Filed 3/20/20 (unmodified opn. attached)

**CERTIFIED FOR PUBLICATION**

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

FIFTH APPELLATE DISTRICT

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| KING AND GARDINER FARMS, LLC, Plaintiff and Appellant, v.COUNTY OF KERN et al., Defendants and Respondents;CALIFORNIA INDEPENDENT PETROLEUM ASSOCIATION et al., Real Parties in Interest and Respondents. | F077656(Super. Ct. No. BCV-15-101666)**Order Modifying Opinion and Denying Rehearing****[No Change in Judgment]** |
| COMMITTEE FOR A BETTER ARVIN et al., Plaintiffs and Appellants,v. COUNTY OF KERN et al., Defendants and Respondents;CALIFORNIA INDEPENDENT PETROLEUM ASSOCIATION et al., Real Parties in Interest and Respondents. | (Super Ct. No. BCV-15-101679) |

 It is ordered that the following published portions of the opinion filed herein on February 25, 2020, be modified as follows:

1. On page 143, at the end of the first paragraph ending with “aside the ordinances …”, insert the following:

The usual remedy also has been applied by the Courts of Appeal. (See *Save Our Big Trees v. City of Santa Cruz* (2015) 241 Cal.App.4th 694, 712-713 [failure to comply with CEQA; trial court directed to issue writ of mandate directing city to set aside ordinance and resolution]; *Center for Sierra Nevada Conservation v. County of El Dorado* (2012) 202 Cal.App.4th 1156, 1185 [further environmental review required by CEQA; trial court directed to issue writ of mandate directing county to set aside negative declaration and related ordinance].)

1. On page 143, footnote 50, the following is added to the end of footnote 50.

In our view, responsible agencies, such as DOGGR, would be able to rely on the permits issued by County on or before that date without conducting an independent environmental assessment. Because a possible remedy was invalidating all the permits issued under the noncompliant Ordinance, we reject Oil Associations’ argument that setting this deadline improperly accelerates the finality of the opinion and violates their right to seek further review.

1. On page 145, the last paragraph beginning “In addition, the Ordinance …”, that entire paragraph is deleted and the following paragraph and footnote, which will require renumbering of all subsequent footnotes, is inserted in its place:

In addition, the Ordinance was approved despite its significant, adverse environmental impacts based on a statement of overriding considerations. The Ordinance’s primary purpose is the acceleration of oil and gas development and the economic benefits that might be achieved by that development. We identify this as the primary purpose because alternatives that served this purpose less effectively were rejected as infeasible. In contrast, the basic purpose of the regulation establishing low carbon fuel standards addressed in *POET I* was environmental protection—specifically, the reduction of greenhouse gas emissions. While the Ordinance has provisions that protect the environment, even with a noncompliant EIR the Board found the increased oil and gas activities would result in significant environmental effects. In *POET I*, it was uncertain whether incentivizing increased biodiesel use would increase NOx emissions. (*POET I*, *supra*, 218 Cal.App.4th at p. 740 [on remand, agency required to make finding of fact on whether project would result in a potential increase in NOx emissions].) Here, there is no uncertainty. Therefore, based on the Ordinance’s significant environmental impacts, CEQA’s basic purpose of protecting the environment,[[1]](#footnote-1)51 and the serious yet unresolved question about whether County’s issuance of permits involves the exercise of discretion, we conclude the Ordinance should not be allowed to remain in effect.

There is no change in judgment.

Respondents’ petition for rehearing filed on March 11, 2020, is denied.

Real Parties in Interest Western States Petroleum and California Independent Petroleum Association petition for rehearing filed on March 12, 2020, is denied.

FRANSON, Acting P.J.

WE CONCUR:

PEÑA, J.

SNAUFFER, J.

Filed 2/25/20 (unmodified version)

**CERTIFIED FOR PARTIAL PUBLICATION**[[2]](#footnote-2)\*

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

FIFTH APPELLATE DISTRICT

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| KING AND GARDINER FARMS, LLC, Plaintiff and Appellant, v.COUNTY OF KERN et al., Defendants and Respondents;CALIFORNIA INDEPENDENT PETROLEUM ASSOCIATION et al., Real Parties in Interest and Respondents. | F077656(Super. Ct. No. BCV-15-101666)**OPINION** |
| COMMITTEE FOR A BETTER ARVIN et al., Plaintiffs and Appellants,v. COUNTY OF KERN et al., Defendants and Respondents;CALIFORNIA INDEPENDENT PETROLEUM ASSOCIATION et al., Real Parties in Interest and Respondents. | (Super Ct. No. BCV-15-101679) |

 APPEAL from a judgment of the Superior Court of Kern County. Eric Bradshaw, Judge.

 Shute, Mihaly & Weinberger, Rachel B. Hooper, Heather M. Minner, Kevin P. Bundy; and Daniel P. Selmi for Plaintiff and Appellant King and Gardiner Farms, LLC.

Earthjustice, Colin C. O’Brien, Byron Jia-Bao Chan; and Elizabeth Benson for Plaintiff and Appellant Sierra Club.

Center on Race, Poverty & the Environment and Caroline Farrell for Plaintiffs and Appellants Committee for a Better Arvin, Committee for a Better Shafter, and Greenfield Walking Group.

Center for Biological Diversity, Hollin N. Kretzmann and Clare Lakewood for Plaintiff and Appellant Center for Biological Diversity.

 Margo A. Raison, County Counsel, Andrew C. Thomson, Deputy County Counsel; Holland & Knight, Jennifer L. Hernandez, Bradley B. Brownlow, Marne S. Sussman, Daniel R. Golub and Emily M. Lieban for Defendants and Respondents.

 Pillsbury Winthrop Shaw Pittman, Margaret Rosegay, Norman F. Carlin and Blaine I. Green for Real Party in Interest and Respondent Western States Petroleum Association.

 Manatt, Phelps & Phillips, Craig A. Moyer and Keli N. Osaki for Real Party in Interest and Respondent California Independent Petroleum Association.

-ooOoo-

In November 2015, the Board of Supervisors (Board) of the County of Kern**[[3]](#footnote-3)** approved an ordinance to streamline the permitting process for new oil and gas wells and certified an environmental impact report (EIR) as compliant with the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et seq.).**[[4]](#footnote-4)** The plaintiffs sued, alleging many CEQA violations. The trial court found the EIR inadequately analyzed the project’s environmental impacts to rangeland and from a road paving mitigation measure, and rejected the other CEQA claims. The plaintiffs appealed. We conclude some of the other CEQA claims have merit.

The published parts of this opinion address CEQA violations involving water, agricultural land, and noise. As to water supplies, the mitigation measures for the project’s significant impacts to water supplies inappropriately deferred formulation of the measures or delayed the actual implementation of the measures. Also, the EIR’s disclosures about the mitigation measures were inadequate and, as a result, the adoption of a statement of overriding considerations did not render harmless these failures to comply with CEQA.

