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Hearing Date: 12/12/2019

STAFF REPORT: CONSENT CALENDAR

Application No.: 5-19-1090
Applicant: California Dept. of State Parks and Recreation
Location: Crystal Cove State Park, 8471 North Coast Highway, Laguna Beach (Orange County)
Project Description: Habitat creation of eight approximately 50-ft. diameter seasonal pools for the benefit of Western spadefoot toads totaling approx. 9,800 sq. ft., and habitat restoration of 10.48 acres of adjacent upland coastal sage scrub and cactus scrub habitat for the benefit of coastal cactus wren along Moro Ridge within Crystal Cove State Park in Orange County.

Staff Recommendation: Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

The applicant is proposing to create a total of eight seasonal pools across three habitat restoration areas along the Moro Ridge and to restore approximately 10 acres of upland California sage and cactus scrub habitat within the San Joaquin Hills in Crystal Cove State Park within Orange County. The primary issue raised by the proposed activities is potential impacts to existing habitat and native vegetation and wildlife within the project area. As conditioned, Commission staff is recommending approval of the proposed project with three special conditions to minimize potential adverse impacts caused by the development consistent with the Coastal Act, including: 1) submittal of a final monitoring plan, 2) resource agency approvals, 3) submittal of a final plan for proper abandonment and termination of the program, and 4) submittal of a cultural resource treatment and monitoring plan.
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I. MOTION AND RESOLUTION

Motion:  I move that the Commission approve the Coastal Development Permit applications included on the consent calendar in accordance with the staff recommendations.

Staff recommends a YES vote. Passage of this motion will result in approval of all the permits included on the consent calendar. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution: The Commission hereby approves a Coastal Development Permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.
III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Revised Monitoring Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit for review and written approval of the Executive Director, a final detailed monitoring plan in substantial conformance with the submitted *Habitat Restoration and Monitoring Plan for Crystal Cove State Park Upland Habitat Restoration and Seasonal Pool Creation – Western Spadefoot (Spea hammondii)* prepared for Natural Communities Coalition by Land IQ, dated October 31, 2019, and *Expanded Monitoring Methodology*, dated November 5, 2019. A biologist qualified in the preparation of plans to restore coastal habitats shall design the monitoring plan. The revised monitoring plan shall at a minimum include the following:

   A. Provisions for monitoring of the restoration site in accordance with the approved final restoration program for a minimum of five years or until it has been determined that success criteria have been met or have failed to be met, whichever comes first.

   B. Provisions for submission of annual reports of monitoring results to the Executive Director for the duration of the required monitoring period. Each report shall document the condition of the restoration with photographs taken from the same fixed points in the same directions. Each report shall also include a “Performance Evaluation” section where information and results from the monitoring program are used to evaluate the status of the restoration project in relation to the performance standards. The performance monitoring period shall be five years. The final report must be prepared in conjunction with a qualified biologist. The reports must evaluate whether the restoration site conforms to the goals, objectives, and performance standards set forth in the approved final restoration program.

   C. If the final report indicates that the restoration project has been unsuccessful, in part, or in whole, based on the approved performance standards, the applicant shall submit within 90 days of the Executive Director’s written notice to the applicant of such failure to meet the performance standards a revised or supplemental restoration program to compensate for those portions of the original program that were necessary to offset project impacts which did not meet the approved performance standards. The revised restoration program, if necessary, shall be processed as an amendment to this coastal development permit.

   D. The permittees shall monitor and manage the restoration site in accordance with the approved monitoring plan, including any revised restoration program approved by the Commission or its staff. Any proposed changes to the approved mitigation and monitoring plan shall be reported to the Executive Director. No changes to the approved mitigation and monitoring plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.
2. **Other Agency Approvals.** Prior to construction, the applicant shall provide to the Executive Director a copy of each permit issued by the California Department of Fish and Wildlife, Regional Water Quality Control Board, US Army Corps of Engineers, the US Fish and Wildlife Service, and the State Lands Commission (hereinafter “other resource agencies”), or a letter of permission, or evidence that no permit or permission is required. The applicant shall inform the Executive Director of any changes to the project required by the other resource agencies. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

3. **Abandonment Plan.** By acceptance of this permit, the applicant agrees, on behalf of itself and future assigns, to implement an abandonment plan at the termination of the restoration program, or in the event that the proposed PVC pool linings begin to deteriorate or otherwise compromise the restoration efforts or the surrounding habitat, or if they become obsolete and are no longer useful and functional to the restoration plan. In such a case, the applicant hereby agrees to submit to the Executive Director a plan for the removal and disposal of the pool linings in an environmentally sensitive manner. Upon removal of the pools, the applicant shall restore the habitat to match the surrounding habitat; the removal of the pool lining and subsequent restoration effort may require an additional permit or a permit amendment.

