protections will risk CRWQCB noncompliance and could entail a fine of up to \$5,000 daily per resident. Of related concern is that individual purchase and build-out of the parcels allocated for single-family

residences is critical to ensure that HDWD obtains adequate funding to complete the sewer connections for wastewater treatment. The alternative would mean that those connections aren't realized, and that septic waste would continue to leach to the groundwater basin. These and the necessary sewer connection permits are critical to implementing the transition away from septic and the reduction of nitrate concentrations in the groundwater basin, a public safety and public health concern. The proposed emergency rulemaking timeframe in lieu of a standard rulemaking is necessary due to the expediency needed for HDWD and the Town of Yucca Valley to be able to complete the connection phases already underway, and in communicating back to residents or landowners the adjusted timing, if any, of their planned connections.

RESIDENCES AND ACCESSORY STRUCTURES

Restrictions on small business operations and stay-at-home orders due to the COVID-19 pandemic severely affected individuals and families, small businesses, and local communities in California in 2020. Work associated with modifications to single-family residences and accessory structures within the next 9-12 months will provide critical cash-flow to small businesses and local permitting agencies in economically hard-hit areas, benefiting the general welfare of the residents of those communities. An emergency regulation is needed to ensure take authorization can be provided within that timeframe, since Section 2081 ITPs would be prohibitively costly for individual small projects. A large influx of such permits would also likely overwhelm staff workload and extend the time needed to approve ITPs for such projects.

PUBLIC WORKS PROJECTS

Various public works and other projects are planned for the Town of Yucca Valley, the County of San Bernardino, and the City of Palmdale for the first six months of candidacy of WJT, and beyond six months for the duration of candidacy (Table 1). These projects include single family residences (SFR) and accessory structures. Examples of accessory structures include an accessory dwelling unit, garage, carport, swimming pool, patio, greenhouse, storage shed, gazebo, septic tank, sewer connection, solar panels, or gravel or paved driveway. Examples of public works projects include primarily road improvements for existing roads or associated road structures.

Table 1. Summary of quantity of planned single-family residences (SFR), accessory structures, and public works projects for participating agencies within approximately one year of effective date of this regulation.

Timeframe	I	II	I	II	I	II
Municipality	SFR	SFR	Accessory Structure	Accessory Structure	Public Works	Public Works
Palmdale	10	10	50	100	10	10
San Bernardino	75	75	100	100	0	0
Yucca Valley	10	23	80 for sewer connections 25 for other accessory structures	20 for sewer connections 30 for other accessory structures	2	2

I: denotes planned timeframe for upcoming 180 days following effective date of this regulation

II: denotes planned timeframe for beyond 180 days of this regulation; after which up to two 90-day extensions of this emergency regulation may be filed

TRIMMING OR REMOVING DEAD OR DAMAGED TREES AND LIMBS

Winter weather conditions in the high desert, including high winds and snow, can result in fallen trees in public rights-of-way and weakened tree limbs, which can create a public health and safety hazard. Dead trees and branches also pose a fire risk. These situations are particularly dangerous when dead or damaged trees are in close proximity to homes or other structures.

Finding of Emergency

The Commission considered the following factors in determining whether an emergency exists: public health, safety and general welfare, as well as the magnitude of potential harm; the immediacy of the need; and whether the anticipation of harm has a basis firmer than simple speculation, and determined that an emergency regulation authorized under FGC Sections 2084 and 399 is needed.

The proposed addition of Section 749.11, Title 14, California Code of Regulations (CCR) creates a special order allowing incidental take of WJT during CESA candidacy for projects that have met the qualifications described below.

II. Proposed Emergency Regulations

Overview

The Commission will grant the City of Palmdale, County of San Bernardino, and Town of Yucca Valley (participating agencies) the authority to authorize the incidental take of a limited number of WJTs during the candidacy period that may result from activities related to approvals or permits issued by the participating

agencies for construction of single-family residences and accessory structures, public works projects, or the trimming or removal of damaged or dead trees. These activities will take place within the jurisdictions of the participating agencies, in habitats that are currently supporting the presence of WJT. The habitats supporting WJT in the jurisdictions of the participating agencies ranges from poor quality habitat that provides relatively little opportunities for WJT to survive and reproduce, to higher quality habitat that provides relatively greater opportunities for WJT to survive and reproduce. Lands on which project activities are expected to take place are expected to be pre-subdivided parcels of one to five acres in size. Parcels that have not been developed or disturbed are more likely to provide high quality WJT habitat, and parcels that have already been developed or disturbed are likely to provide of lower quality WJT habitat.

