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Governor's Office of Planning & Research

January 20, 2021

Mar 23 2021

## STATE CLEARINGHOUSE

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**Subject: Agzone Services LLC, Minor Use Permit (DRC2018-00075) (Project)  
Mitigated Negative Declaration (MND)  
SCH Number: 2020120523**

Dear Mr. Hughes:

The California Department of Fish and Wildlife (CDFW) received an MND from San Luis Obispo County for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

Thank you for the opportunity to provide recommendations regarding the activities proposed at the Project site that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects on the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

### CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

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<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in take as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorized as provided by the Fish and Game Code will be required.

In this role, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on project activities that have the potential to adversely affect fish and wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

**Bird Protection:** CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs, and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession, or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

**Fully Protected Species:** CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is prohibited and CDFW cannot authorize their incidental take.

**Unlisted Species:** Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State or Federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T as specified in the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15380), CDFW recommends it be fully considered in the environmental analysis for this Project.

## **PROJECT DESCRIPTION SUMMARY**

**Proponent:** Agzone Services LLC

**Objective:** The Project proponent is seeking a Minor Use Permit utilizing 4.34 acres of a 43-acre parcel. The Project includes establishment of 3 acres outdoor cannabis cultivation; construction of gravel access road, security fencing, and 5,000-gallon water tank. Excavation of a trench for of new water lines will result in a total of 80 cubic yards of cut and fill on site.

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**Location:** The project site is located at 11520 Tule Elk Lane, approximately 39 miles east of the community of Santa Margarita in the Carrizo Planning Area, County of San Luis Obispo, Assessor's Parcel Number (APN) 072-301-009.

**Timeframe:** Unspecified.

## RECOMMENDATIONS

CDFW offers the following recommendations to assist the county of San Luis Obispo in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

### Environmental Setting and Related Impact

Review of the California Natural Diversity Database (CNDDB) (CDFW 2021) and internal CDFW population data reveals records for wildlife species within the vicinity of the Project site including, but not limited to the tule elk (*Cervus canadensis nannodes*) and pronghorn antelope (*Antilocapra americana*).

### COMMENT 1: Tule Elk and Pronghorn Antelope

**Issue:** Elk is California's largest land mammal and an important wildlife resource whose population growth in recent decades has been of great interest to the public. Prior to non-indigenous settlement, it was estimated that the elk population in California was more than 500,000 animals. Non-indigenous settlement decimated California's elk populations. By 1872, only a few tule elk remained in the San Joaquin Valley. Conservation organizations and hunters were able to restore elk to the California landscape. Elk population growth since 1970 has been significant and California now supports approximately 5,700 tule elk (CDFW 2018). The pronghorn antelope are more common in northeastern California, whereas, in the Carrizo Plain area small populations has been established through translocation of the northern populations. The tule elk and pronghorn antelope populations that are part of the greater Carrizo Plain region herds utilize habitats within the Project site and surrounding areas for seasonally foraging, attracted to the agricultural farming for grazing, and as a movement corridor (USDE 2011). These herds are non-migratory, but some animals do make small seasonal movements to exploit regional food and water resources. The Project has the potential to impact these species.

**Specific impact:** Tule elk and pronghorn antelope are known to utilize the Project site and adjacent areas (USDE 2011). CDFW population monitoring data indicates that both tule elk and pronghorn antelope occur within the Project site and surrounding areas. Potential impacts to tule elk and pronghorn antelope, as a result of the Project includes loss of habitat connectivity to other regional elk herds, loss of

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habitat, mortality resulting from vehicle collisions, entanglement with fences and other structures, loss of summer foraging, and fawning habitat. Without appropriate mitigation measures for tule elk and pronghorn antelope, potentially significant impacts include loss of habitat and fragmentation of movement corridors.

**Evidence impact is potentially significant:** The location of the Project site is in an area of the Carrizo Plain, known as a movement corridor for large herding animals, like tule elk and pronghorn antelope. The area contains considerable existing barriers to large-scale animal movement for species like tule elk and pronghorn antelope, such as solar power facilities. Furthermore, habitat loss and fragmentation resulting from development or conversion to other land uses are also a primary threat to tule elk and pronghorn antelope. The Project site is within the range of tule elk and pronghorn antelope, which is utilized by both species based on CDFW population assessment surveys. As a result, ground-disturbing activities and addition of fencing associated with development of the Project site have the potential to significantly impact local populations of this species.

### **Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to tule elk and pronghorn antelope, CDFW recommends incorporating the following mitigation measures into the MND prepared for this Project, and that these measures be made conditions of approval for the Project.