4. **Cultural Resource Treatment and Monitoring Plan.** Prior to construction, the applicant shall submit for the review and approval of the Executive Director an archeological/cultural resources monitoring plan prepared by a qualified professional, which shall incorporate the following measures and procedures:
   
   i. The monitoring plan shall ensure that any prehistoric archaeological or paleontological or Native American cultural resources that are present on the site and could be impacted by the approved development will be identified so that a plan for their protection can be developed. To this end, the cultural resources monitoring plan shall require that archaeological and Native American monitors be present during all grading operations and subsurface construction activity that has the potential to impact cultural resources.

   ii. There shall be at least one pre-grading conference with the project manager and grading contractor at the project site in order to discuss the potential for the discovery of archaeological/cultural or paleontological resources.

   iii. Archaeological monitor(s) qualified by the California Office of Historic Preservation (OHP) standards, Native American monitor(s) with documented ancestral ties to the area appointed consistent with the standards of the Native American Heritage Commission (NAHC), and the Native American most likely descendent (MLD) when State Law mandates identification of a MLD, shall monitor all project grading and subsurface construction activity (such as trenching for utilities) that has the potential to impact cultural resources, as required in the approved cultural resources monitoring plan required above.
iv. The permittee shall provide sufficient archeological and Native American monitors to assure that all project grading and subsurface construction activities that has any potential to uncover or otherwise disturb cultural deposits is monitored at all times.

v. If any archeological or paleontological, i.e. cultural deposits, are discovered, including but not limited to skeletal remains and grave-related artifacts, artifacts of traditional cultural, religious or spiritual sites, or any other artifacts, all construction shall cease within at least 50 feet of the discovery, and the permittee shall carry out significance testing of said deposits in accordance with the attached "Cultural Resources Significance Testing Plan Procedures" (Appendix B). The permittee shall report all significance testing results and analysis to the Executive Director for a determination of whether the deposits are significant.

vi. If the Executive Director determines that the discovery is significant, the permittee shall follow the procedures in Appendix B to determine if an amendment to this permit is required. If an amendment to this CDP is required, development within at least 50 feet of the discovery shall not recommence until an amendment is approved, and then only in compliance with the provisions of such amendment.

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION AND LOCATION

In support of the recovery of the western spadefoot (Spea hammondii) and coastal cactus wren (Campylorhynchus brunneicapillus), the proposed project seeks to increase breeding, foraging and nesting opportunities through the creation of eight approximately 2,100 sq. ft. seasonal pools between 2 to 3.5 feet in depth depending on the substrate, and habitat restoration of 10.48 acres of adjacent upland California sage and cactus scrub habitat across the San Joaquin Hills in Crystal Cove State Park. Heavy equipment will be utilized for excavation and fine grading of the pools, and ingress and egress to the project sites will be on existing access roads.

The project site is within the San Joaquin Hills along the southeastern boundary of Crystal Cove State Park in Orange County. (Exhibit 1). The park consists of approximately 3,936 acres, which includes approximately 3 miles of beaches and tide pools, 1,400 acres dedicated to the Marine Conservation Area and underwater park, 400 acres of bluffs, and 2,400 acres of canyons.

