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Dear Mr. Bennett:

Thank you for the opportunity to comment on the scope of the EIR for the above referenced project. I have several comments regarding the August 13th NOP.

SUBSEQUENT EIR/BASELINE. Page 3 of the NOP says that, pursuant to section 15162, "[S]ubstantial changes are proposed" in the project resulting in one or more "new significant environmental effects." In fact, the original, 15 year-old EIR for the golf course included a sand mining project as an alternative, but that alternative was rejected by the Board as not fulfilling the purpose and need for the project, and not being environmentally superior. The "purpose and need" for this project is different from the golf course project. Not only is the purpose and need different, but the location is different. The previous project would have occurred on 460 acres. The proposed project occurs on 530 acres. Thus both the purpose of the project and the project site differ. It is not clear why a subsequent EIR was the choice, rather than an entirely new EIR.

Normally, the reason to prepare a subsequent EIR rather than an entirely new EIR is that the amount of documentation that the public and the decision-maker must wade through is reduced. Streamlining is desirable, but it is questionable if that will be accomplished in this case. Instead, the public and decision-makers must refer to a lengthy 15-year-old document for a different project on a different footprint, and try to determine how that analysis relates to the current analysis and what has been left out. It is unclear that this approach streamlines anything; on the contrary, it seems to lengthen and complicate matters, making a comprehensible consideration of the impacts of this project almost impossible.

This issue may also be relevant to considerations made in the determination of baseline. However, case law indicates that the hypothetical water consumption of approved but not constructed development does not constitute an appropriate baseline. This would be true whether the project is addressed in a subsequent EIR or an entirely new EIR. For this project, regardless of the type of EIR, the golf course level of water consumption is not an appropriate baseline. "Current conditions" is the appropriate baseline. Indeed, the water consumption associated with the golf course is one of the reasons that project failed. Subsequent to the previous EIR, the project was modified to bring in treated sewer water to try to salvage the project. Water issues, expenses and complications associated with the project resulted in its failure and subsequent law suit.

The EIR for the golf course indicated that impacts would be mitigated to below a level of significance. However, that mitigation never occurred. Some of the impacts have been exacerbated over time, and some have been mitigated on their own, but the fact that mitigation was never implemented should be considered. It is difficult to see how treatment of this project under a subsequent EIR does not amount to "piecemealing" of projects, to allow impacts to occur under one guise, and then switch the project to a completely different project.

PRE-EIR MISINFORMATION AND TERMINOLOGY. People can use any name to which they are legally entitled; however, "Nature Reserve" seems a misleading name for a sand mining consortium. Furthermore, misleading terminology was used by the project proponents during months and years of aggressive pre-EIR publicity. For example, all sand mining projects must have a reclamation plan, but for this project the as yet unwritten reclamation plan was described as "restoration" back to "pre-dam conditions."

"Restoration" implies returning a site to its previous biological function. Given the pre-EIR information and publicity, the historic condition of the site should be evaluated to determine if the proposed project will reflect pre-dam conditions. Pre-dam conditions included continual sand input into the system, which has now been stopped. It did NOT include mining pits, lined with impermeable yellow-fill. Pits meeting the needs of sand extraction and yellow-fill disposal are a constructed system, not a natural system, even if native cattails are planted on the benches. The misleading term "restoration" should be deleted from use in CEQA documents if the project is not returning the site to a previously naturally existing system.

New terminology for disturbance was coined in the pre-EIR publicity materials. Virtually all of San Diego County has been subject to anthropogenic disturbance and supports non-native species, even in highly valued habitat areas. The word typically used to describe such habitat areas is "disturbed." The pre-publicity on this project called the site "degraded in the extreme," a description that appears to be both inaccurate and unique to the pre-publicity for this project. The pre-publicity materials that were sent to agencies and advocacy groups provided maps suggesting that the site is devoid of habitat value.

The site has in fact been subject to prior disturbance, as has virtually all of San Diego County, including parts of the County with very high habitat values. For example, some valuable vernal pool sites were previously in agricultural use. Furthermore, river habitats are disturbance-adapted habitats, making them especially resilient. However, the pre-publicity in essence served as a preliminary environmental impact report concluding that there would be only a few short-term, negligible impacts, but that project would have long term benefits. Given this description, and given that this question of short term and long term impacts/benefits is one that must be addressed in CEQA documents, this EIR should impartially address this issue. There are two parts to the issue: 1) is it really a "short term" impact with a "long term" benefit, and 2) is it a long term benefit at all.

With regard to question 1, the pre-EIS information describes impacts as "short term." When the project was previously proposed, with the reverse osmosis component, it was "only" going to be for 8 years of operation. Now it is supposedly for 15 years. In what context is a 15 year impact considered short term? While certain activities are often described as "temporary," when they

have a finite term measured often in months, it is not common practice to qualify the impact by the expected life of the development. On the Internet, I visited a real estate site that had a raging debate going about realistic life expectancy of a condominium development, and had numbers ranging from 30 to 80 years. Would a residential development with a 30 year life expectancy be considered to have "short term" or "temporary" impacts? I've seen several EIRs for landfill expansions providing a dozen years or so of capacity, but have not seen even the traffic impacts of such a twelve year project described as "temporary." Furthermore, staff has said in public meetings that they understand that once a permit is issued, it is very likely that additional permits will be issued, and the project will continue beyond 15 years. Without a permit sunsetting in 15 years with some enforceable provision assuring there is no possibility of renewal, suggesting that any of these impacts will last only 15 years is unrealistic. Additionally, many of the impacts are permanent. For example, once the sand is removed from the riverbed, its water holding capacity will forever be lost and the aquifer will be forever altered.

