California Native Plant Society

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RE: Comments on the DEIR for the Mid County Parkway.

Dear Ms. Bechtel,

Thank you for the opportunity to comment on this critically important Draft Environmental Impact Report for the Mid County Parkway Project. I am conservation chair for the Riverside-San Bernardino Chapter of The California Native Plant Society (CNPS). The CNPS is a non-profit organization of more than 10,000 laypersons and professional botanists organized into 32 chapters throughout California. The mission of the California Native Plant Society is to increase understanding and appreciation of California's native plants and to conserve them and their natural habitats, through education, science, advocacy, horticulture and land stewardship. The CNPS was very involved during the creation of the Western Riverside County Multiple Species Habitat Conservation Plan and has been very involved in the conservation of native plants in Riverside County for years. As for my own background, I am a professional botanist and plant restoration ecologist (1991 Ph.D. in Biology, Evolutionary Ecology Program, University of California Riverside). I am a co-author of the Flora of the "Santa Ana River and Environs, (Clarke et al. 2007, Heyday Press) and have over 20 years of research experience with California native plants. I also have have over 10 years of practical habitat restoration experience in western Riverside County (upland and wetland habitats) and have served on the Riverside County-City Arroyo Watershed Committee since its inception. I have published numerous papers on restoration genetics and population genetics of plants and how to use plants responsibly in restoration and revegetation and have co-taught nermerous workshops that deal with how to use native plants responsibly in restoration and revegetation projects. This was a difficult and long DEIR to absorb. It would have helped if the PDF files distributed to the public had been searchable.

In general, our Chapter supports the NO PROJECT Alternative because there are too many issues uncovered in the DEIR or with insufficient mitigation. In the interest of time, only a handful of our reasons are provided here.

GENERAL

Open space lands and conservation lands are supposed to be set aside for preservation of wildlife and habitat in viable conservation planning, not for future facilities. Similarly, lands mapped as being critical to habitat connectivity in an HCP or MSHCP agreement such as the Western Riverside County Multiple Species Conservation Plan (herein MSHCP) are not supposed to be used for development in a way that defeats their purpose and in a way where they were not considered during the planning phase. The road placement envisioned during the MSHCP process, and how it would affect wildlife movement and habitat was very

different from that proposed for the MCP. Conservation plans such as the MSHCP represent a major compromise between development interests and conservation. The MCP road project (in particular Alternatives 4 and 9) jeopardizes the trust of many conservation organizations that supported the concept of HCPs and MSHCPs in Riverside County. The MCP would fragment habitat that is central to conservation planning in Riverside County and severely degrade the lands invaded by major roads, especially in the sections of the Gavilan Hills where no developed roads exist currently and where it impacts the Motte Rimrock Reserve and other reserves. It is not obvious from the DIER (nor is it possible) how the addition of lands around Lake Mathews to the south in an area surrounded by busy roads and which are already designated criteria cells for improving corridors and core reserves through land addition could successfully mitigate the havoc created by bisecting other core reserves and areas meant to supply connectivity between major conserved lands south of Lake Mathews. It is also not true that scattered underpasses and culverts could sufficiently mitigate the barrier that the parkway would create to free movement of wildlife. Until there are real data collected from carefully designed experiments that actually document that scattered corridors and underpasses are used sufficiently by plants and animals to counteract the detrimental genetic effects that accumulate from fragmentation and inbreeding, it is premature to state that such structures mitigate the potentially significant impacts to a level of non-significance. The "equivalency analysis" that compares the effects of the road plans examined in the MSHCP relative to the alternatives in the MCP project is not convincing.