Western spadefoot toads are a state Species of Greatest Conservation Need and is recognized by the California Department of Fish and Wildlife as Priority 1 (highest priority) Species of Special Concern and is currently under review by the U.S. Fish and Wildlife Service for listing under the Endangered Species Act. Already extirpated in much of its historic range in southern California due to loss of breeding habitat from urban and agricultural development, the recent increase in frequency of droughts in addition to changing fire regimes further exacerbate already challenging environmental conditions for the species throughout the region. Creation of new breeding sites and restoration of adjoining upland habitat for the terrestrial stage of the toad’s life in the coastal subarea is essential to the long-term conservation of the coastal population of the western spadefoot.
Coastal cactus wrens are obligate inhabitants of coastal sage scrub habitat and are one of three “Target Species” of Orange County’s Natural Communities Conservation Plan/Habitat Conservation Plan and in decline locally and regionally due to habitat fragmentation resulting from urban development and fire. Cactus wrens almost exclusively nest in prickly pear cactus (\textit{Opuntia littoralis} and \textit{O. oricola}) and coastal cholla (\textit{O. prolifera}), and by restoring coastal sage scrub and specifically cactus scrub in adjoining uplands, the proposed restoration efforts will enhance upland habitat quality on Moro Ridge for western spadefoot toads and provide nesting and foraging opportunities for coastal cactus wren territories as Crystal Cove State Park historically supported a number of coastal cactus wren that have yet to fully recover from the 1993 Laguna Fire.

Seasonal pools will be constructed to increase the amount and duration of water available for spadefoot toads that area already present in the proposed locations in the San Joaquin Hills. Larval development of the toads requires ephemeral pools to persist long enough to complete development, so increasing the water holding capacity of individual pools allows for longer periods of larval development resulting in larger juveniles with higher fat reserves at metamorphosis, equating to higher fitness levels and survivorship as adults. Western spadefoot toads require ponds to hold water for more than 30 days during breeding season, though they can benefit from hydroperiods as long as 80 days, which the ponds will be designed to accomplish. With reduced precipitation falling during winter months, the few, small existing pools (road ruts, relic cattle ponds from former grazing operations, and a few natural pools) are challenged to maintain long enough hydroperiods to allow the toads to successfully breed, further compromising the number of spadefoot toads present along the coast.

Potential seasonal pool creation sites on Moro Ridge were selected based on their proximity to known productive breeding pools, soil texture, topography, and vegetation composition. In locations where clay content in the soil is sufficiently high, a natural clay liner will be utilized, however, this has been specified for only two of the created pools. The remaining six pools will be constructed with an aquatic safe PVC liner, which will allow for reliable filling of the pools for spadefoot breeding. Created pools will be constructed in nonnative annual grasslands that include species such as \textit{Brassica nigra} (black mustard) and \textit{Centaurea melitensis} (tocalote) that have outcompeted native vegetation as a result of overgrazing and vegetation clearing for ranch and fire protection purposes. The final habitat restoration areas selected on Moro Ridge are identified as restoration areas A, B, and C (\textit{Exhibit 2 & 3}). Three pools will be created in Areas A and C (one small 30-ft. diameter, 700 sq. ft, and one large 52-ft. diameter and 2,100 sq. ft.), and two pools (one small and one large) will be created in Area B.

In addition, restoration sites were selected based on their proximity to adjacent upland habitat suitable for coastal sage scrub and cactus scrub habitat to provide opportunities for coastal cactus wren territories which have not yet fully recovered from the 1993 Laguna fire that negatively impacted sensitive avian species. All vehicular and restoration equipment transport to and from the habitat restoration areas will be made on existing access roads and trails. All habitat restoration areas are highly degraded and are vegetated with nonnative annual grasslands, and are also near the road; therefore no equipment will travel through existing native habitat to implement this project.
Coastal Act Section 30240(a) states that Environmentally Sensitive Habitat Areas (ESHA) shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Under section 30240(b), development that occurs adjacent to ESHA must be sited and designed to prevent impacts which would significantly degrade those areas, and must be compatible with the continuance of those habitat areas.