For the proposed project, will there be a permanent impact on water resources as a result of increased evaporation and lowering of the water table? How will the termination date proposed be enforced, and by whom? Is "short term" an accurate description of the nature of the impact, or will in fact, the project site be permanently altered? Will agricultural uses return to the site? The project description lists a permit expiration of 2035. I am 54 years old right now. I will be 74 years old in 2035. I will be directly impacted by the project. Needless to say, I do not consider this a short term impact.

With regard to question 2, is the proposed reclamation with yellowfill-lined pits, permanently altered landscape, existing systems completely removed, and replaced with holes that have standing water, is that outcome, should it happen exactly as described in the optimistic planning for this project, environmentally preferable to the existing habitat and wildlife corridor and thus a "benefit"? A realistic comparison with other southern California river valleys should be made to determine the habitat value of a disturbed system such as this. For example, Tijuana Estuary is a National Estuarine Sanctuary. Substantial grant money has been spent removing non-native species. No disturbances such as grading for a golf course have occurred. Yet the riparian corridor at Tijuana Estuary may be comparable to the one on the San Diego River in El Monte Valley in that it supports many nonnative species, including tamarisk. The presence of non-native species and the fact of previous disturbance do not remove the value of an area – if it did we might have no important preserve areas at all in the County. A comparison of species richness, diversity, support of rare species of the project site with other comparable Southern California river valleys should be made to provide an accurate appraisal of the value of the existing wildlife corridor. The descriptions in the pre-EIR publicity should not be repeated without fresh evaluation.

AGGREGATE IMPACTS. SANDAG's San Diego Region Aggregate Supply Study identifies and evaluates aggregate resources for transportation projects. Sand mining interests, such as Crystal Howard of EnviroMINE, Inc, which is working on behalf of the project proponents of this project, and Michael Beck from the Endangered Habitat League, a partner of the proposed project, served on the advisory committee for SANDAG's study. On page 6-6 the study provides recommendations for providing a more positive image of sand mining, an unusual

component of a resource study. The study seems almost intended to promote this project, which it mentions specifically. While it is not a CEQA matter to address the potential conflicts of interest of the preparers of government planning documents who are also project proponents with a financial interest in a project, it is a CEQA matter to consider planning documents, and it is relevant to consider if those planning documents are appropriately objective.

Despite the proponents' involvement in the study, the study found that there are "ample sources of the necessary rock to meet the anticipated future demand," although El Monte's resources are desirable fine sands (whereas beach sands are, per the study, too fine). Furthermore, the graphs within the study show steadily declining annual use of aggregate since 1999, perhaps as people use materials other than aggregate, which has one of the highest greenhouse gas impacts of any construction material. So although the study concludes that aggregate for transportation projects is in great need in the County, there may be other interpretations of the findings.

According to the SANDAG study, the average size of a sand mine in San Diego County is 150 acres, including undisturbed lands and setbacks. The study also identified the goal of extending the life of existing mining operations. The proposed project is significantly larger than the average sand mine. Would this proposed large sand mining project have economies of scale that would put existing, smaller operations out of business? Would this result in impacts associated with premature closure of existing facilities, contrary to the environmental goals of the SANDAG study and local plans to protect a 50-year supply of aggregate? Would it thwart the recommendation to research the "viability of establishing smaller aggregate sites" with short trip distances? Would the project result in environmental impacts associated with the waste of remaining aggregate resources after operations are suspended after "only" 15 years of mining?

The first goal of the project is to "maximize the recovery of a wide variety of construction aggregate in a safe and efficient manner." Does the 15 year term of the proposed mining operation conflict with this goal? Does the production of inexpensive virgin materials from a massive mining operation with excellent economies of scale promote the waste of recyclable aggregates, such as demolition debris and materials dredged from drainages and from behind dams? If the project does not meet the financial expectations that are considered necessary to support reclamation, will the project continue beyond 15 years?

How often are reclamation plans implemented without being altered? How often are reclamation plans successful?

Would this proposed project keep the price of virgin materials low so that it continues to be uneconomical to recycle demolition concrete and materials dredged from drainage channels and from behind dams, as reported the SANDAG study? Would this project contribute to the exportation of aggregate from San Diego to Riverside, as reported, but not quantified, in the SANDAG study? How much sand is currently being exported from San Diego to Riverside? Would this project increase exports from Southern California to Asia via the Port of Long Beach? How much aggregate is shipped out of the Port of Long Beach? Would this project result in cumulative impacts and environmental justice issues with one area, Lakeside, hosting more than a third of the extraction facilities in the County?

