



# THE MATHER NEIGHBORHOOD ALLIANCE

June 15, 2015

US Army Corps of Engineers, Sacramento District  
1325 J Street, Room 1350  
Sacramento, California 95814-2922

Attn: Kathleen Dadey at Kathleen.A.Dadey@usace.army.mil  
Re: Comments on the Mather Specific Plan Project Supplemental Draft Environmental Impact Statement; and Request for Public Hearing  
Public Notice: SPK-2002-00561

Ms. Dadey,

The Mather Neighborhood Alliance (Alliance) developed the following comments to address deficiencies found in the Mather Specific Plan Project Supplemental Draft Environmental Impact Statement (SDEIS) as they apply to Sacramento County's (County) proposed amendments to land use designations, boundaries, and transportation alignments in the Mather Specific Plan (project site).

The Alliance currently represents over 100 Mather residents and includes experts in geology, ecology, civil engineering, media and publicity, environmental and contract law, and many other disciplines. We expect the Alliance to grow substantially as we create awareness of the project specifics and recruit more experts who share an interest in protecting the natural resources at Mather for the benefit of our County and region as a whole. In addition, we expect to continue to share comments and feedback to County and Federal agencies.

Residents in the Mather Field community and surrounding region have known about the County's desire to develop land areas on the project site for several years. Although the County has done did some public outreach events in the past, these would probably be best described as marketing propaganda with very general outlines that presented "potential" projects with huge benefits (e.g. closer shopping, public transportation, bike paths, hiking trails, etc.) while neglecting to mention possible negative aspects (e.g. major increases in traffic loads, substantial losses to habitat, increasing ambient noise and light pollution). Our community has only recently become aware of the full extent and true nature of their planned developments following the release of the County's draft Environmental Impact Report (DEIR) and an updated presentation of development plans for Mather which County staff gave at a recent home owner's association meeting.

While we recognize that some development within the project is desirable and (in some cases) necessary, we strongly object to the breadth of developments proposed and the unnecessarily destructive implications they will have on the Mather ecosystem. We are distressed by the lack of consideration shown by the County (and other agencies) regarding potential impacts these developments might impose on the overall aesthetic character of the Mather community, especially in the southeastern portion of the project site.





# THE MATHER NEIGHBORHOOD ALLIANCE

Now that the County's scope of development has been more completely revealed, we (the Alliance), respectfully request a Public Hearing to offer community members an opportunity to address the inadequacies of environmental review(s) that have been conducted for the project site and to provide input to the U.S. Army Corps of Engineers (USACE)

We offer our comments specific to the SDEIS on the following pages. We respectfully ask that you and other USACE staff give them careful consideration and offer a public hearing before moving forward with approval of any permit applications currently pending for this project.





## Hydrologic Considerations

First and foremost amongst the deficiencies we have identified in the SDEIS is an apparent lack of understanding and/or consideration shown to shallow subsurface hydrology and the potentially significant damage that additional disruptions to it might have on the long term health of vernal pool/seasonal wetland habitats across the entire Mather project site. Sacramento County documents regarding this project state quite clearly that “the future amount of construction activity that could occur consistent with the project proposal is unknown...”, yet somehow the authors still conclude that “with mitigation, impacts to waters and wetlands that will result from development are less than significant.” Similarly, the SDEIS notes that “indirect effects may occur if proposed activities within 250 feet of suitable habitat alter the surface and/or subsurface hydrology of the area” (pg. 4.5-1), but goes on to state that “with mitigation, impacts would be reduced to a less-than-significant level.”. We submit that these conclusions are unwarranted, are based on very little or no real data from the project site and demonstrate a less than adequate understanding of perched aquifer hydrology.

Researchers from UC Davis and the University of South Florida published a 2005 paper<sup>1</sup> detailing results of an investigation into subsurface hydrology around some of the vernal pools at Mather Field. These authors concluded (as many of us have long suspected) that upland areas, vernal pools, and seasonal streams are all part of an integrated surface-water/perched groundwater system that extends laterally beneath the vernal pools and surrounding habitat. In short, the vernal pools at Mather Field are connected by a shallow groundwater table that flows laterally on a subsurface layer of low permeability soil (i.e., a soil hardpan). Groundwater flow across this hardpan surface sustains the pools long after winter rains have ended and provides a source of freshwater recharge through the pools. Many pools are sequentially linked by this groundwater flow, such that pools at the upper end of the subsurface gradient are discharging to pools lower down.