Mitigation fees will be collected for authorized take of WJTs by the participating agencies. Project activities that result in take of WJT in habitats that are expected to provide lower quality habitat for WJT (developed parcels) are subject to lower mitigation fees than project activities that result in take of WJT in habitats that are expected to provide higher quality habitat (undeveloped parcels). Furthermore, removal and relocation of WJT from project activities will be subject to lower mitigation fees than removal of WJT without relocation, because relocated WJT may survive, and provide benefits. These fees will be deposited into a WJT Mitigation Fund and expended for the purpose of addressing threats to WJT, which may include but are not limited to acquiring and conserving WJT mitigation lands.

The participating agencies may authorize take of WJT associated with developing single-family residences, accessory structures, and public works projects concurrent with approval of the project, subject to the following terms and conditions:

- Adoption of a required WJT ordinance by each participating agency;
- Deposit of required moneys to the WJT Mitigation Fund within sixty days of the effective date of the regulation, and bi-monthly thereafter;
- Submittal of bi-monthly reports and an annual report by each participating agency;
- No more than ten WJTs may be removed per project site;
- Completion of a required WJT census for each project by the project proponent, and submittal of a corresponding report to the participating agency;
- Avoidance of take to the maximum extent practicable;
- Minimization of take via limits on ground disturbance and a requirement to relocate WJTs to the maximum extent feasible;
- Meeting conditions warranting relocation of individual WTJ, and subsequent measures to be taken for relocation efforts;
- The option of removal of individual WJT where relocation of such individuals is not feasible;

- Payment of required mitigation fees defined by size class, take action (relocation vs. removal), and land status (undeveloped or developed) the participating agencies by the project proponents; and
- The option of issuing permits for removing detached WJT or tree limbs when posing a threat to structures or public health or safety.
- Cumulative limits on the amount of WJT take for single family residences, accessory structures, and public works projects that may be permitted by the participating agencies.

Proposed Provisions

PARTICIPATING AGENCIES

Subsection 749.11(a) lists the participating agencies of City of Palmdale, County of San Bernardino, and Town of Yucca Valley (referred to from subsection 749.11(b)(4)). This provision is necessary to define the eligible municipalities for take authorization under the proposed regulations.

DEFINITIONS

The following definitions are provided under subsection 749.11(b):

(b)(1) – Accessory Structures – The definition of accessory structure is necessary to describe the improvements to land that may result in impacts to WJTs on habitat that is expected to already be degraded due to relatively significant prior use of the land.

(b)(2) – Desert native plant specialist – Minimum requirements for a desert native plant specialist are necessary to help ensure that activities required under the regulation are more likely to be conducted by experienced, ethical professionals and are therefore more likely to be implemented successfully.

(b)(3) – Developed parcel – The definition of developed parcel is necessary to describe lands that are expected to already be somewhat degraded due to relatively significant prior use of the land by humans. Developed parcels are therefore typically expected to provide lower quality WJT habitat than undeveloped parcels.

(b)(4) – Participating agency – The City of Palmdale, County of San Bernardino, and Town of Yucca Valley are the three local agencies that requested to be included in the regulations.

(b)(5) – Project Proponent – The definition of project proponent is necessary to make it clear that there will often be a difference between the entity that wishes to have take authorization under the regulations, and the participating agency that will provide that take authorization under the regulations.

(b)(6) – Project site – The project site may consist of one parcel or more parcels depending on the project type and will define the area to be censused for WJT by the desert native plant specialist.

(b)(7) – Public works project – The definition of public works project is necessary to define the project activities for which the participating agencies may want to issue take authorization under the regulations.

(b)(8) – Single-family residences – The definition of single-family residence is necessary to aid in defining a developed parcel and an undeveloped parcel. Parcels with single family residences are typically expected to provide lower quality WJT habitat than parcels on which no, or very little, development has occurred.

(b)(9) – WJT size classes - Three size classes of WJTs are identified in the proposed regulation: trees less than one meter in height; trees one meter or greater but less than four meters in height; and trees five meters or greater in height.

- Of these three size classes, take of trees that are four meters or greater in height represents the greatest impact to WJT population resilience. Trees of this height are typically considered to be adults with multiple branches. Not only does it take many decades for WJTs to reach this size and become reproductive, but when flowering does occur, trees with multiple branches produce significantly more flower clusters and therefore produce significantly more seeds than the trees in the other size classes. These larger trees can be over 100 years old and are critically important for the persistence of the population.
- WJTs that are one meter or greater in height but less than four meters in height are also very important to conserve, because they represent the trees that have already become established, and that are already reproductive, or are likely to survive to become reproductive adults in the future. These trees represent the future of the population, but do not yet produce as significant of a contribution to the reproductive output of the population as the trees that are already four meters or greater in height.
- WJTs that are less than one meter in height are less likely to survive (and therefore, eventually reproduce) than plants that have exceeded this height.