LANDUSE. The pre-EIR materials assert that the project is consistent with planning documents such as the San Diego River Master Plan, County Trails Master Plan, Multiple Species Conservation Plan, County General Plan, Lakeside Community Plan, Tricolored Blackbird Conservation Plan, and County Climate Action Plan. Indeed, the project proponents have spent years entering the project into as many planning documents as possible. While the appropriateness of project proponents using influence and position to prepare planning documents and a land use framework that specifically favors this project may be beyond the scope of CEQA consideration, the appropriateness of using these documents to determine the significance of impacts of the project is certainly relevant. Will these planning documents still provide unbiased overriding goals that the project may be inconsistent with? For example, would the project divide the community in the Valley, making exchange between residents on the north with residents on the south difficult? Would the project be consistent with overall goals of reducing carbon emission if it promotes development using high carbon emission cement dependent on massive mining of virgin aggregate? Would the project be consistent with Lakeside Community Plan's circulatory goals with the proposed traffic on El Monte Road and Lake Jennings? Would the project temporarily or permanently change the existing agricultural land uses of the Valley? Would the proposed project be inconsistent with existing horseback therapy programs in the Valley that serve children with disabilities? Would the project be consistent with the mission statements of all of the river conservancies to prepare a recreational area along the San Diego river for the enjoyment of the highly important, scenic San Diego river? Is putting trails through a construction site, boxed between a berm and a roadway, with no access to the river consistent with planning documents, goals, objectives and mission statements?

Much has been made of the zoning of the site, and also the potential for CEQA related impacts associated with building over the top of aggregate resources. It is not known at this time what alternatives will be proposed, but would any alternative place a development over the top of the sand in the floodplain? If not, wouldn't all alternatives be consistent with the zoning?

Would agricultural uses be impacted by the proposed project? With farm-to-table curricula becoming important, and "local sourcing" an issue, how important is this area as an agricultural and educational resource? How sustainable is oat hay production in the Valley – considering the inputs and irrigation and transportation impacts of alternate fodder sources. How would the project impact the educational activities conducted by the local schools in the Valley? How would it impact the programs for children conducted by the diary? What historical agricultural uses occurred here? Is agricultural use a long term benefit that would be destroyed by a short term gain?

Have any Native Americans groups been contacted? Local residents have found arrowheads and other artifacts in the project area. Are there any important archeological sites in the area?

HAZARDS. Mining operations cause high levels of noise and vibration, which can lead to safety hazards. Would vibrations caused by mining and processing equipment and trucks increase risks of liquefaction for surrounding residents? Would it result in destabilization of boulders above the riverbed? Would it have an effect on the dam? Would it have an effect on the reptiles of the Valley, and other organisms that are especially sensitive to noise or vibration?

Excavation associated with mining operations can expose natural and man-made contaminants. The footprint of the operations includes an existing hazardous materials dumpsite, the documentation for which is available in Helix Water District files and has been discussed in public meetings. Would mining in the footprint of a hazardous materials disposal site expose the air, ground and/or surface water to contamination? Is there is a plume of nitrates below the surface of the Valley associated with the dairy? Would excavation in the vicinity of the dairy expose the air, groundwater, or surface water to contamination from the dairy? Will the loss of the sand's filtering abilities expose surface or ground water to contamination from dairy waste or chemicals from the dump site that exists within the extraction footprint?

Are there naturally occurring constituents of the subsurface that would be dislodged and result in contamination of the air, ground, or surface waters? How frequently does this happen, and does pre-mining coring always identify such hazards? Are there residential, recreational and agricultural uses surrounding the project site that rely on the groundwater resources that would be impacted by the project?

EPA regulations for reservoirs require that they be covered to protect water from contamination in runoff. Helix Water District treats the water before it distributes it, but local residents do not treat their well water. Would exposure of the groundwater to the atmosphere remove the filtering capacity of the existing overlying sand, thereby exposing the aquifer and downstream surface water to contamination?

The project would include heavy trucks on a narrow country road that has no shoulder or sidewalk. Bicyclists, equestrians, walkers and joggers frequently use this road. The project would occur within an existing wildlife corridor. It is not uncommon to have to stop on this road and wait for a covey of quail to wander across. What provisions for wildlife crossings, pedestrian, equestrian, and bicycle safety are proposed? Would heavy traffic in this location fulfill the goal of "safely" extracting resources?

With regard to the safety of this project, the project is going to have significant traffic impacts on El Monte Road. El Monte Road is one-way in and one-way out for residents and recreational users. The valley is prone to both fires and floods, and is in the dam failure zone. Residents have themselves and livestock to evacuate, often on very short, or, in 2003, with absolutely no notice what-so-ever. Having evacuated horses from the Valley in 2003, I can only imagine how much worse the situation would have been if I had been threading my horse trailer past sand trucks on the one and only road out of the Valley. Would the project impact evacuation routes or otherwise exacerbate the fire and flood hazards for residents and recreationalists? Would it delay emergency response time into the Valley?

One of the most common recreational uses in the valley is boating on the reservoir. Drivers of trucks and SUVs pulling power boats using El Monte Road are not generally characterized as unusually patient drivers. Indeed, most drivers find themselves in a hurry from time to time. When they pass slower-moving vehicles on rural county roads, they pose a special hazard – not only to other drivers, but also to equestrians and bicyclers enjoying the gentle grade of this scenic roadway. What threat will be added with slow, heavy, sand-laden trucks? Has the special nature of the existing uses of the roadway been considered? Will one of the potential mitigation measures be putting half of the traffic on Willow Road?