The 10.48 acres identified for upland habitat restoration and seasonal pool creation is classified as “Mediterranean California Naturalized Annual and Perennial Grassland Group (Weedy), dominated by nonnative annual grasses and forbs (e.g. *Brassica nigra* (black mustard), *Centaurea melitensis* (tocalote), *Raphanus raphanistrum* (wild radish), *Silybum marianum* (milk thistle), and *Sonchus oleraceus* (sow thistle). The adjacent existing upland habitat on Moro Ridge includes native vegetation indicative of xeric coastal sage scrub (e.g. *Artemisia californica* (California sagebrush) Alliance, *Baccharis pilularis* Alliance, and *Rhus integrifolia* or *Malosma laurina* Alliance). The Commission Staff Ecologist has reviewed the proposed project, and considers the project area, where the pools are proposed to be constructed and cactus scrub is to be planted, to be within highly degraded ESHA due to the presence of the large amount of invasive vegetation dominating the landscape, and adjacent to ESHA because of the presence of xeric coastal sage scrub surrounding the pools and restoration areas. Coastal sage scrub, in this particular area, is considered ESHA because it provides habitat for rare and especially valuable plant and animal life and it is easily disturbed by human activity and development. Therefore, since the work will occur within degraded ESHA and adjacent to ESHA, the project site must comply with Section 30240 of the Coastal Act. As discussed below, the project is consistent with Section 30240 with respect to both development in and adjacent to ESHA.

The purpose of the seasonal pool creation and habitat restoration is to create new breeding sites for the western spadefoot toad, which is recognized by CDFW as a Priority 1 (highest priority) Species of Special Concern. The restoration of adjoining upland habitat, which is essential to the long-term conservation of western spadefoot toad in the region, will also create new nesting and foraging opportunities for the benefit of the coastal cactus wren, which is a “Target Species” of concern for the county. Furthermore, advancement of pool creation has the potential to improve knowledge about the siting and building of seasonal pools in semi-arid environments. Such information can extend to other populations of western spadefoot toads in southern California, as well as other species dependent upon ephemeral pools for their long-term persistence (e.g. fairy shrimp, *Branchinecta* or California tiger salamander *Ambystoma californiense*) that may be challenged in the future as a changing climate affects natural seasonal pools. Finally, the proposed invasive plant removal and native plant species planting and recruitment will establish a more highly functioning ecosystem in the long-term by increasing the amount of space, water, and light for native vegetation to recolonize and restore the habitat, and allowing for more space for native species to propagate and thrive.

Resource dependent development, such as habitat restoration and nature study, is allowed in ESHA under the Coastal Act as a use that is dependent on the resource. Without the proposed project the highly invasive vegetation that has created the degraded ESHA would continue to proliferate and displace native habitat for native species, and there is evidence to suggest that the population of spadefoots that are targeted with this restoration effort may become extinct without the creation of the breeding pools. While the proposed project will disrupt the habitat temporarily, post-project,
the restored habitat will be of a much higher value to the wildlife and adjacent open space, and will be compatible with the continuance of the ESHA. The project enhances the quality of the existing habitat by including major coastal sage scrub and cactus scrub restoration.

The applicants submitted a detailed habitat restoration plan, entitled *Habitat Restoration and Monitoring Plan for Crystal Cove State Park Upland Habitat Restoration and Seasonal Pool Creation – Western Spadefoot (Spea hammondii)* prepared for Natural Communities Coalition by Land IQ, dated October 31, 2019, and *Expanded Monitoring Methodology*, dated November 5, 2019. To ensure that potential impacts to the sensitive species are avoided, the applicant is proposing to conduct all restoration activities and other disturbances such as pool construction or mowing to take place outside of bird breeding season from February 15 to August 15 for Migratory Bird Treaty Act protected species, and January 15 to September 15 for raptor breeding season. In addition, prior to the start of restoration activity, pre-work surveys will be conducted by a qualified biologist to document the location of occupied areas to avoid impacts to sensitive and protected species. The grading, construction and implementation of the restoration will not affect the public’s ability to access this area of the public state park.

Following construction, the applicant is proposing intensive monitoring of pool performance to be conducted by the University of California, Los Angeles (UCLA) and by the United States Geological Survey (USGS). Monitoring will track the water holding capacity of the pools and activity of toads across the pools utilizing various techniques and technologies. Intensive monitoring will continue for a minimum of three years, however long term monitoring efforts will continue to evaluate pool performance for water holding capacity until 2071. Long term, pools will be monitored to continue to evaluate pool performance, with regard to water-holding capacity, seasonal presence of spadefoot, together with precipitation patterns experienced across the region. The data collected will be evaluated to identify under-performing pools, which are described as those that do not hold water for more than 30 days during heavy precipitation years. Upon identification, underperforming pools will be evaluated for modification which could include removal or modification of the liner as part of the long-term commitment by the applicant and the landowner to manage the restoration of the site and recovery of the spadefoot toad in this location.