### **Recommended Mitigation Measure 1: Tule Elk and Pronghorn Antelope Habitat**

The Project as proposed will result in the loss of habitat for tule elk and pronghorn antelope. CDFW recommends that tule elk and pronghorn antelope habitat be conserved at a minimum 1:1 ratio to the loss of habitat within the general vicinity of the Project site.

### **Recommended Mitigation Measure 2: Fencing**

Physical barriers such as fencing, mesh wire, panels, electric fence, and visual barriers (such as landscaping cloth hung between fence poles) have the potential to impact tule elk and pronghorn antelope through loss of movement corridors. CDFW recommends not utilizing physical barriers that may impede tule elk and pronghorn antelope habitat connectivity to other herds, access to water, and foraging areas.

### **COMMENT 2: Lake and Streambed Alteration**

**Issue:** The Project site is adjacent to an ephemeral stream, two (2) ephemeral swales, and a depressional wetland on the property. The Project has the potential to temporarily and/or permanently impact both the ephemeral stream, swales, and the

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depressional wetland. Activities within or adjacent to the stream, swales, and wetland may be subject to CDFW's lake and streambed alteration regulatory authority, pursuant Fish and Game Code section 1600 et seq.

**Specific impact:** Work within or adjacent to stream channels have the potential to result in deposition of debris, waste, sediment, toxic runoff, or other deleterious materials into water causing water pollution and degradation of water quality.

**Evidence impact is potentially significant:** The Project site includes activities adjacent to an unnamed ephemeral stream, located approximately 0.38 miles north of the two (2) ephemeral swales is located approximately 75 feet south and 125 feet north, and a depressional wetland 100 feet south east of the Project site. Project activities adjacent to these features may be subject to CDFW's lake and streambed alteration regulatory authority. Project activities within and or near streams, may have the potential to impact these jurisdictional features on or near the Project site and downstream waters.

Although ephemeral streams and swales, such as the streams adjacent to the Project site, are mostly dry, recent studies have shown that biodiversity and habitat values of dryland streams are considerably higher than in the adjacent uplands, transporting and delivering water, and providing linear habitat connectivity and refuge, and concentrating seeds, organic matter, and sediment. Moreover, the ecological viability of the dryland environment depends on the sustainability of the physical/hydrological processes that form and maintain episodic streams and the habitat they support (Brady and Vyverberg, 2013).

Ephemeral streams function in the collection of water from rainfall, storage of various amounts of water and sediment, discharge of water as runoff and the transport of sediment, they provide diverse sites and pathways in which chemical reactions take place and provide habitat for fish and wildlife species. Disruption of stream systems such as these can have significant physical, biological, and chemical impacts that can extend into the adjacent uplands adversely effecting not only the fish and wildlife species dependent on the stream itself, but also the flora and fauna dependent on the adjacent upland habitat for feeding, reproduction, and shelter.

### **Recommended Potentially Feasible Mitigation Measure(s)**

#### **Notification of Lake and Streambed Alteration**

The Project site is adjacent to an ephemeral stream approximately 0.38 miles north, two (2) ephemeral swales located approximately 75 feet south and 125 feet north, and a depressional wetland 100 feet southeast. CDFW has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource, pursuant to Fish and Game Code section 1600 et seq.

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Section 1602 subsection (a) of the Fish and Game Code requires an entity to notify CDFW before engaging in activities that would substantially change or use any material from the bed, channel, or bank of any stream or substantially divert or obstruct the natural flow of a stream. It is unclear if proposed Project activities may involve activities that are jurisdictional under Fish and Game Code section 1602. CDFW recommends coordination with CDFW staff prior to ground-breaking activities on-site or submit a Lake or Streambed Alteration Notification to determine if the activities proposed are subject to CDFW's jurisdiction. Please note that CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement.

Additionally, Business and Professions Code 26060.1 subsection (b)(3) includes a requirement that California Department of Food and Agriculture cannabis cultivation licensees demonstrate compliance with Fish and Game Code section 1602 through written verification from CDFW. CDFW recommends submission of a Lake and Streambed Alteration Notification to CDFW for the proposed Project prior to initiation of any cultivation activities.

### **COMMENT 3: Fertilizers/Imported Soils**

**Issue:** Cultivation of cannabis requires a nitrogen-rich soil environment, and thus, many cultivators use fertilizers and imported soils to increase the nitrogen content of the local soils.

**Evidence the impact would be significant:** Nutrient enrichment can increase the abundance of pests and pathogens, and the use of imported soils can contain invasive plant or animal species that harm native biodiversity (Matson et al. 1997, Johnson et al. 2010, Butsic and Brenner 2016). Excess nutrients from fertilizers that run-off into watersheds can cause nutrient imbalances in the watershed that kill fish and other wildlife (NDIC 2007) and decrease the activity of aquatic species (Xu and Oldham 1997). Fertilizer run-off can also cause algae outbreaks, which, when they begin to decay, deplete the water of oxygen, suffocating fish and other aquatic life (Mallery 2010).