The proposed project would establish pits that are 90 feet below the current grade. The dam occasionally releases flood flows during storm events in years with heavy rain. Natural flows and flows exacerbated by release from the upstream reservoir tend to level out topographic features in the Valley, historically resulting in braided streambed through a broad sand flat, with regular modifications of the river course. Benches graded by the proposed project would likely be modified during flood events, and sediment from higher areas would likely fill ponds. Without hardening the entire Valley, how does the project propose to prevent the Valley from restoring itself naturally, thus eliminating the artificial features claimed to be "restoration"? Without continuing input of sediment from the dam, would flood flows scour upland areas toward the pits? What hazards could result from project-related erosion within the floodplain?

The proposed plan would dispose of 5000 cubic yards of unusable yellow-fill in the pits. Some estimates are significantly greater for the amount of yellow-fill that may be present. Would the stagnant water in the yellow-fill and debris-lined ponds raise the population of mosquitoes above existing levels, even if non-native, invasive gambusia are introduced? If so, what threat would diseases carried by mosquitoes pose to bird life, other wildlife, domestic animals, livestock including horses, and humans?

The pre-EIR materials assert that there is no threat of asbestos or other health hazard associated with expected emissions. What emissions would be associated with mining equipment, trucks, processing equipment, PM_{10} and other particulates, and would there be any dangerous components, such as hazardous materials in the known hazardous waste disposal site located within the proposed excavation footprint, that would become airborne and cause health problems to wildlife, domestic animals, livestock, humans, including sensitive receptors at the park and school immediately west of the project site? In evaluating Valley Fever, which is known to occur at the site, will the impacts on wildlife and domestic animals be considered as well as impacts on sensitive receptors and the human population in general? How will the children with disabilities who come to the Valley for horseback therapy programs be affected by the dust and noise of the proposed project? Is excavation of a site known to support Valley fever consistent with the goal of providing "safe" resource exploitation?

Would the proposed habitat add fuel in the case of fire events and would it be consistent with the function of the area as a floodway? This project will increase demand on regional water supplies over existing conditions, including those needed for emergencies such as fires. What effect will the project have on public safety?

NOISE. A 1,300 foot setback from residential areas is considered in the County's guidelines to mitigate noise. Receptors that are higher than a noise source often experience less attenuation over distance than those at the same level or below. Would to proposed 100 foot setback in this bowl-shaped Valley, in which sound travels very well, be sufficient to mitigate noise impacts to surrounding residents and recreationalists? Would it be consistent with planning documents? Would it result in impacts to livestock and domestic animals, and birds, dogs and exotic animals that may be raised by local residents? What effect will it have on surrounding wildlife, such as least Bell's vireos and gnatcatchers? Have "pre-impact" day and night sound monitors been established to estimate mammal and amphibian activity as a baseline in advance of the proposed work? Will post-impact monitoring be done? If post-impact monitoring shows a significant

impact on the natural sound levels, basically muting the bird, bat, insect and amphibian calls, what mitigation will be possible after the fact?

What is the existing "soundscape" of the Valley? What effect would the presence of an industrial site have on the behavior of horses when they are being ridden in the Valley? What effect would the project have on the therapeutic riding facilities that are located in El Monte Valley, facilities that cater to children with disabilities?

WATER. The SANDAG study, in describing sand mining in El Monte Valley, highlighted wastewater purification and recharge of the eight-year project. The project is now a 15 year project with no recharge. The SANDAG study describes an "effort to develop a new, permanent water supply source by augmenting the water in the El Monte Valley underground basin with highly purified, recycled water." However, as proposed, instead of recharge, the current project is expected to directly consume 132 acre-feet of water per year. In addition, it would expose the ponds, that are reclaimed from the mining pits using yellow-fill and other materials that are not acceptable for cement production purposes, to evaporation. In addition to direct use of water for dust suppression and aggregate processing, the project would result in losses resulting from evaporation and from physical processes that may drop the water table once the sand overlying bedrock is removed. I have heard a description of an underground dam that holds water in the basin for use by local wells that would be destroyed by this project, as would the water-holding properties of the sand.

The project proponents for the golf course, which are the same proponents for the sand mine, showed their complete lack of understanding of the existing, natural hydrology of the San Diego River, and in fact most natural Southern California rivers, but installing "silt fences" after conducting grading operations - to keep sand out of the riverbed. The measure was an unwarranted expense, showing complete lack of understanding of the fact that the "river" is located 40 feet below grade, and is covered with 35 to 40 feet of sand. The silt fences were an inappropriate mitigation measure. They were not effective at preventing any sand from returning to the riverbed; however, that is not a bad situation, since the natural condition is a shifting course through a sand flat. Over time, the plastic fences have blown here and there. The waste has never have been collected. The plastic has done nothing but cause plastic pollution. It has not prevented the sand from moving during rain events, as it naturally does in such a system. The fact that these project proponents would leave the land graded and un-restored, and would leave plastic silt fence to cause plastic pollution in a wildlife corridor, suggests the level of responsibility that can be expected. This is pertinent when considering how effective and prompt the mitigation measures proposed by the project proponents will be.

Since the previous EIR was certified, the State has undergone a significant drought period. The State legislature has enacted legislation requiring protection and regulation of groundwater resources. This aquifer is mapped as one of the aquifers requiring regulation. The City of San Diego oversees El Capitan reservoir, located at the head of El Monte Valley. The City also oversees San Vicente, and other major local water infrastructure. The City has commented on activities at Hanson Pond that may have an impact on the aquifer. It is not clear from the State legislation which agency will be responsible for regulating groundwater in El Monte Valley. That entity should be one that has the best interests of the aquifer as its primary concern, and

should not be tied to a particular project in any way. In some areas of California a county government is exercising such control, but that may not be appropriate here, given relationships with the City and with the San Diego County Water Authority.