Just because the MCP doesn't overlay particular reserve lands does not mean those land would not be affected indirectly by cumulative factors. Each reserved is connected to another by way of corridor connections. When the connections are severed, the reserves are potentially affected (fragmentation issues). Also, effects of noise, air pollution, lights, roadkill, and off-road vehicles would not be only within the direct footprint of the MCP. All these factors would affect wildlife reserves negatively. For example, air pollution and nitrogen deposition affect the growth of invasive species (positive effects), beneficial soil microorganisms (negative effects), and native plants (negative effects) in ways that are complex and detrimental to native vegetation. Native vegetation is the core of valuable wildland habitat. Effects of ORVs are obvious and detrimental and these effects increase when new roads are cut through wildlands. ORV accessibility to open space and damage to open space increases dramatically. Invasive species increase along road routes significantly and spread out. Many species of wildlife have large foraging ranges that may traverse the MCP path and reserves. These factors should not be ignored and they have been well documented in the scientific literature.

The DEIR did not appear to address that there are many conservation lands in the form of easements and mitigated habitat that are owned by districts or individuals. Many of these conservation lands are conserved in perpetuity. For example, the Resource-Corona Conservation District owns and manages a 135 acre open space reserve that is west and adjacent to the Lake Mathews-Estelle Mountain Reserve lands south of Cajalco Road and easterly of Temescal Canyon Road. This reserve is shown as approved development on the map (Figure 3.2.1) rather than as habitat reserve. This land is part of the mitigation for the Dos Lagos development as per US Fish and Wildlife Service, Biological Opinion. Other areas that have become part of Riverside County's reserve system through land donations are also not depicted such as a major valley with riparian vegetation (sycamore woodland and alluvial fan scrub) and juniper woodland southerly of the junction of Cajalco Rd and Wood Road, and just south of the old Daily Ranch. There is also land designated as a future flood-right of way in Bedford Wash between Temescal Cn Road and the wash's confluence with Temescal Wash that includes mitigated wetland habitat and a 5-acre area slated to serve as wildlife habitat, flood protection, and water quality protection. This land sits directly underneath the planned MCP just south of Cajalco Road and east of Temescal Canyon Road. These lands have not been identified as to how the MCP could affect their habitat values and intended functions, either directly or indirectly through cumulative impacts. There are also many conservation easements along Temescal Creek near Cajalco Road and along Cajalco Creek. Large open space conservation lands near the Alternative 9 are part of the mitigation for developments in the Meade Valley area. These lands are not part of the MSHCP land acquisitions, but many occur in criteria cells and are important to the integrity of wildlife corridor connectivity and buffering of the core reserves. Their value and how they are impacted by the MCP should not be ignored.

As stated, for Alternatives 4, 5, and 9; L. Mathews South Segment (page 3.1-16): "The existing land use is primarily habitat reserve, with some low-density residential and rural residential uses. Constructing an MCP Alternative in these areas would introduce a major highway in these areas and its associated effects such as noise, vehicle emissions, and barriers to wildlife movement." Several of the most severe consequences in addition to barriers to wildlife movement include increased movement of invasive species into the area, increased access by off road vehicles into difficult to access reserve areas, increase road kill, and increased ignition source and fire danger. In addition, fuel modification along roadways would remove many square miles of vegetation and habitat, future reducing the wildlife habitat.

REVEGETATION AND FUEL MODIFICATION

The DEIR did not adequately cover the importance of using genetically appropriate native plant materials for the revegetation along the massive road cuts and fill areas through conservation lands and habitat corridors. This is an important mitigation measure and should not be ignored. The issue of fuel modification along roads was also not adequately addressed. State laws for fuel modification keep changing and expanding. Many thousands of acres of habitat could be lost to fuel modification along the roadsides and to the outside of the road right-of-way if a 100 foot fuel modification zone is required between habitat lands. In addition, there are plant species of exceptional value to wildlife habitat such as California sagebrush (an important species of sage scrub vegetation) that Caltrans Region 8 has been avoiding in revegetation plans along roadsides such as the 60/215/91 improvements where the highway traverses open space by UC Riverside, Quail Run Park, Sycamore Canyon, and associated MSHCP criteria cells. It was thought to be flammable. This extra loss of habitat and habitat value is a critical point and needs to be thoroughly analyzed and appropriately mitigated with additional land attached to the affected MSHCPs, HCPs, or any to the many other ignored conservation lands, including conservation easements (by law, the County Recorders Office is supposed to be indexing all Conservation Easements). It is not appropriate to defer analysis of these points to after certification of the EIR or to simply state that Caltrans will review revegetation plans.