**Recommendations to minimize significant impacts:** Use organic fertilizers and avoid synthetic fertilizers. Minimize use of fertilizers in areas where it is likely they could run-off into watersheds.

### **COMMENT 4: Pesticides**

**Issue:** Cannabis cultivation sites often use substantial quantities of pesticides, including insecticides, and rodenticides, to discourage wildlife foraging on cannabis plants and to decrease damage to irrigation lines.

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**Evidence impact would be significant:** Wildlife, including beneficial arthropods, birds, mammals, amphibians, reptiles, and fish can be poisoned by pesticides after exposure to a toxic dose through ingestion, inhalation, or dermal contact (Fleischli et al. 2004, Pimentel 2005, Berny 2007). They can also experience secondary poisoning through feeding on animals that have been directly exposed to the pesticides. Raptors (e.g., hawks and owls) and mammalian carnivores (e.g., fishers) are some of the common victims of secondary poisonings by anticoagulant rodenticides (Mendelssohn and Paz 1977, Gabriel et al. 2015, 2018). Even non-lethal doses of pesticides can negatively affect wildlife; pesticides can compromise immune systems, cause hormone imbalances, affect reproduction, and alter growth rates of many wildlife species (Pimentel 2005, Li and Kawada 2006, Relyea and Diecks 2008, Baldwin et al. 2009).

**Recommendations to minimize significant impacts:** Minimize use of synthetic pesticides, and, when they are used, always use them as directed by the manufacturer including proper storage. Anticoagulant rodenticides should not be used at cultivation sites, particularly those that incorporate “flavorizers” that make the pesticide appetizing to a variety of species. Use physical barriers, traps, and organic pesticides to control pest populations around cultivation sites.

## II. Editorial Comments and/or Suggestions

### Mitigation measure **BR-2** Special Status Plant Species Avoidance and Minimization Measures, Page 34 and 35.

As currently drafted, **BR-2** states “If special status plant species, including, but not limited to, California jewelflower, Kern mallow, dwarf calycadenia, Hall’s tarplant, recurved larkspur, diamond-petaled California poppy, or San Joaquin woolly-threads, are identified within the proposed development footprint, impacts to these species will be avoided to the extent feasible.” CDFW recommends adding to the MND “special status plant species be avoided whenever possible by delineation and observing a no-disturbance buffer of at least 50-feet from the outer edge of the plant population(s) or specific habitat type(s) required by special status plant species.”

### Mitigation measure **BR-4** San Joaquin Kit Fox Protection Measures, Page 37

As currently drafted, **BR-4** states “the applicant shall clearly delineate the following as a note on the project plans: speed signs of 25 mph (or lower) shall be posted for all construction traffic to minimize the probability of road mortality of the San Joaquin kit fox”. CDFW recommends speed limits be 15 mph (or lower) to avoid potential impacts to SJKF.

To avoid take of SJKF due to “road mortality of the San Joaquin kit fox” as stated in MND **BR-4**, CDFW recommends consultation with CDFW to discuss how to avoid take

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or, if avoidance is not feasible, to acquire an Incidental Take Permit (ITP) prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081(b).

Mitigation measure **BR-5** Standard SJKF Avoidance and Protection Measures, Page 38 and 39.

As currently drafted, **BR-5 (2)** states “A maximum of 25 mph speed limit shall be required at the project site during project activities.” CDFW recommends speed limits be 15 mph (or lower) to avoid potential impacts to wildlife.

As currently drafted, **BR-5 (13)** states “During project activities and/or the operation phase, any contractor or employee that inadvertently kills or injures a SJKF or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to the applicant and County.” This statement indicates that take of SJKF may occur. CDFW recommends consultation with CDFW to discuss how to avoid take or, if avoidance is not feasible, to acquire an ITP prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081(b).

Mitigation measure **BR-7** Nesting Birds Protection Measures 1. Pre-construction Survey for Sensitive and Nesting Birds, page 40

As currently drafted, **BR-7 (1a)** states “A 250-foot exclusion zone shall be placed around non-listed, passerine species, and a 500-foot exclusion zone will be implemented for raptor species. Each exclusion zone shall encircle the nest and have a radius of 250 feet (non-listed passerine species) or 500 feet (raptor species).” CDFW Recommends that if in the event a fully protected raptor species is found within ½ mile of the Project site, implementation of avoidance measures is warranted. CDFW recommends that a qualified wildlife biologist be on-site during all Project-related activities and that a ½-mile no-disturbance buffer be implemented. If the ½-mile no-disturbance buffer cannot feasibly be implemented, contacting CDFW for assistance with additional avoidance measures is recommended. Fully addressing potential impacts to fully protected raptor species and requiring measurable and enforceable mitigation in the MND is recommended.