How does the new legislation alter what is considered an appropriate use in a mapped aquifer? How do agencies with the best interest of the aquifer influence land use decisions in El Monte Valley? Which agencies have authority? Who has rights to the water? How much water does the County use? How much water does Helix use? How much water do local residents use? What has the groundwater table looked like overtime? Is it currently being overdrawn? What is the quality and what has the trend been in water quality? What effect on water quality and quantity would the project have? What recourse would people have if their wells are ruined? What will that do to the recreational, residential, and agricultural uses in the Valley? How would hydrological alterations impact biological resources, habitats, and surrounding residential and agricultural wells? If impacts on local wells and septic systems are mitigated with piped water and municipal sewer connections, what effect would that have on likely densification and development of the surrounding areas after reclamation is complete? Would the project have a permanent impact on water resources in exchange for short term benefits associated with sand mining?

BIOLOGY: Ideas about proper stewardship of biological resources change over time. At one time deserts were considered wastelands, nothing but a good place for mines and other destructive uses. Now, although the value of the fragile system has better appreciation, deserts are still often seen as the perfect place for destructive energy facilities. Wetlands were once considered disease-ridden problem areas, and people were encouraged to fill them in. Now people are encouraged to take perfectly functioning upland habitat and turn it into wetland, even in places where no wetlands ever naturally occurred. Biologists caution that created wetlands have limited values compared to natural wetlands, but the regulations try to compensate by merely upping the ratios. Similarly, at one time people were encouraged to plant trees in places where trees never naturally occurred. People planted tamarisk like crazy. Now land stewards aggressively remove tamarisk, even when it is being used by wildlife, and even with the approach of a beetle that selectively feeds on and destroys tamarisk. Has an estimate been made about when biological control for tamarisk will arrive in this area? Have studies such as this one been considered? http://www.sciencedirect.com/science/article/pii/S1049964409001170

As explained in this article about kudzu http://www.smithsonianmag.com/science-nature/true-story-kudzu-vine-ate-south-180956325/?no-ist our thinking about biological stewardship is often more dogma than science. Under CEQA, complying with regulatory structures may or may not mitigate impacts. A thorough, unbiased consideration of environmental impacts is intended to guide decision making and encourage effective mitigation and/or environmentally superior alternatives.

Salt flats, mud flats, and sand flats provide distinct soil parameters that are important to wildlife. The project proponents might see such habitat types as "denuded," but they are in fact important biological resources. Soil organisms often have very specific moisture and nutrient requirements and have different tolerences for toxic materials. Soil organisms are often highly interdependent, so that different life forms may provide critical benefits of biomass production and nutrient

cycling on the site. There is a fungus, for example, that is specific to the understory of mature oak trees, such as those in El Monte Valley. Has the unique soil biota of the Valley, including legless lizards and unusual soil organisms, including a phosphorescent earthworm and numerous important fungi, been documented? What is the role of plant residue decomposers and mycorrizal fungi in the existing system? The existing substrate will be processed into cement, will it be reproducible? What effect will the project have on invertebrates and on nocturnal organisms, including night insects, bats, and amphibians? Does the sandflat support arroyo toads? Did it in the past? What are the requirements for arroyo toads, and has this type of habitat been declining over time?

In the pre-EIR publicity, the project proponents plan to introduce tricolored black bird habitats in the mining pits. Tri-colored blackbirds may in fact be a native species that can exist in a manufactured system. Rice paddies in the Central Valley have, when managed properly, provided enough simulation of that region's tule marsh habitat to support tricolored black birds. Tri-colored blackbirds have been documented at a San Diego landfill. However, other mining pits, such as the 197 acre pit reclaimed for the Otay Valley Quarry Reclamation Plan have not been suitable, nor has Hanson pond.

Hanson pond is not suitable for tricolored blackbirds because it only has a fringe of cattails around the sides, and then plunges quickly into open water. Triolored blackbirds require a wider area of shallow water – at least 100 feet wide – in order to be sufficient for colony establishment. Therefore, unless Hanson Pond is significantly modified, it cannot serve as Ticolored blackbird habitat.

In considering the relative value of the site as tricolored blackbird habitat, there are a few pertinent questions. Was the site ever tricolored black bird habitat? Does the region support a significant percentage of the extant population of the species? Is a yellow-fill lined pit, with introduced, invasive gambusia to mitigate mosquito populations, a healthy and appropriate habitat for tricolored black birds? Will the topography of the pits be sufficient to provide the shallow, cattail marsh required for colony establishment? Is this topography consistent with other habitat requirements, flood control requirements, and other purposes of the site? Will the pits attract not only mosquitoes, but also bull frogs? How effective are gambusia at reducing mosquito populations? Are gambusia themselves an invasive non-native" What effects would bullfrogs have?

The "Restoration Overview" distributed by the project proponent claims to benefit the very species the project would impact. It lists Cooper's hawks and other residents of the Valley. Unfortunately, there are no assurances that yellow fill-lined ponds will provide habitat for these species. Nearby Hanson's pond has not been mined in many years, yet these years of restoration opportunity that have not been fulfilled. The pre-EIR information claims to benefit the very species that will be impacted. The EIR should assess the actual impacts, and correct misunderstandings based on pre-EIR materials. Have other aggregate reclamation projects been successful at creating the habitats this project proposes?