(b)(10) – Undeveloped parcel – The definition of undeveloped parcel is necessary to categorize lands that are expected to be less degraded by prior use of the land by humans than developed parcels. Undeveloped parcels are therefore typically expected to provide higher quality WJT habitat than developed parcels.

(b)(11) – WJT definition – WJT is defined as all stems that have emerged from the ground within a one-meter radius measured from a single point at the base of the largest stem. This definition is necessary because WJTs are capable of asexual clonal growth via rhizomes that emerge from the ground surface somewhat close to the main stem of a western Joshua tree plant. The presence of this clonal growth can confound efforts to count the number of western Joshua

trees present on a project site because one plant may have multiple stems emerging from the ground. The distance of one meter from the largest stem was selected to include stems of a plant that are reasonably likely to be connected to the main plant via underground rhizomes, but that could be less likely to survive and reproduce independently from the largest stem of the main plant. Stems outside of this one-meter radius would then be considered separate plants because they could be genetically different plants that grew from seed, or they could be plants that were generated by clonal growth from the main plant, but that are reasonably likely to be capable of independent survival and reproduction, even if they are no longer connected to the main stem. The distance of one meter was selected because it is a biologically reasonable distance, can be measured easily and accurately, and is simple to understand.

(b)(12) – WJT Mitigation Fund – Mitigation fees will be collected for authorized take of WJTs by the participating agencies. These fees will be deposited into a WJT Mitigation Fund and expended for the purpose of addressing threats to WJT, which may include but is not limited to acquiring and conserving WJT mitigation lands.

PARTICIPATING AGENCY RESPONSIBILITIES

Subsection 749.12(c) describes the responsibilities for participating agencies.

(c)(1) – As the Commission is delegating take authorization of WJT to each participating agency, this subsection describes the requirement that each participating agency adopt an ordinance fulfilling the requirements under subsection (d). This delegation is similar to existing processes for granting take authorization by the Department for municipalities or project proponents as part of conservation or land use planning to fulfill requirements or avoid or minimize impacts under a broader plan (e.g., Natural Community Conservation Planning Act; FGC Section 2800 *et. seq.*). The chosen timeframe of 60 days for adopting an ordinance is necessary because that is a reasonable timeframe in which to complete that action and will confirm full participation by the agencies. This requirement is necessary to ensure that take authorization is issued in accordance with the regulations, particularly satisfaction of subsections 749.12(d) and (e).

(c)(2) – WJT Mitigation Fund initial deposit - This subsection describes the requirement that participating agencies deposit initial funds into the WJT Mitigation Fund within 60 days of the effective date of the regulation. The chosen timeframe of 60 days for depositing the initial funds is necessary because that is a reasonable timeframe in which to complete that action and will confirm full participation by the agencies. The specified amount of \$10,000 is necessary to ensure there are adequate administrative startup funds for addressing threats to WJT, which may include but are not limited to acquiring and conserving WJT mitigation lands.

(c)(3) – WJT Mitigation Fund bi-monthly deposits – This subsection describes the deposit schedule into the WJT Mitigation Fund each participating agency must adhere to for moneys collected by project proponents pursuant to subsection (d)(6). This bi-monthly schedule is needed to reduce the burden on participating agencies that would come from monthly deposits, while also ensuring that deposits do not fall behind or become overlooked as a result of deposits taking place too infrequently.

(c)(4) – Bi-monthly reporting – This subsection describes the reporting schedule to the Department at WJT@wildlife.ca.gov (similar to that for the Mitigation Fund deposits) each participating agency must adhere to for tracking purposes of WJT take. The reported elements include the number of projects approved resulting in relocation or removal of WJT (paragraph A); the number and size class of WJT relocated (paragraph B) and the number and size class of WJT removed (paragraph C); the number of dead WJT trees removed and live trees trimmed (paragraph D), and a summary and documentation of the mitigation fees collected in accordance with the fee structure outlined in subsection (d)(6) (under paragraphs E and F). Deposits of mitigation fees and submittal of corresponding reports by participating agencies every two months is necessary to reduce the burden on participating agencies that would come from monthly reporting and deposits, while also ensuring that reporting and deposits do not fall behind or become overlooked as a result of reporting and deposits taking place too infrequently. Department staff would also utilize bi-monthly reporting to monitor take limits prescribed in subsection (f) for each participating agency, and for comparison purposes to the subsequent data reported on an annual basis pursuant to subsection (c)(5) (e.g., for monitoring the survivability of relocated trees).