If the proposed restoration is not properly conducted and monitored, the restoration program could fail to meet the performance standards specified in the plan. Therefore, to ensure proper implementation of the proposed restoration, **Special Condition 1** requires the applicant to submit a monitoring report five (5) years from the date of the approval or the CDP and the final restoration program. If the report concludes that the restoration is not in conformance with or has failed to meet the performance standards specified in the restoration program approved pursuant to this permit, the applicant shall submit a revised or supplemental restoration plan for the review and approval of the Executive Director. **Special Condition 2** requires the applicant to comply with all permit requirements of applicable resource agencies. **Special Condition 3** requires that the applicant perform the proper abandonment of the pool linings in the event that they become obsolete or start to deteriorate. **Special Condition 4** requires submittal of an archeological monitoring plan to ensure that any prehistoric, archaeological or paleontological cultural resources that may be present on the site and could be impacted by the proposed development receive proper protections, preferably avoidance. With the Habitat Restoration Plan incorporated into the proposed project, and
as proposed and conditioned, Commission staff has determined that the project is consistent with Section 30240 because the created seasonal pools and will sufficiently protect against any significant disruption of habitat values, and the restoration related to invasive plant removal will be compatible with the continuance of habitat values.

B. HABITAT
As conditioned, the development is a resource dependent use, will not result in significant degradation of habitat, recreation areas, or parks, and is compatible with the continuance of those habitat, recreation, or park areas. Therefore, the Commission finds that the project, as conditioned, conforms to Section 30240(a) and (b) of the Coastal Act.

C. PUBLIC ACCESS AND RECREATION
The proposed development will not affect the public’s ability to gain access to, and/or to make use of, the coast and nearby recreational facilities. Therefore, as proposed the development conforms with Sections 30210 through 30214, Sections 30220 through 30224, and 30252 of the Coastal Act. The proposed development, as submitted, does not interfere with public recreational use of coastal resources and conforms with Sections 30210 through 30214 and Sections 30220 through 30223 of the Coastal Act regarding the promotion of public recreational opportunities.

D. WATER QUALITY
The proposed development has a potential for a discharge of polluted run-off from the project site into coastal waters. The development, as proposed, incorporates design features to minimize the effect of construction and post-construction activities on the marine environment. These design features include, but are not limited to, the appropriate management of equipment and construction materials, reducing run-off through the use of permeable surfaces, the use of non-invasive drought tolerant vegetation to reduce and treat the run-off discharged from the site, and for the use of post-construction best management practices to minimize the project’s adverse impact on coastal waters. Therefore, the Commission finds that the proposed development, as conditioned, conforms with Sections 30230 and 30231 of the Coastal Act regarding the protection of water quality to promote the biological productivity of coastal waters and to protect human health.

E. CULTURAL RESOURCES
Coastal Act section 30244 states that where development would adversely impact archaeological or paleontological resources, reasonable mitigation measures shall be required. As conditioned, the proposed development will not result in degradation of cultural resources. Therefore, the Commission finds that the project, as conditioned, conforms with Section 30244 of the Coastal Act.

F. LOCAL COASTAL PROGRAM (LCP)
Coastal Act section 30604(a) states that, prior to certification of a local coastal program (“LCP”), a coastal development permit can only be issued upon a finding that the proposed development is in conformity with Chapter 3 of the Act and that the permitted development will not prejudice the ability of the local government to prepare an LCP that is in conformity with Chapter 3. The Crystal Cove State Park has a certified Public Works Plan (PWP) that allows for general restoration projects to occur consistent with Chapter 3 policies. However, the proposed development and specific restoration project was not considered in the PWP, and consequently, the standard of
review is the Coastal Act. The PWP can be used as guidance and the project is consistent with the overarching principles and goals of the PWP. As conditioned, the proposed development is consistent with Chapter 3 of the Coastal Act and with the certified document for the area.

G. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
As conditioned, the project will not have any significant impacts on the environment within the meaning of CEQA and there are no feasible alternatives or additional feasible mitigation measures available that would substantially lessen any significant adverse effect that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.