Also, the finding that the project’s conversion of agricultural land would be mitigated to a less than significant level is not supported by substantial evidence. The finding was based on the use of agricultural conservation easements, which do not actually offset the conversion of farmland. Because the project’s conversion of agricultural land would not have been reduced to a less than significant level, the EIR should have addressed other proposed mitigation measures, including the clustering of wells when feasible, for reducing the project’s conversion of agricultural land.

As to the project’s noise impacts, the County determined the significance of those impacts based solely on whether the estimated ambient noise level with the project would exceed the 65 decibels threshold set forth in the County’s general plan. Based on prior case law, we conclude the magnitude of the noise increase must be addressed to determine the significance of change in noise levels. Here, the EIR did not include an analysis, supported by substantial evidence, explaining why the magnitude of an increase in ambient noise need not be addressed to determine the significance of the project’s noise impact.

In the unpublished parts of this opinion, we conclude CEQA violations existed with respect to air quality and related health risks. First, the EIR inadequately addressed air quality impacts because it did not discuss the impact of a mitigation measure on fine particulate matter (PM2.5) emissions or, alternatively, provide an explanation for why there is no separate discussion of the measure’s impact on PM2.5 emissions. In addition, the mitigation measure addressing particulate matter does not provide for enforceable mitigation of PM2.5 emissions and the Board made no finding that mitigation of PM2.5 was not feasible.

Second, the Cumulative Health Risk Assessment constituted new information that had been omitted from the draft EIR. In the context of this case, the new information was significant because the draft EIR inadequately addressed the subject and there was no meaningful public review and comment on the new assessment. Consequently, the Cumulative Health Risk Assessment must be included in any revised EIR that is recirculated to correct the other CEQA violations.

 We also publish our discussion of the appropriate appellate relief for the CEQA violations. We conclude the certification of the EIR and the approval of the new ordinance must be set aside. The writ of mandate issued on remand shall set aside (i.e., invalidate) the ordinance as of 30 days from the date of this opinion. Thus, permits issued before that date may remain in effect and oil and gas activities under those permits may continue. In contrast, if any permit is issued after that date, the writ of mandate’s invalidation of the ordinance also shall invalidate the permit retroactively. Thus, pending CEQA compliance, the County will return to the regulatory scheme in place prior to the ordinance’s adoption.

We therefore reverse the judgment and remand for further proceedings.

**FACTS**

*Project*

Representatives of three oil and gas industry associations—Western States Petroleum Association; California Independent Petroleum Association; and Independent Oil Producers’ Agency (collectively, Oil Associations)—approached the County with a proposal to amend the Kern County Zoning Ordinance to address local permitting for oil and gas exploration, development and production activities. In January 2013, the Board considered the proposal at a public meeting and directed the staff of the County’s planning and community development department to proceed with processing the requested amendments. The amendments included updated procedures, development standards, and conditions for future oil and gas activities in unincorporated portions of Kern County.

At the time of the requested amendment, the County’s zoning provisions did not require a County permit for drilling on lands zoned for exclusive agriculture, limited agriculture, medium industrial, heavy industrial or natural resource. The County did require conditional use permits for drilling in certain residential and commercial districts, though few requests for this type of permit were processed. Regardless of whether proposed oil and gas activities within the County’s jurisdiction required a conditional use permit or not, such activities were subject to (1) the County’s basic standards for development, building and safety and (2) the permit requirements of state and regional agencies such as the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR),**[[5]](#footnote-5)** the Department of Fish and Wildlife, and the San Joaquin Valley Air Pollution Control District (Air District).

The Oil Associations’ stated goals in seeking the zoning amendments were to (1) create an effective regulatory and permitting process for oil and gas exploration and production, which could be relied upon by the County, DOGGR and other agencies; (2) achieve an efficient and streamlined environmental review and permitting process for all oil and gas operations covered by the proposed amendment; and (3) develop industry-wide best practices, performance standards, and mitigation measures to ensure adequate protection of public health and safety and the environment. If these efficiencies were attained, Oil Associations believed it would increase oil and gas exploration and production in Kern County, which in turn would benefit the local economy.

The proposed amendments required permits for all new oil and gas activities and subjected applications for permits to a ministerial “Oil and Gas Conformity Review.” An important purpose of the proposed amendment was to eliminate time-consuming and costly review of individual well and field development activities by establishing a ministerial**[[6]](#footnote-6)** permit review process that incorporates mitigation measures identified in the project’s EIR. If the County correctly determined the permit review process was ministerial—that is, did not involve the exercise of discretion—the processing of future permit applications by the County will not be subject to additional environmental review under CEQA. Also, the EIR prepared for the adoption of the proposed zoning amendment may be used by other responsible agencies with discretionary authority over individual well or field developments. The final EIR for the zoning amendment stated, “this streamlining may avoid individualized-CEQA review for many projects.” The final EIR also stated the amendment would “significantly increase[] the County’s oversight of oil and gas [activities] that are currently allowed ‘by right,’ without any ministerial or discretionary review, under the County’s Zoning Code.”

*Project Area*

Kern County contains 8,202 square miles. The project area encompasses 3,700 square miles, including most of the San Joaquin Valley Floor within Kern County. The project area is bordered on the west by San Luis Obispo County. The project area’s northern boundary is the Kings and Tulare county lines. The eastern boundary of the project area was established at the 2,000-foot elevation in the foothills of surrounding mountain ranges.

Kern County wells are the source of 80 percent of all oil and gas produced in California. In 2013, Kern County had 43,568 active oil and gas, dry gas, and gas storage wells and 15,863 inactive wells. The project area contains 100 active and abandoned “Administrative Oilfields,” a term defined by DOGGR. These oilfields cover approximately 931.4 square miles, which is roughly 25 percent of the project area of 3,700 square miles.

The EIR forecasted an average of 2,697 new producing oil and gas wells would be drilled in the project area each year from 2015 through 2040. When other types of wells, such as water disposals, steam flood injectors, water flood injectors and observation wells, are included the total new wells reach 3,649 per year. The EIR forecasted 2,221 wells would be plugged and abandoned each year. Well plugging and abandonment is the last stage of oil and gas activities, lasts only a few days, and allows the site to be reclaimed or repurposed.

*Project Subareas*

The EIR divided the project area into three subareas and used those subareas in its analysis of many of the project’s environmental impacts. The western subarea contains 1,714 square miles. Interstate 5 forms the boundary between it and the other subareas. The western subarea contains 37 active oil and gas fields, including five of California’s largest producing fields.