Mitigation measure **BR-8** Western Burrowing Owl (*Athene cunicularia*), Avoidance and Minimization, Pre-construction Survey for Burrowing Owl Page 40 and 41.

As currently drafted **BR-8(1)** states “The surveys shall be consistent with the methods outlined in Appendix D of the CDFW 2012 Staff Report on Western burrowing owl Mitigation.” CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortiums Burrowing Owl Survey Protocol and Mitigation Guidelines (CBOC 1993) and the Staff Report on Burrowing Owl Mitigation (CDFG 2012).



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If BUOW are found CDFW recommends adding to the MND mitigation measures “that if within the recommended buffers and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), exclusion is not a take avoidance, minimization, or mitigation method and is considered a potentially significant impact under CEQA. However, if necessary, CDFW recommends that burrow exclusion be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of 1 burrow collapsed to 1 artificial burrow constructed (1:1) as mitigation for the potentially significant impact of evicting BUOW. BUOW may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance, at a rate that is sufficient to detect BUOW if they return.”

Mitigation measure **BR-16** Annual Biological Resource Surveys. Annual Pre-activity Survey for SJKF, Special-status Small Mammals, and Burrow Mapping. Page 44.

Giant kangaroo rats (GKR) have been recently been documented in the vicinity of the Project. GKR populations in the Carrizo plain and near the Project have been expanding in the surrounding areas of the Project (Althouse and Meade 2017 and Hacker 2021, Pers. Comm.). As currently drafted **BR-16** states “throughout the life of the project, the applicant or project proponent must hire a qualified biologist to complete an annual pre-activity survey for SJKF and special status small mammal species (e.g., giant kangaroo rat) no more than 14 days prior to the start of initial ground disturbance associated with the outdoor grow sites to ensure SJKF and special status small mammal species have not colonized the area and are not present within the grow site areas.”

Due to the presence of GKR in the Project vicinity CDFW recommends focused protocol-level trapping surveys be conducted by a qualified wildlife biologist that is permitted to do so by both CDFW and the United States Fish and Wildlife Service (USFWS) to determine if GKR occur in the Project area. CDFW advises that these surveys be conducted in accordance with USFWS’s (2013) “*Survey Protocol for Determining Presence of San Joaquin Kangaroo Rats*,” well in advance of ground-disturbing activities in order to determine if impacts to GKR could occur.

**Land Conversion:** Project activities that result in land conversion may also result in habitat loss for special status species, migration/movement corridor limitations, or fragmentation of sensitive habitat. Loss of habitat to development and agriculture are contributing factors to the decline of many special status species and game species. CDFW recommends CEQA documents generated for cannabis activities address cumulative impacts of land conversion.

**Cumulative Impacts:** General impacts from Projects include habitat fragmentation, degradation, habitat loss, migration/movement corridor limitations, and potential loss of

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individuals to the population. Multiple cannabis-related Projects have been implemented and proposed throughout San Luis Obispo County with similar impacts to biological resources. CDFW recommends the lead agency consider all approved and future projects when determining impact significance to biological resources.

**Cannabis Water Use:** Water use estimates for cannabis plants are not well established in literature and estimates from published and unpublished sources range between 3.8-liters and 56.8-liters per plant per day. Based on research and observations made by CDFW in northern California, cannabis grow sites have significantly impacted streams through water diversions resulting in reduced flows and dewatered streams (Bauer, S. et al. 2015). Groundwater use for clandestine cannabis cultivation activities have resulted in lowering the groundwater water table and have impacted water supplies to streams in northern California. CDFW recommends that CEQA documents address the impacts to groundwater and surface water that may occur from Project activities.

## **ENVIRONMENTAL DATA**

CEQA requires that information developed in Environmental Impact Reports and Negative Declarations be incorporated into a database, which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special status species and natural communities detected during Project surveys to CNDDDB. The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

## **FILING FEES**

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs., tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

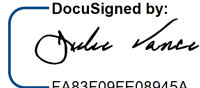
## **CONCLUSION**

CDFW appreciates the opportunity to comment on the Project to assist the county of San Luis Obispo in identifying and mitigating Project impacts on biological resources.

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Should you have questions regarding this letter or for further coordination, please contact Shannon Dellaquila, Senior Environmental Scientist (Specialist), by phone at 559-899-9758 or electronic mail at [Shannon.Dellaquila@wildlife.ca.gov](mailto:Shannon.Dellaquila@wildlife.ca.gov).

Sincerely,

  
FA83F09FE08945A...  
Julie A. Vance  
Regional Manager

ec: Shannon Dellaquila  
California Department of Fish and Wildlife

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