This research was not included in the SDEIS bibliography and appears to have been overlooked by USACE in their evaluations of the potential impacts and their relative significance. This inadequate consideration of shallow subsurface hydrology has potentially dire implications for the relative “significance” of environmental impacts to vernal pool habitats and water quality throughout the project area and, consequently, the conclusions reached in the SDEIS. It also has substantial ramifications for any of the “proposed” mitigation actions which rely on construction of new pools or improvements to existing habitats.

In their paper, the UC Davis-led research team concluded that *“small changes in local land use, such as the development of irrigated agriculture or parkland, may have considerable impacts on the vernal pools. The degree to which small changes in local land use might affect the vernal pools is poorly understood, because the fundamental hydrogeological characteristics of perched*

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<sup>1</sup> Rains, M.C., G.E. Fogg, T. Harter, R.A. Dahlgren, and R.J. Williamson. 2005. **The role of perched aquifers in hydrological connectivity and biogeochemical processes in vernal pool landscapes, Central Valley, California. Hydrological Processes.**





*aquifers remain relatively unexplored. The management of perched aquifers should rest on a scientific foundation that provides a general understanding of the conditions necessary to maintain perched aquifers capable of supporting the physical and biological functions of dependent wetland ecosystems."* To be clear, what these researchers are saying is that the health of vernal pool ecosystems depends on a solid understanding of the shallow groundwater aquifer. Activity (such as construction of subsurface utilities) which even slightly alters how this groundwater moves beneath the land surface could have potentially large (negative) impacts on the vernal pools. In short, we cannot treat vernal pools as isolated saturation ponds fed by rainfall and surface runoff and expect to mitigate impacts to them by establishing arbitrary setbacks to prevent damage.

Utility trenches, drainage channels, sanitary sewer and storm drainage lines are certain to intersect the perched groundwater table within the project area, with some potentially penetrating the hardpan layer into deeper soil strata below. These intrusions pose two obvious potential impacts to vernal pools in the surrounding areas. First, subsurface utilities and deep earthworks could disrupt groundwater flow to the point that some vernal pool areas (even those in the proposed conservation areas) could dry up much faster than normal or potentially never fill in the first place. Second, these subsurface trenches and utilities can act as "sensitive receptors" that allow contaminated surface waters to infiltrate the groundwater table and flow laterally into environmentally sensitive habitats. Volatile organic hydrocarbons (VOCs) found in fuels, solvents, herbicides, and insecticides can infiltrate and spread in shallow groundwater systems. No amount of best management practices (BMPs) or stormwater management efforts can completely eliminate VOC (and similar) contamination from infiltrating shallow groundwater systems and eventually impacting environmentally sensitive habitats. The SDEIS does not address any long term contaminant management strategies or potential impacts associated with residential, business, or industrial activities proposed for development areas.

Our review of the SDEIS failed to find any reference to an Integrated Groundwater and Surface Water Model (IGSM) for the Mather Field Special Planning Area. A well-executed, multi-year study of shallow groundwater movement throughout the proposed development and conservation areas is essential before any definitive EIS can establish that impacts will not be significant (with or without mitigation). Much of the proposed development areas (identified by Sacramento County planners as Urban Development, and Commercial Recreation, and Public Quasi Public areas east of Eagles Nest/Zinfandel Drive) sit on the up-gradient (uphill) side of seasonal drainages and vernal swales that feed westward toward the Morrison Creek drainage and across the eastern half of proposed conservation areas. It stands to reason that in at least some areas, near-surface groundwater gradients will follow a similar pathway.

Analysis by this SDEIS cannot satisfactorily conclude that environmental impacts to vernal pools are less than significant without having a more complete understanding of the subsurface hydrology and full knowledge of ALL potential construction activities which could intersect and disrupt groundwater flow. We believe that it is essential that the groundwater hydrology in the project is fully mapped and understood before any kind of infrastructural improvements are





made. Otherwise irreversible long term damage to existing vernal pool habitats may very well be inflicted by proposed developments.