The central subarea contains 1,025 square miles and is bordered by Interstate 5 on the west and State Route 65 and State Route 223 on the east. It contains 21 active oil and gas fields, some large-scale production activity and some of the deepest wells in Kern County.

The eastern subarea contains 953 square miles and is bounded by State Route 65 and State Route 223 on the west. It contains 20 active oil and gas fields and several large-scale production areas, including the Kern River Oilfield in the Oildale area.

The land within the project area also was classified under a tier system set forth in the amended zoning ordinance. This tier system is based on the land uses within the area. Tier 1 areas are where oil and gas activity is the primary land use and the existing well and activity densities preclude almost all other uses. Tier 2 areas have agriculture as the primary land use. Tier 3 areas are zoned for light, medium or heavy industrial, natural resource, recreation forestry, floodplain, and a few other uses. Tier 4 areas are zoned for residential and commercial use and oil and gas activities require a conditional use permit. Tier 5 areas are with specific plan boundaries either adopted with a special planning district or which include specific provisions for oil and gas operations. The regulations included in the specific plan would govern the approval of oil and gas activities or, in the absence of such regulations, a conditional use permit would be required.

*Air and Water*

Water supply and air quality within Kern County and the project area are serious concerns. The United States Environmental Protection Agency (EPA) has established health-based ambient air quality standards, or allowable limits, for seven pollutants—ozone, carbon monoxide, nitrogen dioxide (NO2), sulfur dioxide (SO2), lead, respirable particulate matter (PM10), and PM2.5.**[[7]](#footnote-7)** These pollutants are commonly referred to as “criteria pollutants.” (See 40 C.F.R. Part 50 [national primary and secondary ambient air quality standards].) State Air Resources Board (ARB) has established allowable concentration levels for criteria pollutants along with sulfate (SO4), hydrogen sulfide (H2S), visibility reducing particles, and vinyl chloride. ARB’s ambient air quality standards for criteria pollutants and other pollutants equal or exceed federal standards. (See Cal. Code Regs., tit. 17, §§ 70100–70201 [state ambient air quality standards].) Based on data from 2014, the project area fails to attain (i.e., exceeds) ARB and national standards for ozone and PM2.5 and fails to attain ARB standards for PM10.

The water demands of Kern County’s residents, farms and other businesses exceed the local surface water supplied by the area’s principal river, the Kern River, and streams such as Poso Creek. Based on long-term averages, local surface water supplies account for slightly less than one-third of the total water supplies in the project area. Thus, the project area is dependent upon imported surface water and groundwater pumping. The specific environmental concerns associated with the sources of water for the project area are discussed in parts II. through IV. of this opinion.

*Environmental Review*

In June 2013, the County’s planning and community development department recommended that the Board approve a proposed consulting agreement with Ecology & Environmental, Inc. to prepare the EIR for the proposed amendment to the zoning ordinance. That firm had submitted a proposal along with a bid of $960,549. The department’s recommendation stated the Oil Associations, as project proponents, would be required to fund (1) the preparation of the EIR and (2) the staff time for processing the CEQA documents.

On August 30, 2013, the County published a notice of preparation of a draft EIR for the proposed Ordinance. The notice of preparation set four scoping meetings in September 2013.

On July 8, 2015, the County released a draft EIR for public comment. From its table of contents in the front to the glossary at its end, the draft EIR is over 1,800 pages. In addition, 23 appendices to the draft EIR contain approximately 6,100 pages. The County set August 24, 2015, as the deadline for submitting comments on the EIR. Also, the public was notified that the County planning and community development department would hold three public workshops before the deadline and that the County’s planning commission would hold a public meeting on October 5, 2015.

On September 25, 2015, the County released chapter 7 of the final EIR, “Response to Comments.” That chapter addressed the 71 comment letters received from state agencies, local agencies and other interested parties. The cover letter for chapter 7 referred to the public hearing scheduled for October 5, 2015, before County’s planning commission. One of the appendices listed in chapter 7 was designated M-1, “Revised Health Risk Assessment.” It was prepared by Environmental Compliance Solutions, Inc., was dated September 19, 2015, and contained 18 pages.

On November 2, 2015, after the planning commission’s public meeting, the County released chapter 12 of the EIR, “Final Environmental Impact Report Consolidation.” Chapter 12 included revisions to the zoning amendment recommended by staff, clarifications and modifications of the draft EIR, all written comments received by the County *after* the period for comments to the draft EIR and after the planning commission’s October 5, 2015, hearing on the project, and staff-initiated clarifications and amplifications made following the September 25, 2015, publication of chapter 7. Chapter 12 also proposed the addition of five new EIR appendices, including Appendix M-2, Cumulative Health Risk Assessment.

*Approval of Ordinance*

On November 9, 2015, the Board held a special meeting at which it approved the project by adopting Ordinance No. G-8605 (Ordinance). The Ordinance amended Chapter 19.98 to County’s Ordinance Code and modified other zoning provisions. Chapter 19.98 contains procedures and standards applicable to the exploration, drilling and production of oil and gas. (Ordinance, § 19.98.010.) The Board also certified the EIR and adopted (1) findings of fact to support its determinations relating to significant environmental impacts, (2) a statement of overriding considerations, and (3) the proposed mitigation measure monitoring program.

**PROCEEDINGS**

*Parties*

On December 9, 2015, King and Gardiner Farms, LLC, a California limited liability company (KG Farms), filed a verified petition for writ of mandate and complaint for declaratory and injunctive relief against the County, the Board and the planning and community development department of the County. KG Farms’ pleading also named Oil Associations as real parties in interest and alleged they were listed as project applicants on the notice of determination issued by the County on November 10, 2015.**[[8]](#footnote-8)** The pleading alleged violations of CEQA and the State Planning and Zoning Law (Gov. Code, § 65000 et seq.). KG Farms’ lawsuit was assigned case No. BCV-15-101666 by the Kern County Superior Court.

On December 10, 2015, Committee For A Better Arvin, Committee For A Better Shafter, Greenfield Walking Group, Natural Resources Defense Council, Sierra Club, and Center for Biological Diversity (collectively, Sierra Club) filed a petition for writ of mandate and complaint for declaratory and injunctive relief against the County, the Board, the County’s planning commission, the County’s planning and development department, and the three real parties in interest (Oil Associations). Sierra Club’s pleading alleged violations of CEQA and the State Planning and Zoning Law and was assigned case No. BCV-15-101679 by the Kern County Superior Court.

*Consolidation*

Based on a February 2016 stipulation of the parties, the CEQA actions brought by KG Farms and Sierra Club were consolidated with a lawsuit brought by Vaquero Energy, Inc. and a related entity, Hunter Edison Oil Development Limited Partnership (collectively, Vaquero). Vaquero alleged the Ordinance violated the equal protection clause and the due process clause and, as a result, was invalid.