(c)(5) – Annual report_ - this subsection describes the requirements for annual reporting of the survivorship of relocated trees. While anecdotal information from various efforts exists regarding the survivability of WJT after relocation or transplantation events, there is inadequate data documenting the condition or status of such trees. Inclusion of this requirement for the elements of the location (street address, date of relocation, status of live or dead, as well as a photograph of the relocated WJT) is necessary to begin collection of long-term survival data of relocated trees to help inform future decisions on the value of relocated WJTs to the resilience of WJT populations over the long term.

PROCESS FOR TAKE AUTHORIZATION

Subsection 749.12(d) describes the process for participating agencies to authorize take. Each participating agency may authorize take, subject to conditions justified below.

(d)(1) – 10 WJT limit – The limit on the total number of WJTs that may be taken per project site is necessary to ensure that projects minimize their on-site impacts to WJT, and that WJT impacts can be adequately mitigated via payment

of mitigation fees under this regulation. Take of more than this number of WJTs may be authorized by the Department via an incidental take permit under FGC subdivision 2081(b).

(d)(2) – Census – This subsection describes the process for a project proponent seeking to take WJT to cause the completion of a tree census (paragraph A). The tree census must be conducted by a desert native plant specialist, in accordance with subsection (b)(2). A complete census of the WJTs present within an impact area is the most straightforward and efficient methodology to obtain robust data to directly quantify take of WJT within a project area and determine the appropriate mitigation fees under this regulation. Understanding the number and size classes of trees within a project site provides a baseline for comparison to habitat quality post-construction, and an indication of the continued ability to sustain WJT within the project site. There is some evidence that plants that have grown to be at least one meter in height have a much greater likelihood of survival (and therefore, eventual reproduction) than plants that are less than this height (DeFalco et al. 2010, p. 246; Esque et al. 2015, p. 89). WJTs that are over one meter in height therefore represent a reasonable approximation of the future population, even if they may take several more years or decades to reproduce. WJTs are capable of clonal growth, which can lead to clumps of genetically identical plants growing together very closely. This could confound counting efforts, but because these plants are capable of surviving and reproducing independently, plants that appear to be separate should be considered as separate WJT plants for the purposes of the census. WJTs that have one or more secondary axes (branches) are generally considered to be reproductive adult plants because branching usually occurs after flowering. Flowering has been observed in plants as short as one meter, but adult plants are typically taller, often greater than four meters in height.

Under paragraph B, as part of approval for incidental take under this regulation, project proponents must prepare a tree census report and submit it for review and approval prior to removing any WJT or engaging in ground-breaking activities within the project site. The reported elements include the date of the census, dates of proposed relocation of WJT, a map of the project site showing the location of the proposed residence, accessory structure or other project as well as all WJT within the project site, as well as the proposed placement of relocated WJTs. These reported elements are necessary for later comparison with the subsequently submitted bi-monthly and annual reports under (c)(4) and (c)(5).

(d)(3) – Avoidance – When considering how to lessen environmental impacts, the first and best option should be to try and avoid those impacts altogether. This subsection is necessary to make it clear that avoidance of take of WJT and associated impacts should be implemented to the maximum extent practicable. Projects that are designed and conducted to avoid the take of WJT are exempt from paying mitigation fees since they will not be taking WJT.

(d)(4)(A) -Minimization - When considering how to lessen environmental impacts, if avoidance is not feasible, impacts should be minimized. This section is necessary to minimize take of WJT and associated impacts. The regulation

facilitates take minimization via: (1) the economic incentive for project proponents to minimize mitigation fees by minimizing the number of WJTs that will be taken as a result of project activities; (2) requirements to avoid and minimize ground disturbing activities within 10 feet of any WJT unless those activities will be temporary, will not physically impact the western Joshua tree or its root system, and will not disturb the soil to a depth of greater than twelve inches; and (3) relocation of WJTs. A buffer of 10 feet was selected because it was considered a reasonable distance from the main stem to minimize damage to roots that may impact the tree, without being so large a buffer as to be difficult for project proponents to work around. A soil depth of 12 inches was selected because it was considered a reasonable distance to minimize damage to roots that may impact the tree.