## Ecologic Considerations

The SDEIS also fails to give any consideration to broader ecosystem-wide consequences of proposed developments on the project site. While the SDEIS does give an account of how impacts to each individually identified species or habitat could be mitigated, there was no discussion about how the interruption/disruption of individual species and habitats might affect the ecosystem as a whole.

Every good environmental scientist knows that the balance of predators to prey within a system is a delicate one, and scientific literature is awash with examples of how reduction (or removal) of predators from an ecosystem invariably results in a dramatic decline of the overall health of plant and animal communities due to unchecked population increases in prey species. This is certainly a possibility within the Mather project and one that has not been even remotely addressed.

Even with the proposed establishment of a conservation area on the project site, analysis in the SDEIS does not question what effect proposed heavy development (including a 4 to 6 lane extension of Zinfandel Road, transforming it into a major traffic artery) surrounding this conservation area will have on the full range of predatory species found across the site. Owls are particularly susceptible to being killed by moving vehicles and the coyote population will likely be forced to relocate elsewhere given the heavy traffic loads projected. Some predatory species are quite shy as well and tend to avoid heavily trafficked areas. For example, the Great Blue Heron is a commonly seen species around the Mather area and is considered by the CDFW to be a "special animal" and an "at risk" species. These herons (a known predator of voles) are extraordinarily shy and tend to abandon areas subject to heavy construction and high traffic roadway development. Yet the SDEIS makes absolutely no mention of this species and the impacts its disappearance from the site would have on the surrounding ecosystem.

While it is relatively easy to write off/mitigate individual species loss on a case by case basis, the cumulative effect to the ecosystem could be dramatic. Without adequate predation, vernal pool habitats could be irreparably damaged by rodent outbreaks (which are known to occur in Mather) and the resultant effects up and down the food chain could prove disastrous. The extent of development proposed could effectually make the Mather Field conservation area ecologically unsustainable in the long term.

## Western Spadefoot Toad Mitigation

The SDEIS identifies the Western Spadefoot Toad as a California listed species of concern (CSC) known to be present within the project site and notes that impacts to the species will be significant. However, with the mitigation measures proposed, the SDEIS indicates that impacts would be reduced to a less-than-significant level.





Unfortunately, the proposed mitigation methods for Western Spadefoot Habitat is almost laughable (and would be if it were not for the fact that it will likely result in the local extinction of the species). The supposed mitigation procedure is to dig up Spadefoot burrows with hand tools and move them elsewhere within the project site. The SDEIS assumes spadefoots can successfully be relocated to vernal pools elsewhere in the preserve and thus reduce impact to the species to less than significant levels. This is tacitly false, on two counts. First off, there is the assumption that suitable Spadefoot habitat can be found elsewhere in the proposed conservation areas. Local naturalists around Mather know full well that spadefoots can only be found in one very limited area adjacent to Eagles Nest Road. No one knows why the Spadefoot population is limited to this location, but there are many biologists and ecologists who suspect that their habitat needs are a bit more specific than just any random vernal pool.

The second issue is that the SDEIS proposes excavating every Spadefoot burrow they find by hand in order to relocate them to more suitable habitat. This is a nearly ludicrous suggestion. The claypan soils identified in this area are impossibly hard, especially during the dry season when construction activity would be likely. Anyone living in the Mather area who has ever tried to excavate a hole in these soils can tell you how difficult a task it is to get down even a few inches, and Spadefoot burrows can go down as much as three feet.

Even if someone could dig down that far in a practicable amount of time, how do they move an entire burrow (preserving the soil moisture in the process) without killing the animal inside? There are absolutely no scientific or regulatory guidelines to suggest this mitigation strategy can work. The time and expense required to dig up that many burrows by hand is likely to be astronomic, and thus considered impracticable. The eventual conclusion will be that this species will be taken out entirely at Mather field and no mitigation or preservation will be performed.

If the project proponents do intend to destroy the species at Mather, they should have the decency to take responsibility for it and not hide behind a knowingly false mitigation proposal. We, the taxpaying members of the general public (and their elementary-aged school children who study these amphibians in local educational programs), will not accept the foregone conclusion that the destruction of the Mather Field Spadefoot population serves the greater public interest. With the glaring lack of a proven mitigation strategy, it is almost a guarantee that Western Spadefoots will disappear from Mather forever if their present habitat is destroyed. We thus urge you to reject plans to “take” the only known habitat for this species in the project site.