*Trial and Judgment*

The trial of the consolidated matters was conducted in June, August and December of 2017. In March 2018, the trial court issued its written ruling resolving all claims and issues. The ruling stated Vaquero had failed to prove the Ordinance was unconstitutional. The ruling also stated the EIR violated CEQA by failing to analyze (1) the Ordinance’s impacts on rangeland and (2) the environmental impacts the road paving mitigation measure intended to reduce dust and the project’s impacts on air quality. The ruling denied all other CEQA claims asserted by KG Farms and Sierra Club.

On April 20, 2018, the trial court entered a single, final judgment in the consolidated CEQA actions. The judgment set forth the directions that would be included in a peremptory writ of mandate addressing the deficiencies in the EIR relating to impacts on rangeland and from road paving as an air emissions mitigation measure. The trial court entered a separate judgment addressing its denial of Vaquero’s claims.

*Appeals*

In June 2018, KG Farms, Sierra Club and Vaquero filed appeals. The three appeals were assigned case No. F077656 by this court. In August 2019, we bifurcated Vaquero’s constitutional claims from the CEQA claims and assigned Vaquero’s appeal case No. F079719. In October 2019, we heard oral argument in Vaquero’s appeal and published a decision rejecting Vaquero’s constitutional claims. (*Vaquero Energy, Inc. v. County of Kern* (2019) 42 Cal.App.5th 312.)

**DISCUSSION**

I. STANDARD OF REVIEW

Plaintiffs seek to invalidate the Ordinance by arguing the EIR failed to comply with several requirements of CEQA. “The basic purpose of an EIR is to ‘provide public agencies and the public in general with detailed information about the effect [that] a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.’ (§ 21061.)” (*Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 511.) An EIR is a document of accountability because it must be certified or rejected by public officials—in this case, the Board. (*Id*. at p. 512.) The public disclosures made by a properly prepared EIR protect both the environment and informed self-government. (*Ibid*.)

Judicial review of a public agency’s compliance with CEQA is governed by the abuse of discretion standard set forth in section 21168.5 and referred to in the policy declaration of section 21005, subdivision (a).**[[9]](#footnote-9)** (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 512.) Section 21168.5 provides that our “inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence.” (§ 21168.5.) Generally, an abuse of discretion may occur in two ways. The public agency could fail to proceed in the manner required by CEQA, thereby committing procedural (i.e., legal) error. Also, the public agency could err by making findings of fact unsupported by substantial evidence. Whether the public agency has employed the correct procedures—that is, followed applicable law—is subject to independent judicial review. (*Sierra Club v. County of Fresno*, *supra*, at p. 512.) In contrast, when the agency acts in its role as the finder of facts, its findings are subject to deferential review under the substantial evidence standard. (*Ibid*.)

In this case, some of the claims raised by plaintiffs assert the discussion contained in the EIR is inadequate, which undermines the EIR’s effectiveness as an informational document. Sometimes, claims of an inadequate discussion cannot be neatly categorized as either factual or procedural error. (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 513.) Our choice of the applicable standard of review for a particular claim of inadequacy is set forth in the section of this opinion discussing that claim.

II. IMPACTS ON LOCAL WATER SUPPLY

Water and its availability present many issues important to Californians. It is particularly important in Kern County where the Kern County subbasin of the San Joaquin Valley Groundwater Basin, which includes most of the project area, has been subject to conditions of critical overdraft since 1980.**[[10]](#footnote-10)** Consequently, our evaluation begins with the various water-related CEQA violations raised.

A. Contentions of the Parties

KG Farms contends the EIR did not contain the detailed, informative analysis of the project’s water supply impacts required by CEQA because it only analyzed those impacts at a regional level and disregarded local impacts. KG Farms contends the EIR must analyze water supply impact “to the extent reasonably possible.” (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 431 (*Vineyard*).) Under KG Farms’ view of the administrative record, it was possible for the County to analyze the project’s local water supply impacts and the reasons offered by the County for its use of three regional subareas are insufficient to excuse it from addressing local impacts.

Oil Associations and the County agree that *Vineyard* requires an EIR to analyze water supplies to the extent reasonably possible. They contend the EIR met this standard by performing a detailed, systematic analysis of water supply impacts within three separate subareas using the best available data. They argue a more localized analysis is not required by CEQA because (1) using a more geographically specific unit would have posed serious technical challenges and (2) any localized water analysis would have been speculative due to the many uncertainties in forecasting long-term use. Some of the uncertainty stemmed from how the new Sustainable Groundwater Management Act (SGMA)**[[11]](#footnote-11)** will be implemented.

B. Disclosures in the EIR

Appendix T to the draft EIR was a Water Supply Assessment Report (WSA) prepared for project proponent Western States Petroleum Association by Kennedy/Jenks Consultants. Sections 4, 5 and 6 of the WSA addressed ground and surfacewater supplies, water demand by the oil and gas industry, and water demand for the project area generally. Section 7 of the WSA compares water supply and demand using three scenarios—a normal or average year, a single dry year and multiple dry years. The final EIR included a revised WSA, dated September 18, 2015. Both versions of the WSA found “that there is no surplus water in the Project Area.”

*1. Physical Setting*

Chapter 4.9 of the EIR addressed hydrology and water quality. Section 4.9.2, “Environmental Setting,” described the project area’s hydrogeology, which included its water bearing formations and groundwater recharge and storage. That section also addressed the relationship between oil and gas production and water resources by summarizing the sources and uses of water for oil and gas exploration and production.

The EIR identified two categories of water—municipal and industrial (M&I) water**[[12]](#footnote-12)** and “produced water.” Produced water is groundwater that naturally occurs in oil and gas reservoirs, is brought to the surface with the extracted oil and gas, and is separated from the hydrocarbons after extraction. Produced water usually is saline and poor quality. Most produced water cannot be used for agricultural, residential, commercial or industrial uses without substantial treatment to remove contaminants.

Based on data from 2012, the draft EIR stated 234,959 acre-feet of water *supplied* to oil and gas operations came from produced water and 8,778 acre-feet came from M&I water. Some of the produced water was used for oil and gas purposes (88,812 acre-feet), some was treated and used for agricultural irrigation (32,771 acre-feet), and some was disposed of in ponds or by well injection (114,794 acre-feet).**[[13]](#footnote-13)** Thus, M&I water accounted for approximately nine percent of total water demand for gas and oil exploration and production.