(d)(4)(B) – Relocation – This subsection describes the circumstances warranting a relocation and subsequent measures to be taken for relocation efforts. As noted above under the justification for (c)(5), although the effectiveness of WJT relocation has not yet been proven to contribute to long-term WJT population resilience, relocation of trees may preserve cultural and aesthetic values of trees for the local community, and pursuant to the bi-monthly and annual reporting, will provide data on the effectiveness of WJT relocation practices.

(d)(4)(C) This subsection outlines the situations by which relocation may not be feasible. This is necessary in order to define the parameters for removal of a WJT pursuant to subsection (d)(5).

(d)(4)(D) This subsection outlines three parameters for relocation. Relocations of WJTs that are greater than one meter in height must be completed by desert native plant specialists to help ensure that the relocation is conducted by an experienced and ethical professional and is therefore more likely to be implemented successfully. To help ensure that relocated WJTs will not be impacted again in the future and have a higher likelihood of long-term survival and reproduction, trees must be relocated to a location on the project site that is at least 25 feet from any existing or proposed structure or improvement and at least ten feet from any other WJT. The requirement makes it clear that the project proponent will provide a map of the relocated WJT and is necessary for the participating agency to track the relocations and ensure consistency in reported WJTs that are relocated for reporting to the Department pursuant to subsections (c)(4) and (c)(5).

(d)(5) – Removal of WJT – this subsection links the circumstances identified in subsection (d)(1) to (d)(3) and (d)(5) for the allowable removal of WJT when relocation or other measures have been found to be infeasible. This is necessary for demonstrating the criteria to be met for a WJT to be considered for removal, after considering all other avoidance or minimization measures.

(d)(6) – Mitigation – this subsection describes how mitigation is in the form of payments to a fund. Typical incidental take permitting under CESA requires mitigation for take, and the physical direct and indirect impacts of the taking. For example, cutting down a tree and doing nothing else is less of an impact than cutting down a WJT and constructing a residence on the spot previously

occupied by WJT. It is misleading to assume impacts of project activities to a species can be fully described simply in terms of the number of individuals lost. Individuals and habitat are closely linked, therefore this regulation attempts to reduce impacts down to an individual tree by tree level while also accounting for the quality of the habitat impacted.

Accordingly, the corresponding mitigation fee structure is defined by size class, take action (relocation vs. removal), and land status (undeveloped or developed). Consideration of size class is imperative for assessing a value of the impact and corresponding mitigation fee. Taller WJTs generally have more reproductive potential than shorter WJTs, and they are therefore considered to be more valuable for WJT population resilience. Therefore, the mitigation fees for removal and relocation of taller WJT size classes are greater than the mitigation fees for shorter WJT size classes.

The mitigation fees for removal and relocation of WJTs associated with single-family residence projects and sewer connection projects undertaken on undeveloped parcels and public works projects (paragraph B) to erect or construct a new public structure, building, road, or improvement, are greater than the mitigation fees for accessory structure projects undertaken on developed parcels and for public works projects (paragraph A) to alter, maintain, or repair an existing public structure, building, road, or improvement. The primary reason for this difference is that projects that are undertaken on more pristine habitat, generally associated with undeveloped parcels, is of greater impact to WJT population resilience than projects on developed parcels that have been degraded from prior construction, habitat fragmentation, non-native plant species, ground disturbance, contaminants, and other impacts.

The mitigation fees for removal and relocation of WJTs are less than the mitigation fees for removal of WJTs without relocation. Although the effectiveness of WJT relocation has not yet been shown to contribute to long-term WJT population resilience, relocation of trees will provide additional information on the effectiveness of WJT relocation practices, given the required reporting (from the census report, through the bi-monthly reports as well as the annual report). Table 2 outlines the fees by size class and take action (relocated vs. removed).

Table 2. Mitigation fees per WJT by size class, take action, and land status.

Size class (height)	Take Action	Undeveloped Fee	Developed Fee
≥ 4 meters	Relocated	\$2,425	\$700
≥ 4 meters	Removed	\$4,175	\$2,100
< 4 meters	Relocated	\$625	\$175
< 4 meters	Removed	\$1,050	\$525

Assumptions used in calculating the fees in Table 2 include consideration of a larger acreage allotment for trees over four meters in height (given rootstock and seed dispersal) than for trees less than four meters, as well as a higher mitigation ratio for undeveloped vs. developed parcels. The estimated habitat area per WJT ≥ 4 meters in height, or < 4 meters (in fraction of an acre) is multiplied by a \$12,000 per acre cost (for mitigation land acquisition, management, and long-term funding draft to offset loss of age structure with current reproductive capacity), and is also multiplied by a corresponding mitigation ratio utilized in other mitigation analyses to calculate each fee in **Table 2**.