## Aesthetic Concerns

Many of the residents in our community moved here for the relative quiet and open views that the Mather region affords in contrast to crowded urban environments and noise in the surrounding areas. Indeed, the wildlife found at Mather undoubtedly exists here in part because of these aesthetic qualities. Yet the SDEIS makes no mention of light pollution or noise pollution and potential impacts that the proposed developments/improvements will bring and does not address what impacts these might have on wildlife at Mather or the sensitive wetland habitats







therein. We fervently believe that introduction of a 4 (possibly 6)-lane major traffic artery through the heart of Mather wildlands and substantial residential development adjacent to the conservation areas will irreparably damage the long term biologic viability, species diversity, ambient noise, and aesthetic value of the entire Mather ecosystem, in direct violation of State and Federal guidelines. Furthermore, we submit that the proposed mitigation strategies are inadequate and do not sufficiently compensate our community and the greater Sacramento region for the potential loss of these valued public resources.

## Optional Mitigation Measures & Conservation Management

We strongly object to the allowances being granted that give Sacramento County the option to implement on-site creation/restoration/rehabilitation to compensate for habitat loss on the project site. It is our understanding that the agreement with the U.S. Department of Defense (DOD) for land transfer of Mather Air Force Base lands to the County included mandatory establishment of a permanent conservation area as long as wetland habitats on these lands remain functional/viable. Yet in the SDEIS, it appears that the County is excused from mitigating for the loss of habitat in development areas by establishing the conservation area that was already a requisite part of the land transfer agreement.

To the Alliance, this appears to be double-dipping the value of the planned Mather Vernal Pool Preserve in order to give the County (and their developer) a free pass on vernal pool mitigation. If any developer elsewhere in Sacramento County proposed to fill 36 acres of vernal pools, that developer would be required to preserve 72 acres of vernal pools and create 36 acres of vernal pools for mitigation (i.e., compensation). At a cost of more than \$150,000 per acre (perhaps as much as \$200,000 per acre, which is a rough price estimate from vernal pool mitigation banks) this would cost a developer more than \$16 million. From our perspective, using vernal pools in the Mather Preserve (which are already required to be protected by agreement with the DOD) as a mitigation resource is an unethical and fiscally irresponsible use of a public asset.

We also wish to express our profound dissatisfaction with the way the County has managed preserve lands to date. Years have gone by in which the County has allowed the preserve to degrade as invasive plant species have spread unchecked across the vernal pool areas. In some cases these invasive plants were first introduced by human activity tacitly permitted by the County, but there has been little evidence that they have made a good faith effort to manage the conservation areas adequately.

Furthermore, it has come to our attention that the County does not intend to institute a full conservation management plan or establish the requisite endowment to provide for its maintenance for another 5 to 10 years! Instead they are (supposedly) hiring a conservation manager and proposing a paltry \$80,000 yearly contribution toward conservation efforts in the interim.

We now recognize that more is at stake than just a few (supposedly innocuous) developments and roadways. Because the County's agreement with the DOD stipulates that they must





establish and manage a preserve *on those lands for as long as they remain functional/viable*, we are deeply concerned that ongoing mismanagement, absence of a full management plan, and limited interim management funding in conjunction with highly invasive development plans will render the remaining habitats at Mather unsustainable in the near future. If these habitats are degraded to the point that they no longer are considered functional, we anticipate that County development will then move to dissolve the conservation and develop those lands as well. However outrageous this plan might appear, many Mather and County residents suspect that this is a long term goal of County Community Development staff.

## Conclusions

We submit that SDEIS lacks sufficient information and/or has not fully considered the true and cumulative impacts of the proposed developments for the Mather Specific Plan Project. Thus it follows that the repeated conclusions therein of "less than significant" impact (with or without mitigation) are invalid as well. We urge you to consider the full suite of impacts, including cumulative impacts, that proposed changes in land use designations and infrastructure construction will bring about to the community of Mather and ask that this SDEIS be fully revised to address our concerns before approving any of the permits requested by Sacramento County at this time. Furthermore, we request that a Public Hearing be held to address the adequacy of this SDEIS environmental review and others that have been conducted thus far to allow an opportunity for more community members to provide input now that the County's scope of development has been more completely revealed.

Respectfully submitted,

The Mather Neighborhood Alliance