*2. Regulatory Setting*

Section 4.9.3 of the EIR addressed the regulatory setting by describing federal and state laws affecting water supply and local plans, such as the County’s general plan. The state laws regulate (1) discharges of drilling mud and drilling fluid on land, (2) disposal of produced water in percolation and evaporation ponds, (3) discharges to injection wells, (4) hydraulic fracturing, and (5) the reporting of water use and disposal by oil and gas producers. The EIR also described 2009 amendments to the Water Code requiring the DWR to implement a new California statewide groundwater elevation monitoring (CASGEM) program.**[[14]](#footnote-14)** The program collects data on groundwater levels and use for 515 designated groundwater basins in the state, including the Kern County subbasin that underlies most of the project area. When the draft EIR was prepared, the Kern County subbasin was considered the 21st most impacted of the 515 basins and was designated a high priority basin under the CASGEM program.

The EIR also described SGMA, which was enacted in 2014. (See fn. 7, *ante*.) Under SGMA, groundwater basins, such as the Kern County subbasin, must be managed under a new groundwater sustainability plan, or a coordinated set of plans, by January 31, 2020, because it (1) has been designated as high or medium priority under the CASGEM program and (2) is subject to critical overdraft conditions. Accordingly, to comply with SGMA, a groundwater sustainability plan must be adopted for the Kern County subbasin by January 31, 2020.

Where groundwater sustainability plans are required, one or more local groundwater sustainability agencies must be formed to cover the basin and prepare and implement the applicable groundwater sustainability plans. Groundwater sustainability plans will be reviewed by the DWR to ensure that over a period of 20 years, “sustainable groundwater management” is achieved. (See Wat. Code, § 10721, subd. (w).) There are approximately 10 groundwater sustainability agencies in the project area.

The EIR states “the County’s authority to regulate subsurface activities relating to oil and gas exploration and production is preempted by state and federal laws and regulations.” Therefore, the EIR states County cannot directly regulate or impose mitigation measures that directly regulate subsurface activities by oil and gas operators, but it retains jurisdiction over activities conducted at the surface, including those that may affect subsurface water quality.

*3. EIR’s Analysis of Water Supply Impacts*

 Section 4.9.4 of the EIR addressed impacts to hydrological resources and mitigation measures for the significant impacts. It estimated that by 2035 the use of M&I water, originating from state and federal water projects, in oil and gas exploration and production would increase by 2,983 acre-feet from the 8,778 acre-feet used in 2012. This total increase was allocated across the western (2,493 acre-feet), central (332 acre-feet), and eastern (158 acre-feet) subareas. The EIR also discussed the prospect of increasing the amount of produced water generated by oil and gas activities and increasing the reuse of produced water. The EIR concluded the recommended mitigation measures would encourage the additional reuse of produced water, but “the extent to which oilfield operators can increase produced water reuse and decrease M&I [water] demand is uncertain. As a result, potential impacts to groundwater levels and aquifer volumes would be significant and unavoidable with mitigation.”

Chapter 4.17 of the EIR addressed utilities and service systems, including the systems providing water. Table 4.17-12 summarized the project area water supplies available in 2015 and estimated the amounts available in 2035. The supplies included groundwater, surface water from the Kern River, oilfield produced water, recycled water, and surface water imported from the State Water Project, which is run by the DWR, and from the Central Valley Project, which is run by the Bureau of Reclamation, a federal agency.

Table 4.17-22 summarized the project area demands (agricultural, urban, and oil and gas) for water in average, single dry and multiple dry years for 2015 and 2035. Agricultural demand was based on figures from 2006 obtained from the DWR. The EIR assumed agricultural demand would remain constant, despite the reduction in agricultural land by urban development and other factors. Urban demand was based on publicly available information from 19 different water purveyors, and projections were made for 2020, 2025, 2030 and 2035. The demand from oil and gas exploration and production for produced water and M&I water also was estimated for these years.

Tables 4.17-27 through 4.17-29 in the EIR show the water demand and supply for the project area and each subarea in average, single dry and multiple dry years at five-year intervals from 2015 to 2035. In average years, the water supply and demand in the project area is approximately the same with surpluses in the eastern and western subareas offsetting deficits in the central subarea, which deficits are caused from extensive agricultural activity and the need for irrigation. In single dry years, surface water imported from the State Water Project would be reduced substantially, resulting in significant supply deficits in the project area. While the eastern subarea would have a surplus, it would not offset the deficits projected for the western and central subareas. Due to the leveling effect of using an average, the EIR stated that more water would be available in multiple dry years than in a single dry year.**[[15]](#footnote-15)**

The EIR addressed water supply and demand using the three subareas and did not provide a more localized analysis. For example, it did not perform an analysis at the water district level. The WSA included a map that named 30 water and irrigation districts in the project area and marked their territories using color codes. Table 2 of the WSA listed 43 wholesale and retail water purveyors within the project area and the subareas in which they operated. The WSA also described the water supply conditions associated with the water purveyors, which included imported water supplied by the State Water Project or the Central Valley Project and local surface water from the Kern River and minor streams. As to the potential location of M&I water demand for oil and gas activities, section 3.3.1 of the EIR identified 100 active or abandoned oilfields delineated by DOGGR and specified the size and the subarea (western, central, eastern) where each was located. Figure 3-3 in the EIR was a map showing the location of the oil and gas fields.

The EIR attempted to place the water demand created by oil and gas exploration and production in context of the overall demand for water in the project area. The EIR estimated that sector’s demand for M&I water in 2015 would be 0.37 percent of the total project area demand for M&I and agricultural water and would be 0.44 percent of the total project area demand for M&I and agricultural water in 2035. The EIR also discussed the possibility that the increased use of produced water otherwise subject to disposal might “completely offset oil and gas M&I water demand by 2035.” The EIR stated additional reuse of produced water could require more intensive, costly treatment and this treatment could have other environmental effects related to increased energy use, increased emissions adversely impacting air quality, and disposal of the waste stream created.

C. Analysis

*1. Applicable Legal Principles*

The parties agree that the EIR must analyze water supplies “to the extent reasonably possible.” (*Vineyard*, *supra*, 40 Cal.4th at p. 431.) They disagree on the applicable standard of review. Oil Associations and the County contend the substantial evidence standard applies to its decision to use subareas, rather than more localized units, to analyze water supply impact. In contrast, KG Farms contends the omission of essential information about impacts to local water supplies constitutes legal error subject to de novo review.

As to the meaning of what is “reasonably possible” when disclosing information in an EIR, we conclude that term must be defined and applied by considering the purpose of preparing an EIR. That purpose is “ ‘to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.’ ” (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 516.) The inquiry presents a mixed question of law and fact, which usually is subject to independent review and is subject to substantial evidence review only when questions of fact predominate. (*Ibid*.; see Guidelines, §§ 15144 [forecasting], 15145 [speculation], 15146 [degree of specificity].) “[T]he sufficiency of an EIR is to be reviewed in light of what is reasonably feasible.” (Guidelines, § 15151 [standards for adequacy of an EIR].) We conclude our Supreme Court’s use of the phrase “to the extent reasonably possible” corresponds with the Guidelines’ use of the phrase “what is reasonably feasible.” (*Ibid*.; see Guidelines, § 15364 [definition of feasible].)