Erosion control mixtures of plants for repair of construction paths and for roadside revegetation areas through wildland and open space areas need to be reviewed by experts in local native pants, local plant communities, and plant conservation/restoration genetics. The MCP traverses much wildland habitat and also serves as a potential dispersal corridor for plant seeds and pollen between fragmented habitat. It is important to understand what plants to use along each construction segment and how to use them so that the integrity of native plant communities can be retained as well as the genetic integrity of native populations with particular plant communities. This is important to the value of wildlife habitat and to provide populations with the potential to adapt to changing environmental conditions, especially in the face of rapid climate change. Only combinations of local plant species and their appropriate subspecific taxa should be used. Genetically local plant materials should be specified and materials should be certified, either thought an official California Crop Improvement Association program or through and internal carefully implemented documentation program. It will not be appropriate to come up with a general plant palette to use in all upland areas and one for wetland areas for the ease of construction contractors. There are many different habitats traversed by the MCP alternatives so it is important to use site specific plant palettes and to know how many of these plant palettes are needed. The area is too diverse for a few general plant palettes.

It is important to use genetically appropriate seed sources for the plant materials. Use of native plant cultivars is to be avoided because they do not reflect the genetic diversity appropriate for this region. There are very few official native plant germplasm releases appropriate for this region (see Rogers, D.L. and A.M. Montalvo. 2004. Genetically appropriate choices for plant materials to maintain biological diversity. University of California. Report to the USDA Forest Service, Rocky Mountain Region, Lakewood, CO. Online publication: http://www.fs.fed.us/r2/publications/botany/plantgenetics.pdf). A long-term program for use of regionally local populations for seed sources and a seed increase program for obtaining needed quantities of seed should be

conducted. The University of California Riverside worked with the Metropolitan Water District of Southern California to achieve a successful result for the Diamond Valley Reservoir wildlife corridors and repairs of construction sites within the Western Riverside County Multi-Species Reserve. Wendy Picht of MWD can be contacted for verification. Contracts for plant materials and the contractors that apply them would need to be written to be flexible as to the exact mixtures of container plants and seeds in different areas so that biologically sensible changes can be made depending on construction phase, construction area, and seed/plant availability (e.g., changes often need to be made when droughts cause problems with seed availability). Age of seed used can be species specific. Some species of plants have seeds that retain high viability for several years, others have short shelf lives of up to a year. Contracts should be flexible so that change orders for plant mixtures are simple, expected, and do not require extra expense.

Caltrans Region 8 has a professional team but it does not necessarily have the expertise to judge what plant palettes and populations sources of plants are appropriate for such a sensitive undertaking. As such, it should be required that Caltrans and the County utilize expertise from outside their agencies when actual expertise is lacking and funding should be provided for doing this. As a control, plant palettes and seed sources should be required to be reviewed by an outside expert or a scientific review committee, perhaps through a local university. Local plant species and regionally local seeds and plant materials need to be used for revegetation along all portions of the roadway that traverse wildland habitats, especially HCP, MSHCP and other reserve areas. Under no circumstances should non-native invasive species be allowed as landscaping or for erosion control. Always consult with local experts in addition to county for update of lists of species known to be invasive. Realize that an expert in weeds is not necessarily an expert in conservation genetics. Be sure that all areas of expertise are covered. There is an active Weed Management Area in Riverside as well as faculty and students that study invasive species at UC Riverside. There are botanists in this area that have vast knowledge of local botany. Andrew Sanders of the University of California Riverside (UCR) Herbarium is among them and he also studies invasive species. I emphasize, all plant palettes should be reviewed by experts—not just Caltrans and County personnel.