Expenditure of funds will be for the purposes of Joshua tree conservation and may include but is not limited to acquiring and conserving WJT mitigation lands or furthering research on Joshua tree conservation. Assumptions in use of funds include setting aside a larger block of high-quality habitat by combining mitigation from many individual projects; and tracking of relocation success.

PARTICIPATING AGENCY AUTHORIZATION OF REMOVAL OF DEAD TREES OR TRIMMING

Subsection 749.12(e) describes the process for participating agencies to authorize take for removal of dead WJT or for trimming of live trees. This subsection includes provisions to allow participating agencies to issue permits for the removal of a dead WJT or the trimming of a WJT by a desert native plant specialist, without payment of mitigation fees in certain situations, including if the dead tree or limb has fallen over, is leaning against an existing structure or creates an imminent threat to public health or safety. California Department of Forestry and Fire Protection (CalFire) advises property owners regarding the need to maintain a multiple zone defensible space for fire management, which includes removing any dead trees from a zone that extends a minimum of 30 feet from buildings, structures, decks, etc. and trimming tree branches based on proximity to structures or proximity to other trees. The CalFire advice is outlined on the CalFire website here: <https://www.readyforwildfire.org/prepare-for-wildfire/get-ready/defensible-space/> A detached, dead WJT or a detached limb may be removed by the project proponent or their agent. However, all other removals and all trimming of WJT must be completed by desert native plant specialists to help ensure that the work is conducted by an experienced and ethical professional, and is therefore more likely to be implemented without mortality to the tree. Removal of dead WJTs, and minor trimming of WJT limbs by experienced and ethical professionals is not expected to have a significant effect on the value of the trees for WJT population resilience.

CUMULATIVE TAKE LIMITS

Subsection 749.12(f) describes cumulative take limits proposed by the participating agencies, and these limits were used by Department staff to calculate appropriate mitigation fees. This section is necessary to ensure that the take limits agreed upon by the Department and agencies is adhered to by to all parties and that sufficient fees are collected to mitigate impacts from the take.

ENFORCEMENT

Subsection 749.12(g) describes the enforcement provisions that Department may rely upon in the event that a participating agency does not comply with requirements set forth in this Section.

(g)(1) – Paragraphs A through D describe the actions for which a participating agency would be subject to suspension of authority to authorize take delegated by the Commission. In this instance, the Commission would defer enforcement to the Department on failing to meet requirements set forth in this Section.

(g)(2) – This subsection describes the process of providing notice of suspension and a 30-day timeline by which the participating agency may remedy the failure to comply by written documentation. The Department is required to lift the suspension if the remedy is found to be adequate.

(g)(3) – This subsection describes the means by which the Department may permanently revoke the ability for a participating agency to issue take authorization if it fails to remedy the situation within 30 days of receipt of the Department's notice.

Inclusion of these enforcement provisions are necessary to ensure that the Department may revoke take authority issued to the participating agencies, in the event that the participating agencies fail to meet their obligations under the regulation.

LIMITATIONS

Subsection 749.12(h) describes limitations of this section, which are necessary to make it clear that the take authority provided by the regulations does not constitute a general project approval, and that the mitigation fees and assumptions in the regulations do not limit the Department when issuing incidental take permits for WJT under CESA.

III. Identification of Reports or Documents Supporting Regulation Change

A summary of general scientific information on the life history of WJT is presented in the United States Fish and Wildlife Service Joshua Tree Species Status Assessment, dated October 23, 2018, and available online at: <https://ecos.fws.gov/ServCat/DownloadFile/169734>.

RWQCB, Colorado River Basin Region. Resolution No. R7-2011-0004. Amending the Water Quality Control Plan for the Colorado River Basin Region to Prohibit Septic Tank Discharges in the Town of Yucca Valley, San Bernardino County. Available from: https://www.waterboards.ca.gov/coloradoriver/board_decisions/adopted_orders/resolutions/2011/res0004yucca.pdf

RWQCB, Colorado River Basin Region. Resolution No. R7-2016-0001. Approve a Substitute Environmental Document and Adopt a Proposed Amendment of the Colorado River Basin Water Quality Control Plan to Revise a Septic Tank

Discharge Prohibition for the Town of Yucca Valley, San Bernardino County.