As described below, we conclude that, within the context of this case, whether the EIR analyzed water supply impact to the extent reasonably possible presents a mixed question of fact and law in which factual questions predominate and, thus, the substantial evidence standard applies.**[[16]](#footnote-16)** Furthermore, we conclude the record contains substantial evidence supporting the approach taken in the EIR.

*2. Farmer Impacts*

First, we address Oil Associations’ contention that KG Farms is claiming CEQA requires an analysis of impacts to individual farmers. Oil Associations argue such an analysis is not possible because (1) the precise location of future oil wells is not known and (2) individual farmers do not report their water use. KG Farms responds by asserting it is not seeking an analysis of water supply impacts to individual farmers, but it seeks a meaningful level of detail rather that a broad analysis using three subareas. We conclude Oil Associations have adopted an interpretation of KG Farms’ briefing to set up a straw man. (See Black’s Law Dict. (11th ed. 2019) [“tenuous and exaggerated counterargument that an advocate makes for the sole purpose of disproving it”].) Consequently, no further discussion of Oil Associations’ contention about individual farmers is required.

*3. Positive Net Impact of Produced Water*

Second, we consider Oil Associations’ contention that “to the extent that oil and gas water use has any effect, it is a ‘small positive net water supply benefit.’ ” As Oil Associations interpret the record, “[e]ven with no increase in produced water re-use from the mitigation measures, the current 38,658 [acre-feet per year] of produced water used in irrigation exceeds the oil and gas industry’s 2035 M&I water demand by 26,898 [acre-feet per year].” (Fn. omitted.)

Table 7-15 in the final EIR states that in 2012, oil and gas exploration and production activities used 8,778 acre-feet of M&I water and 38,658 acre-feet of its produced water was used for agricultural purposes. Based on these figures, the net effect in the baseline year of 2012 was a positive 29,880 acre-feet (38,658 minus 8,778). Comparing the figure of 29,880 acre-feet to Oil Associations’ calculation of the net effect in 2035 (26,898 acre-feet) results in an estimated *decrease* in the positive net water supply impact to 2,982 acre-feet in 2035. This reduction of a positive net effect on water supply is an adverse environmental impact. Thus, Oil Associations attempt to justify the absence of a localized water supply impact analysis based on the projections that oil and gas activities will supply agriculture with more irrigation water than the M&I water used by oil and gas activities in 2035 is beside the point. Baseline conditions are projected to change for the worse. Thus, Oil Associations’ contention is devoid of merit.

*4. Speculation on Groundwater Supplies and What’s Reasonably Possible*

Third, Oil Associations contend uncertainties in future water supplies and in the way supplies will be allocated render a more detailed analysis speculative and of no useful purpose. Part of this uncertainty arises from how SGMA and the new groundwater sustainability plans it mandates for the Kern County subbasin will be implemented.

KG Farms contends CEQA does not allow the County to simply label the uncertainties about water supplies as speculative and then move on. KG Farms argues SGMA sets specific long-term goals for required groundwater plans that are similar to those in existing groundwater management plans and, therefore, the County could readily make informed judgments regarding near- and long-term impacts on local water supplies.

The EIR stated the WSA analyzed groundwater extraction using an historical mean average as the best information available prior to the implementation of the groundwater sustainability plans for the Kern County subbasin. It also stated this average extraction figure “does not represent the safe or sustainable yield for the Project Area” and the WSA did not consider or identify a safe or sustainable groundwater yield for the project area. The EIR explained this omission by stating the groundwater sustainability plans “will identify the sustainable or safe yield that will avoid unsustainable extraction rates that could yield ‘undesirable results.’ ” Groundwater extraction represents about 75 percent of water supplies in a dry year.

 The information about the uncertainty created by SGMA and the implementation of groundwater sustainability plans for the project area’s largest water source provides substantial evidence supporting the determination that a more localized analysis of water supply impacts would be speculative. Accordingly, we conclude the EIR, when it was prepared and circulated, did not violate the requirement that it analyze water supply impact to the extent reasonably possible.**[[17]](#footnote-17)**

III. EIR’S ANALYSIS OF THE RECENT DROUGHT

A. Contentions of the Parties

KG Farms contends the EIR violates CEQA because it fails to meaningfully address the historic four-year drought (winter of 2012 through winter of 2015)that markedly affected water supplies in Kern County by failing to use the most recent data, which caused it to underestimate the project’s effect on water shortages. KG Farms contends the County violated Guidelines section 15064, subdivision (a), which provides the evaluation of an impact’s significance must be “based to the extent possible on scientific and factual data.”

B. The EIR’s Discussion of the Drought

On August 30, 2013, the County published a notice of preparation of a draft EIR for the proposed Ordinance. The date of the notice of preparation affects the contents of the EIR. Pursuant to Guidelines former section 15125, subdivision (a), the “EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published.”

The draft EIR was released in July 2015. Chapter 4.9 addressed hydrology and water quality. Section 4.9.2, “Environmental Setting,” described the project area’s hydrogeology. Part of that description is set forth in part II.B.1., *ante*. Section 4.9.2’s discussion of groundwater recharge and storage included many statements about the drought. For instance, it referred to the Governor’s April 2014 drought proclamation and the November 2014 release by DWR of a Public Update for Drought Response. The EIR described the drought, stating: “California’s 2014 water year was one of the driest in decades and followed two consecutive dry years throughout the state.” It also stated the demand for groundwater is increased during periods of droughts and described decreases in the water table: “From the fall of 2013 to the fall of 2014, water table elevations declined substantially in the Tulare Lake Basin.” The declines ranged from 25 to more than 50 feet. To put these declines in perspective, the EIR stated “the magnitude of water table decline during the 2014 water year indicates the basin has experienced some of the largest withdrawals of groundwater in the state and substantial withdrawals from groundwater that had been previously stored for future use.”

The EIR’s discussion of the project’s operational impact to hydrology included the following discussion of the drought:

“California is experiencing a severe drought and has implemented unprecedented water use reduction measures to address historically low snowpack and rainfall levels. The drought has had substantial impacts in Kern County, which relies on imported surface water and groundwater to meet urban and agricultural demand. Due to drought-related reductions in surface water availability, regional aquifers have been depleted by extractions in lieu of surface water use to a substantial extent (DWR 2014). As shown in the regional water supply and demand projections, Project Area demand is projected to significantly exceed supplies in single dry and multiple dry years through 2035. The projections do not assume that the implementation of the new groundwater sustainability plan process in the Project Area may reduce groundwater extraction levels to achieve legally applicable aquifer sustainability requirements. Should groundwater extractions be further limited by the groundwater sustainability plan, the supply shortfalls could be greater than anticipated.”