Will dust control efforts, sand washing, and other water uses at the site attract Argentinean ants, which would then out-compete native ants? Would this be a further impact to the horned lizard,

in addition the grading and removal of habitat and of existing individuals of the species? Would workers be likely to "take" individuals if they found them? What impact would direct "take" of wildlife such as lizards and snakes by workers have?

Most river corridors serve as wildlife corridors. Does the existing Valley serve as a wildlife corridor? Would the proposed project convert the existing wildlife habitat to industrial use? What provisions would be made to provide a wildlife crossing for amphibians, reptiles, birds, mammals, insects, and other animals crossing El Monte Road? Will wildlife also flee the site to the north, increasing mortality with existing traffic on that road, and necessitating a wildlife crossing for Willow Road, as well?

The project would produce an estimated 5,000 cubic yards of unusable fines, also known as yellow-fill, to be deposited in these pits before they are "reclaimed." How effective is silt and clay mined from the site, but not usable in the cement production process, at promoting biological habitat when disposed of in pits?

The site currently supports old and young oaks, sycamores, willows, elderberry, and other native species; why does the proposed revegetation mix not include any of these species? Will any of the many existing landmark trees on the site be destroyed? If not how will their root systems be preserved if the mine will be taking the grade down 90 feet? Have the many native annuals that bloom, different varieties in different years, been inventoried? Will these rare and beautiful organisms be restored to the site at the end of the mining operations?

Nationwide, loss of pollinators is becoming a serious concern. Even in the driest months of the year, abudnat6 pollinators are present in the Valley. Have these pollinators been inventoried? What effect would the proposed project have on the wide variety of annual and perennial plants the insects depend on? Would this contribute directly or cumulatively to impacts on any one species or on pollinators as a whole? Is this a particular concern in an agricultural area?

Will the herbicides proposed for weed removal enter the waterway? Will soil amendments be required to get anything to grow in yellow fill? Will soil amendments contaminate the waterway? What will be done with the existing "biological overburden"? Is sand mining a short term benefit that would be conducted at the expense of permanent damage to a vital wildlife corridor?

REHABILITATION FOR DISTURBED LANDS. The California Department of Conservation, California Geological Survey produced a document entitled "Rehabilitation of Disturbed Lands in California: A Manual for Decision Making." Under the authority of Resource Agency and with the State Geologist, written by the Department of Conservation, Office of Mine Reclamation and V.P. Claassen from the University of California, Davis, "[t]his manual focuses on moderately to severely disturbed lands, such as those commonly associated with mining. These lands do not rehabilitate naturally in the short term because their topsoil has been altered, inverted, or lost." It explains that "the degree of soil development can be an important factor in determining rehabilitation potential… Disturbed soil is often mixed from multiple horizons, which results in the disruption of soil structure and chemistry and the dilution of beneficial soil

organisms and biota.... Coastal sand dunes and riparian woodlands . .. are adapted to frequent and/or high levels of disturbance and exhibit considerable resilience."

The manual explains that disturbed soils have lower infiltration rates. Indeed, the project proposes to remove the permeable materials and leave only the much less permeable, fine-sized yellow-fill. "However, soil is the foundation on which a rehabilitation project is built.... Each of the horizons in a generalized soil profile . . . contributes something to the soil's ability to support plant cover." The manual discusses the importance of determining the target pore size, which, in the case of the proposed project, would be the pore size of the baseline (existing) condition. Will the proposed project mimic the natural pore size of the soils? Will the project approximate the existing particle size and texture? Will the heavy equipment on the site result in compaction of the soils?

Studies have found that compacted soils may persist in a desert setting for more than 100 years "and that vegetation patterns may reflect compaction patterns. Newton (unpublished data) demonstrated on a wetland site that the level of compaction significantly affected the resulting recovery and vigor of the wetland vegetation . ... Soils with high organic matter content are less susceptible to compaction because organic matter holds the soil particles apart so that they don't pack and adhere so tightly together. Soils with low organic matter content or high sand and clay content are especially susceptible to compaction, since even small amounts of clay can tightly pack between solid sand grains and bind the soil tightly together. Tillage or deep ripping of a compacted soil will open up cracks in the soil profile, but without further development of the soil structure these ripped soils will often settle and repack within a year or two." These studies bring into question the assertion that the mining operation will have only "short term" impacts, and also highlight the challenges associated with reclamation. What will the effect of the project be on permeability of the site? Will the soils be compacted? What effect will post-mine soil conditions have on the ability to rehabilitate the site?

In addition to particle and pore size, the chemical characteristics of soil are vital. What is the current, baseline pH of the soil? What is the existing cation exchange capacity of the soil? What is the current salinity of the oil? What is the current nutrient availability in the soil? Will the proposed pits mimic these conditions?

The State's rehabilitation manual recommends examining the soil of nearby areas to develop a model for soil regeneration. "This local model will provide an example that integrates the local climate, geological material, terrain, and biological activity that provides a realistic comparison for establishing adequate soil nutrient levels and selecting potential revegetation plant species and soil microbes. Which nearby soils will be used as reference soils?