Available from:

https://www.waterboards.ca.gov/coloradoriver/board_decisions/adopted_orders/resolutions/2016/0001yv_res.pdf

Specific sources cited above are listed below:

DeFalco, L.A., T.C. Esque, S.J. Scoles-Sciulla, and J. Rodgers. 2010. Desert wildfire and severe drought diminish survivorship of the long-lived Joshua tree (*Yucca brevifolia*; Agavaceae). *American Journal of Botany* 97:243–250.

Esque, T.C., P.A. Medica, D.F. Shrylock, L.A. DeFalco, R.H. Webb, and R.B. Hunter. 2015. Direct and indirect effects of environmental variability on growth and survivorship of prereproductive Joshua trees, *Yucca brevifolia* Engelm. (Agavaceae). *American Journal of Botany*. 102:85–91.

IV. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following determinations relative to the required statutory categories have been made:

- (a) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State:

The Commission anticipates that there will be costs to the State, specifically the California Department of Fish and Wildlife (Department) for program implementation as shown in Table 1. The Department anticipates approximately nine projects, with approximately 27 bi-monthly reports, resulting in total program costs of \$212,329.19 over the 180 days of the proposed action. The identified program costs will be absorbed within existing budgets.

Table 3. Estimated Department Program Costs for Take of Western Joshua Tree (2020\$)

DFW Classification	Activity/Task	Bi-monthly Reports	Hours per Task	Hourly Rate ¹	Project Costs
Senior Environmental Scientist (Supervisory)	Correspondence and screening for eligibility	27	40	\$96.42	\$104,133.60
Senior Environmental Scientist (Specialist)	Review bi-monthly reports	27	8	\$70.93	\$15,320.88
Environmental Scientist	Tracks #s WJT taken	27	6	\$61.62	\$9,982.44
Associate Budget Analyst	Ensure receipt of payments	27	1	\$55.42	\$1,496.34
Attorney IV	Issue Notice of Suspension	6	60	\$110.72	\$39,859.20
Subtotal					\$170,792.46
		Overhead ²	24.32%		\$41,536.73
Total Costs					\$212,329.19

¹ Hourly Rate includes wages per CalHR 2020-21 and Department benefit rates.

² Non-Federal Project Overhead rate for FY 2020-2021 is 24.32% per Department Budget Branch. Note: Minor discrepancies (less than \$1.00) may be apparent due to rounding error.

(b) Nondiscretionary Costs/Savings to Local Agencies:

This emergency regulation will not introduce nondiscretionary costs or savings to local agencies. Should an agency choose to consider the review and issuance of a permit, the process would likely entail the review of project plans, census information, and relocation plans.

(c) Programs Mandated on Local Agencies or School Districts:

None.

(d) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code:

None.

V. Authority and Reference

The Commission adopts this emergency action pursuant to the authority vested by sections 399 and 2084 of the Fish and Game Code and to implement, interpret, or make specific sections 399 and 2084 of the Fish and Game Code.

VI. Section 399 Finding

Delay in the ability for residences in the Town of Yucca Valley to connect to the new sewer and water treatment system for groundwater recharge as a result of western Joshua tree take protections will risk CRWQCB noncompliance, and may mean those connections aren't realized and that septic waste would continue to leach to the groundwater basin. The necessary sewer connections are critical to implementing the transition away from septic and the reduction of nitrate concentrations in the groundwater basin, which is a clear public safety and public health concern.

Work associated with modifications to single-family residences and accessory structures within the next 9-12 months will provide critical cash-flow to small businesses and local permitting agencies in economically hard-hit areas, benefiting the general welfare of the residents of those communities.

Fallen WJT in public rights-of-way and weakened tree limbs from winter conditions can create a public health and safety hazard. Dead trees and branches also pose a fire risk during fire-prone conditions., These situations are particularly dangerous when dead or damaged trees have fallen over, are leaning against an existing structure, or are otherwise creating an imminent threat to public health or safety.

Pursuant to Section 399, subdivision (b), of the Fish and Game Code, the Commission finds, based on the information above, that adopting this regulation is necessary for the immediate preservation of the public health and safety, and general welfare.

Informative Digest (Plain English Overview)

On October 21, 2019, the California Fish and Game Commission (Commission) received a petition from the Center for Biological Diversity to list the western Joshua tree (*Yucca brevifolia*, WJT) as threatened under the California Endangered Species Act (CESA). California Fish and Game Code Section 2073.5 requires that the California Department of Fish and Wildlife (Department) evaluate the petition and submit a written evaluation with a recommendation to the Commission, which was received at the Commission's April 2020 meeting. Based upon the information contained in the petition and other relevant information, the Department recommended that the Commission determine the petition has sufficient scientific information available to indicate that the petitioned action may be warranted, and informed the Commission of that recommendation.