The EIR also addressed the drought in discussing the project’s contribution to cumulative hydrology and water quality impacts:

“Project Area aquifers are historically overdrafted, and recent monitoring data indicates that groundwater storage and elevations have been reduced to historically low levels in many Project Area locations during the current drought ([WSA,] Appendix T). Project Area aquifers are identified as high priority basins in the state CASGEM program and a sustainable level of groundwater use must be determined and implemented for the region by 2020 under recently enacted state law.”

In describing project area water supplies, the EIR stated that “[d]uring the current drought, which began in 2012, portions of the Project Area have not received any imported water and are totally dependent on groundwater” and, as a result, groundwater levels had declined.**[[18]](#footnote-18)** The EIR also addressed the length of the drought by stating: “In April 2015, the [DWR] determined that the drought is continuing into a fourth year.”

In addition to the discussion in chapter four of the EIR, the WSA stated its purpose was “to describe current and future water supplies as well as water demands in the Project Area.” The water supplies included imported water, surface water, groundwater, and recycled water. The WSA addressed supply sources and water demands in normal, single-dry, and multiple-dry years, in five-year increments from 2015 to 2035. The WSA described uncertainty in the information available, including the supply projections from the State Water Project and the Central Valley Project. The WSA stated the projections it relied upon “use the most current modeling and date available,” but “because 2014 was a historically dry year[,] it is likely projections of supply from these sources will be revised by the [DWR] and the [Bureau of] Reclamation.”**[[19]](#footnote-19)** The WSA found that surplus water was not available in the project area, stating:

“Essentially, any new use of water is taking water away from some other user or results in groundwater overdraft. The Central Sub-Area has the greatest potential shortage. Even in an average year supplies are insufficient to meet demands both currently (2015) and into the future (2035). The Central Sub-Area also has projected shortages in a very dry year as well as a multiple-year drought. The West Sub-Area could experience shortages in a very dry year. The East Sub-Area generally has sufficient supply, but this supply cannot compensate for shortages in the other two subareas.”

Table 43 in the WSA compared the supply and demand for water in the project area and the three subareas (west, central and east) for multiple dry years from 2015 to 2035. The EIR included this information in Table 4.17-29. The EIR stated the table showed that, under multiple dry year conditions, “significant supply deficits would occur in the Project Area and the Central Subarea” and gave figures in acre-feet to identify the magnitude of these deficits.

C. Analysis of Alleged CEQA Violation

*1. Adequacy of Discussion*

The legal standard applicable to KG Farms’ claim that the EIR failed to meaningfully address the drought is the general standard for adequacy. KG Farms’ claim raises the issue of “whether [the] EIR’s discussion of environmental impacts is adequate, that is, whether the discussion sufficiently performs the function of facilitating ‘informed agency decisionmaking and informed public participation.’ ” (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 513; see *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1123 [EIR acknowledged an impact would be significant and unavoidable, even with mitigation measures; the acknowledgment was inadequate and a more detailed analysis of how adverse the impact would be was required].) In this context, we assume this inquiry presents a question of law—an assumption favorable to KG Farms.

Based on our review of the contents of the EIR, which includes the WSA, we conclude the discussion provided adequately facilitated informed agency decisionmaking and informed public participation. Much of the information provided in the EIR about the drought is discussed in the foregoing section of this opinion. The EIR also described the drought’s impact on the demand for groundwater and how that demand contributed to the overdrafted condition of the Kern County subbasin. In addition, readers of the EIR were informed about the projections used for future supply and demand and how the drought increased the uncertainty of those projections. Consequently, we conclude the EIR provided sufficient information about the drought to facilitate informed agency decisionmaking and informed public participation.

*2. Timeliness of Data*

KG Farms contends the EIR violated requirements in Guidelines section 15064, subdivision (b). The version in effect in 2015 provided in part:

“The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, *based to the extent possible on scientific and factual data*. An ironclad definition of a significant effect is not always possible because the significance of an activity may vary with *the setting*.” (Guidelines, former § 15064, subd. (b), italics added.)

KG Farms interprets the phrase “to the extent possible on scientific and factual data” to mean the County was required to use the updated state projections of imported water that were published before the release of the final EIR in September 2015. The text of the provision in the Guidelines does not expressly refer to the age of the information used.

Guidelines former section 15125, subdivision (a) specifically addresses the disclosure of information about the environmental setting and the appropriate timeframe for the data used. It states the EIR must describe “the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published.” (Guidelines, former § 15125, subd. (a).) The County published the notice of preparation for the draft EIR on August 30, 2013. The draft EIR used the information that was available at that time to describe the water supply conditions, which included the drought and its consequences. Therefore, we conclude the draft EIR’s description of the environmental setting was not “inaccurate, incomplete and misleading” (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 729) and the EIR does not violate Guidelines sections 15064 or 15125. Instead, the EIR complied with the timing requirement contained in Guidelines section 15125, subdivision (a).

*3. Significant New Information and Recirculation*

“Once a draft EIR has been circulated for public review, CEQA does not require any additional public review of the document before the lead agency may certify the EIR except in circumstances requiring recirculation.” (*Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 223.) Recirculation of an EIR is addressed in Public Resources Code section 21092.1 and Guidelines section 15088.5. Recirculation is required when “significant new information” is added to an EIR after the draft EIR has been circulated for public review. (Pub. Resources Code, § 21092.1; Guidelines, § 15088.5, subd. (a).) New information is “significant” if “the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement.” (Guidelines, § 15088.5, subd. (a).) Examples of significant new information include disclosures of “a new significant environmental impact would result from the project” or “a substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted.” (Guidelines, § 15088.5, subd. (a)(1), (2).) In addition, recirculation is required when the new information shows “[t]he draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.” (Guidelines, § 15088.5, subd. (a)(4).) In contrast, recirculation is unnecessary if “the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.” (Guidelines, § 15088.5, subd. (b).)

The test for determining whether the updated data about the drought and its impact on water supply constitutes significant new information is whether the public was deprived of a meaningful opportunity to comment upon the project’s substantial adverse effect on the water supply, including groundwater. (Guidelines, § 15088.5, subd. (a).)**[[20]](#footnote-20)** A lead agency’s “decision not to recirculate an EIR must be supported by substantial evidence.” (Guidelines, § 15088.5, subd. (e).) Consequently, we review the County’s determination that the updated drought data did not constitute “ ‘significant new information’ ” requiring recirculation under the substantial evidence test. (*Clover Valley Foundation v. City of Rocklin*, *supra*, 197 Cal.App.4th at p. 223.)