"Various projects have sought to create a soil from mixtures of fines (silt and clay), organic matter (compost, sludge, wood chips), and other additives such as gypsum or lime. These sites may grow some vegetation initially; however, studies indicate that their long-term (in excess of 30 years) viability is in question . . ." Will monitoring and maintenance of the site be of sufficient duration, and will there be sufficient funds to repair long term damage? Since the damage may be virtually impossible to repair 30 years after the mining operation has stopped, what measures will be implemented to prevent this kind of long term failure?

Dust suppression is at odds with proper soil treatment. "If soil materials are to be harvested, moved, stored or worked during the construction or mining phase, it is important that these activities occur when the soil materials are dry. Wet or damp soils are easily compacted and smeared and will be less able to grow plants than if they were handled when dry. Bacterial and fungal spores and plant seeds are also in a resistant state of their life cycle if the soil is dry and are more likely to survive the moving process." How will the need to avoid soil compaction be balanced with the need to provide dust suppression? What will be done to salvage the delicate soil organisms in the Valley?

"Many of California's rehabilitation projects take place on unusual parent materials such as serpentine soils and mine waste, presenting a number of challenges to the rehabilitation planner . . . Mine wastes can be inhospitable to plants because of poor quality physical 'soil' characteristics.... Mine wastes typically lack any type of soil structure, which can lead to long-term compaction problems...[may} lack CEC, organic matter, and essential nutrients, and because they have either a high (alkaline) or low (acid) pH . . . [and] may also be significantly higher in metals.... Mine wastes are usually devoid of soil macro-organisms and the essential microorganisms. What will be done to avoid these long term complications?

According to the State rehabilitation manual, soil erosion can be reduced by using existing contours (or reestablishing original basin topography), using existing drainages (or reestablishing original drainages), and minimizing slope length and steepness. Grading practices on mine sites tend to create smooth, finished slopes, which are not conducive to plant growth and tend to exacerbate soil erosion. How will the need to extract millions of tons of sand be balanced with the need to preserve existing contours and avoid steep slopes?

When evaluating the success of a rehabilitation project, typically a reference site is selected. Will the east end of the project property that is not proposed for mining serve as the reference site? "The reference site should be located as close to the project site as possible, within the same elevational range, on the same type of soil, and with the same aspect and climate. In addition, the reference site should match the target vegetation proposed for the project area: it should be dominated by the same type of vegetation, habitat, structure, and species composition." At what frequency and to whom will reporting on be made on the plants, soils, erosion, and other factors? Would impacts to soil resources be permanent, in exchange for short term benefits associated with sand mining?

GHG. What is the role of concrete in GHG production – as in what percentage of GHG production results from concrete production? Would a shift to other materials reduce GHGs?

The SANDAG study concluded that sources of aggregate closest to urban centers resulted in the shortest trip distances and hence the lowest GHG emissions. It did not evaluate how options associated with trucks providing backhaul, the existing US Mexico conveyor belt, use of recycled demolition concrete, or use of dredge materials would affect GHG emissions. If the purpose and need for the project is to "provide cement in an environmentally beneficial manner," these alternatives should be investigated. Would tighter markets for virgin materials result in

increased use of recycled options? Would higher cement costs result in a shift to materials with lesser GHG footprint during production?

According to studies on Biosphere II, concrete was a primary reason for the failure of this experiment. This talk by Jane Poynter about "What Lessons Came out of Biosphere II" provides a summary http://www.npr.org/programs/ted-radio-hour/?ft=nprml&f=57&showDate=2015-09-04. Although GHG emissions associated with manufacture were not factored in, oxygen consuming properties of the material made it impossible for the plants to keep up. As oxygen level diminished, so did the cognitive abilities of the participants, as well as their interpersonal relationships. Although a life cycle analysis of the product is not warranted in a CEQA document, and general consideration of the GHG and other atmospheric impacts associated with the project, which has as a purpose the production of vast quantities of concrete, in a market where local aggregate producers say they have no market, is relevant. Would the production and use of vast amounts of this material result in a short term benefit with a long term cost?

RECREATION: The existing Valley is heavily used for recreation by many users. Have the uses and users of the Valley been identified? Have they been notified or the proposed project and asked for input on the scope of the EIR? Since the local rock face known as El Cajon Mountain, known locally as El Capitan, has been compared with El Capitan in Yosemite Valley, how would sand mining in this scenic Valley effect:

- Climbers on the mountain?
- Hang gliders over the area?
- Boaters headed for the reservoir?
- Mountain bikers.
- Users of the County staging area?
- Users of El Monte Park?
- Users of the trail system, including the trail the Blossom Valley and the Flume Trail?
- Street bicycle use on El Monte Road?
- Equestrian use on El Monte Road and in the riverbed?

Existing equestrian use of the sand flat provides an opportunity for riding in areas that are not desirable to pedestrians and mountain bikes, but that provide safety to equestrians. It is one of the few places left in the County with good footing and safe conditions for cantering. Will this existing condition be eliminated? The existing situation has been described as "no trails," but the reality is that several roads were put in during the days when grading for the golf course was done, including a highly compacted road usable by hikers and mountain bikers as well as equestrians. Additional roads through the sand have been put in by biologists and hydrologists conducting studies for this project, and several informal trails exist throughout the area. There are abundant existing trails. In preliminary trail meetings with Crystal Howard, the need for trail systems consistent with the goals and mission of various public agencies and river conservancies to provide river access to multiple trail users has been established. TWO trails, one with existing sand as the substrate, which is the existing condition, is less expensive, and is preferred by equestrians, and one with a standard trail substrate for joggers, walkers and mountain bikes has been discussed as the appropriate approach in this area.