SENSITIVE PLANT SURVEYS:

When were the focused surveys for plants done? The year is often provided, but methods and months were not provided. The dates that surveys were conducted are extremely important to be able to adequately detect rare plants and census population sizes. In addition, if populations are small or non existent in some years, this influences the genetic effective population size downward. The effective population size is the most important for understanding the continued existence and evolutionary potential of populations, especially fragmented populations. I cannot evaluate if the surveys were sufficient from this DEIR. For example, the DEIR reports that Munz's onion and the Many-stemmed Dudleya were going to be surveyed in 2008, but no data were provided. This report was released in October 2008, so if the surveys had been conducted at the proper time of year (i.e., in the spring—not the summer, fall, or early winter), the data should have been made available. These surveys are required. In addition, the DEIR needs to provide evidence that the surveys were done properly and it has not done so. Were all the surveys done in good rainfall years (especially important for onions and annuals) and in right season to be obvious?

HYDROLOGY AND WATERCOURSES:

For Appendix Q and N-- what were criteria for GIS mapping watercourses/wetlands? What resolution was used? It appears that there were some major errors during what may have been "heads up" digitizing of watercourses for USACE wetlands in the figures used to provide data for analysis. For example, in Figure 10M

(a very sensitive area where the MCP would traverse some important conservation land), many of the non-wetland waters mapped were along ridges, not valleys. We can't trust the analysis if the data are not correct.

The map (Part III, Appendix Q, Figure 3A) showing potential mitigation areas is a huge overstatement of areas potentially available for mitigation. The map shows area of different probabilities for restoration that are outdated. It is currently difficult to find areas for wetland restoration and especially creation on private lands. I assure you that Jones and Stokes and other consulting firms know this well. The hydrology of the area is complex and some streams are being severely affected by changes in water use patterns (e.g. agriculture), changes in the amount of effluent released due, in part, to more recycling of water, and changes in the water table and aquifers due to uphill construction goofs. The development area around Wood Road and Cajalco Road has made big changes in water flow into Cajalco Creek in the past two years. Temescal Wash has been drying out along some reaches more than in past years—so that some areas are having difficulty supporting riparian vegetation. Much of the area along Temescal Creek that is shown as available for restoration is ALREADY undergoing restoration. The Riverside-Corona Resource Conservation District holds conservation easements over much of Temescal Wash from Dos Lagos golf course to about a half mile south of Weirick Rd, and north of Cajalco Road from just past the fire station to Joseph Canyon. Mitigation and restoration is already being applied to most of this area. There is not much room for more mitigation except for a section along the east side of the wash from Cajalco Rd to the first golf course bridge on SE Corporation land, and areas south of Lee Lake water district near Dawson Cn. There are also current mitigation restoration projects along Cajalco Creek that should be removed from this map. Please contact Kerwin Russell of the RCRCD for details.

The DEIR also did not adequately address how the building of the road might affect the hydrology of wetlands and ephemeral drainages OUTSIDE the footprint of the MCP. The DEIR states "Alt 9TWS CV and other MCP alternatives included crossing of drainages. Alt 9 would not result in realignment but for Alt. 4, 5, 6, and 7 would result in impacts to Cajalco Creek near Wood and Alexander. Cajalco Creek would be realigned and channelized. During large storm events, high flows would likely scour a new thalweg within the new confined creek alignment. Therefore impacts related to drainage and erosion at Cajalco Creek under alts 4, 5, 6, and 7 would be significant and could not be mitigated to level of non-significance." How might this affect restoration and mitigation projects that are already in place or approve along Cajalco Creek, especially between Wood Road and Alexander Road?

The DEIR did not appear to address how the construction of a major road through the path by Alternative 9 could affect the overall hydrology of downstream habitats. Currently, construction of water quality basins and housing developments has caused changes in ground water flow in the vicinity off Wood Road and Cajalco Road. The EIR needs to address how the exceptional quantity of grading and filling for construction of Alternative 9, especially where it crosses headwaters of watercourses, could affect downstream areas. If the construction affects underground water, downstream or down slope ephemeral drainages, intermittent or perennial streams, riparian areas such as those at Olsen Canyon and even Cajalco Creek could loose flows critical to supporting wetland vegetation communities and the wildlife that depends on the water.

Sincerely,

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