On September 22, 2020, the Commission determined that listing may be warranted pursuant to Fish and Game Code (FGC) Section 2074.2, and therefore WJT became a candidate species. The Department will undertake a one-year status review and provide it to the Commission along with a listing recommendation. At that time, the Commission will make a final decision on listing.

CESA also provides that the Commission may adopt regulations to authorize take of certain threatened or endangered species and candidate species under FGC Section 2084. Candidate species are protected from take under CESA pursuant to FGC Section 2085 during the remainder of the CESA listing. Under FGC Section 2084, CESA provides that the Commission may adopt regulations to authorize take of candidate species, based on the best available scientific information, when the take is otherwise consistent with CESA. As with all regulations, the Commission may adopt a regulation under Section 2084 on an emergency basis when it determines that a situation exists which threatens public health and safety or general welfare.

The proposed emergency action would add Section 749.12 to Title 14, California Code of Regulations (CCR). This regulation would allow the Commission to grant the City of Palmdale, County of San Bernardino, and Town of Yucca Valley (participating agencies) the authority to authorize the incidental take of a limited number of WJTs during the candidacy period that may result from activities related to approvals or permits issued by the participating agencies for construction of single-family residences and accessory structures, public works projects, or the trimming or removal of damaged or dead trees. These activities will take place within the jurisdictions of the participating agencies, in habitats that are currently supporting the presence of WJT, ranging from poor to higher quality habitat. Lands on which project activities are expected to take place are expected to be pre-subdivided parcels of one to five acres in size. Parcels that have not been developed or disturbed are more likely to provide high quality WJT habitat, and parcels that have already been developed or disturbed are likely to provide of lower quality WJT habitat.

Mitigation fees will be collected for authorized take of WJTs by the participating agencies. Project activities that result in take of WJT in habitats that are expected to provide lower quality habitat for WJT (developed parcels) are subject to lower mitigation fees than project activities that result in take of WJT in habitats that are expected to provide higher quality habitat (undeveloped parcels). Furthermore, removal and

relocation of WJT from project activities will be subject to lower mitigation fees than removal of WJT without relocation, because relocated WJT may survive, and provide benefits. These fees will be deposited into a WJT Mitigation Fund and may be expended for the purpose of addressing threats to WJT, which may include but are not limited to acquiring and conserving WJT mitigation lands.

The participating agencies may authorize take of WJT associated with developing single-family residences, accessory structures, and public works projects concurrent with approval of the project, subject to the following terms and conditions:

- Adoption of a required WJT ordinance by each participating agency;
- Deposit of required moneys to the WJT Mitigation Fund within sixty days of the effective date of the regulation, and bi-monthly thereafter;
- Submittal of bi-monthly reports and an annual report by each participating agency;
- No more than ten WJTs may be removed per project site;
- Completion of a required WJT census for each project by the project proponent, and submittal of a corresponding report to the participating agency;
- Avoidance of take to the maximum extent practicable;
- Minimization of take via limits on ground disturbance and a requirement to relocate WJTs to the maximum extent feasible;
- Meeting circumstances warranting relocation of individual WJT, and subsequent measures to be taken for relocation efforts;
- The option of removal of individual WJT where relocation of such individuals is not feasible;
- Payment of required mitigation fees defined by size class, take action (relocation vs. removal), and land status (undeveloped or developed) to the participating agencies by the project proponents; and
- The option of issuing permits for removing detached WJT or tree limbs when posing a threat to structures or public health or safety.
- Cumulative limits on the amount of WJT take for single family residences, accessory structures, and public works projects that may be permitted by the participating agencies.

The benefit of the proposed regulation include fulfilling the transition away from septic tank storage for the Town of Yucca Valley and reducing nitrate leaching into the groundwater basin and ensuring timely connection to the new sewer and water treatment system, protecting the groundwater basin water quality (drinking water supply) and public health. Take authorization to participating agencies of WJT would augment the general welfare of city and county residents by allowing residential improvements by local contractors, and may provide critical cash-flow to small businesses and local permitting agencies in economically hard-hit areas. Allowing the removal of weakened WJT with broken or downed limbs would reduce threats to public safety and structures during the WJT candidacy period.

Commission staff has searched the California Code of Regulations and has found no other state regulation relating to the incidental take by the specific projects identified under this regulation of WJT during its candidacy under CESA, and therefore concludes that the proposed regulations are neither inconsistent nor incompatible with existing state regulation.