Recently in Tijuana Estuary a "horse only" sandy trail was "improved" by the County with importation of decomposed granite. That improvement resulted in use of the trail by mountain bikers, which resulted in a bike-horse collision, which resulted in the horse rider sustaining a compound fracture. What assurances are there that two trail systems will be maintained, and that the sand substrate of the horse portion will not be altered during non-discretionary routine maintenance in the future?

With regard to the "temporary" nature of impacts, fifteen years of standing in a stall, waiting for the temporary impact to be over with, is a long time. In feral herds, horses walk more than 20 miles in an average day. Horses that run in circles are more prone to tendon and joint problems. How would this "temporary" loss of trails impact the health and welfare of existing horses in Valley? Would the trails options in the Valley be forever limited by this project, resulting in a long-term impact for a short-term benefit?

ALTERNATIVES. A key factor in determining alternatives is a strong understanding of the purpose and need as it pertains to public benefit. The project proponents will most likely rely on the findings of the SANDAG study to suggest that the purpose and need for the project is sand for the production of cement. However, use of the site for cement production must be weighed against its importance as an aquifer, wildlife corridor, habitat, scenic resource, recreational resource and other uses. The SANDAG study found that there were ample aggregate resources in the County. Also, the analysis may determine that the proposed project would not, in fact, "maximize" the use of aggregate resources. The fifteen year operational life would "recover" only a portion of the resources present, while providing economies of scale that could result in the closure and loss of smaller, existing resources, and the waste of more expensive recyclable alternatives. Thus, even alternatives that do not involve sand mining may be as effective at ensuring the "efficient" use of aggregate resources. Using the site as habitat now, rather than waiting for 15 years of mining, would allow the existing habitat to remain, and would prevent the premature closure of smaller mines, and may very well be environmentally superior.

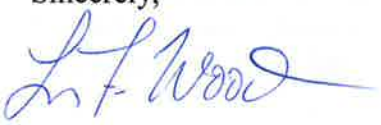
The problem is that the real purpose and need for the project is not related to public benefit. The legal settlement provides for Helix to sell the land to the sand mining consortium at a set, below-market price. The consortium plans to recuperate within 15 years the millions of dollars associated with the failed golf course, with the lengthy litigation against Helix, and to gain sufficient revenue to provide for reclamation activities and an endowment for the restored area sufficient to maintain the area. This is a hefty expectation from the proposed project, and one that is not related to public purpose. Therefore it should not be considered in the environmental document.

Helix Water District is currently the landowner, although it is not the project proponent. If the property reverts to Helix, which under some conditions of the settlement could happen, Helix can use the property for any public purpose. Given the value of the site as habitat and its importance to the regional trail system, local land use conservancies would consider the settlement price that is being paid by the sand mining consortium an excellent value. Thus the option of retaining the property for its habitat and recreational value, with no sand mining, should be included as an alternative.

TO SUMMARIZE SOME OF THE QUESTIONS FOR CONSIDERATION: Will there be irreversible impacts to water and agricultural resources? Is this project a trade-off between sustainable, renewable agricultural use, habitat, and recreation, for excessive, and possibly unnecessary quantities of cement? Would the production of large quantities of building materials be growth inducing? Will the project result in a net reduction in the water currently available for other uses in the region? Will the project result in less sand, and thus less storage and filtering ability, for users of the aquifer? Will the project have a negative impact on any existing wells, either in quality or quantity? Will the project result in the increased potential for diseases in people or in wild of domestic animals? Will the project result in a tradeoff between exploitation of a limited, non-renewable resource at the expense of other, renewable resources, such as agricultural and recreational lands? Will the project result in contributions to carbon emissions by producing massive quantities of a non-renewable building material with a greater carbon footprint than other materials? Will the project discourage recycling of construction and demolition debris by flooding the market with virgin materials instead of promoting the use of recycled materials? Will the project result in the destruction of existing, self-sustaining, natural habitat for an un-natural, maintenance-requiring habitat that does not now exist in this river valley? Will the project result in disruption of a wildlife corridor? Will the project have impacts on raptors, bobcats or other sensitive species? Will the project expose residents, wildlife, or recreational users of the valley to unsafe conditions? Will the project diminish the existing recreational value of the valley? Will the project diminish the existing scenic value of the valley to the public? Will the project impact any oak, sycamore, willow or other landmark trees? Will the project impact the historic values of this farming valley? Will the project impact any area of significance to Native Americans? Will the project reduce the acreage of land available for agriculture? Will the project contribute to existing congestion on local streets and state highways? Will the project result in a deterioration of the area's air quality? Will the project expose ground water to the surface, allowing for evaporation and contamination? Will the project contribute to flood, traffic, evacuation, or fire hazards for residents or recreational users? Will the project expose naturally hazardous soils, such as those containing asbestos, or soils contaminated by dairy runoff, or soils contaminated by dumped wastes?

Thank you again for this opportunity to comment on the scope of this EIR. I look forward to reviewing the draft.

Sincerely,



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