Here, KG Farms has not acknowledged the substantial evidence test applies to the decision not to recirculate. As a result, KG Farms has failed to carry the burden imposed on appellants to establish a finding is not supported by substantial evidence. (See *Pfeiffer v. City of Sunnyvale City Council* (2011) 200 Cal.App.4th 1552, 1572 [appellant challenging EIR for insufficient evidence must lay out the evidence favorable to the other side and show why it is lacking; appellant cannot carry its burden of demonstrating error if it fails to do so].) Furthermore, based on our review of the record, it appears the public had a meaningful opportunity to comment on the Ordinance’s potential impact on the water supply. Therefore, we conclude the County did not violate CEQA at the time it decided not to recirculate the EIR with updated information about the drought.**[[21]](#footnote-21)**

IV. MITIGATION OF WATER SUPPLY IMPACT

A. Legal Background

*1. Policies Involving Mitigation*

In 1976, the Legislature enacted section 21002, declaring it the policy of California “that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects.” (3 Stats. 1976, ch. 1312, § 1, pp. 5888–5889.) The Legislature also declared CEQA’s procedures, which include the preparation of an EIR, “are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.” (§ 21002.)

*2. Describing Mitigation Measures*

Once an EIR has identified a potentially significant environmental effect, it must propose and describe mitigation measures. (§§ 21002.1, subd. (a), 21100, subd. (b).) Specifically, CEQA requires the EIR to “include a detailed statement setting forth … [¶] … [¶] [m]itigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy.” (§ 21100, subd. (b)(3).) Mitigation is defined as an action that minimizes, reduces, or avoids a significant environmental impact or that rectifies or compensates for the impact. (Guidelines, § 15370 [definition of mitigation].) The mitigation measures discussed in the EIR should be feasible. (Guidelines, § 15126.4, subd. (a); see Guidelines, § 15364 [definition of feasible].)

CEQA defines the term “ ‘[f]easible’ ” as meaning “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.” (§ 21061.1; see § 21081, subd. (a)(3) [necessary findings relating to mitigation measures or alternatives].) The guidelines add “legal” factors to the list. (Guidelines, § 15364; see *City of Marina v. Board of Trustees of California State University* (2006) 39 Cal.4th 341, 356.)

The role of the EIR, as an informational document, is to identify and describe potentially significant environmental effects and feasible alternatives or mitigation measures. In comparison, the role of the lead agency is to make ultimate findings as to whether potential environmental effects will be significant and to adopt feasible mitigation measures. (1 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act (Cont.Ed.Bar 2d ed. 2019) § 14.3, p. 14-5 (*Kostka*).)

*3. Adoption of Mitigation Measures*

Generally, “the lead agency must adopt feasible mitigation measures or project alternatives to reduce the effect to insignificance.” (*Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal.4th 204, 231 (*Center for Biological Diversity*).) If the reductions and offsets achieved by feasible mitigation measures is insufficient to render the environmental impact insignificant, the lead agency still may approve the project if it adopts a statement of overriding considerations. (*Ibid*.; § 21081, subd. (b).) However, adopting a statement of overriding considerations does not negate the statutory obligation to implement feasible mitigation measures. “Even when a project’s benefits outweigh its unmitigated effects, agencies are still required to implement all mitigation measures unless those measures are truly infeasible.” (*Sierra Club v. County of Fresno, supra,* 6 Cal.5th at pp. 524–525.) Stated another way, “if the County were to approve a project that did not include a feasible mitigation measure, such approval would amount to an abuse of discretion.” (*Id*. at p. 526.)

*4. Enforcement Requirements for Mitigation Measures*

CEQA imposes several requirements on mitigation measures. Section 21081.6, subdivision (b) provides: “A public agency shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures .…” Similarly, Guidelines section 15126.4, subdivision (a)(2) states: “Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments.” The responsibility of the public agency does not end with simply imposing enforceable mitigation measures. “The public agency shall adopt a reporting or monitoring program for the … conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” (§ 21081.6, subd. (a)(1).) The purpose of a monitoring program is to ensure compliance with the mitigation measures imposed as conditions of the project approval. (*Ibid*.)

The issues relating to mitigation measures raised in this appeal include the deferred formulation and implementation of mitigation measures. The legal principles governing these two types of delay are set forth in the part of this opinion addressing the specific arguments raised by the parties.

B. Ordinance Provisions

 In accordance with the provisions of CEQA and the Guidelines addressing mitigation, the Ordinance (1) expressly made compliance with the adopted mitigation measures a condition of permit approval and (2) included a mitigation monitoring and reporting program. When an application is submitted to County for conformity review, it must include “[w]ritten documentation in sufficient detail to allow the County to determine that all conditions required in Section 19.98.060 will be complied with, including all applicable mitigation measures as listed in the approved Mitigation Monitoring and Reporting Program for the [Ordinance.]” (Ordinance, §§ 19.98.080(E)(11), 19.98.085(F)(15).)**[[22]](#footnote-22)** Section 19.98.060 of the Ordinance sets forth implementation standards and conditions for all oil and gas activities for which a permit is sought. Among other things, “[t]he applicant shall demonstrate compliance with all applicable Mitigation Measures as listed in the approved Mitigation Monitoring and Reporting Program … for the [Ordinance.]” (Ordinance, § 19.98.060(D).) The foregoing provisions in the Ordinance require compliance with the mitigation measures adopted by the Board.

C. Board Findings

The Board’s findings relating to water addressed the project’s impact on the supply and recharge of groundwater and, more broadly, its impact on available water supplies.

*1. Groundwater*

The Board found that, without mitigation, the project has the potential to substantially deplete groundwater supplies or interfere with groundwater recharge. The Board stated this impact would be mitigated to less than significant levels if sufficient amounts of “produced water” otherwise subject to disposal could be treated and reused to offset the consumption of M&I water. The Board found the feasibility of additional reuse of produced water in the project area depended on several factors, “including produced water quality, treatment costs and requirements, the availability of conveyance capacity to route produced water to and from treatment facilities, and the availability of institutional mechanisms for managing produced water treatment and distribution.” The Board also found: “*At present*, the extent to which oilfield operators can increase produced water reuse and decrease M&I demand is *uncertain*. As a result, potential impacts to groundwater levels and aquifer volumes would be significant and unavoidable with mitigation.” (Italics added.) In addition to this general finding, the Board specifically addressed Mitigation Measures (MM) 4.17-2, 4.17-3 and 4.17-4, stating that while the measures “would encourage the additional reuse of produced water, the extent to which oilfield operators can increase produced water reuse and decrease M&I [water] demand is *uncertain*. As a result, potential impacts to groundwater levels and aquifer volumes would be significant and unavoidable with mitigation.” (Italics added.)

*2. Water Supplies*

The Board’s findings addressed another water-related impact by stating “[t]he Project could cause significant impacts to existing water supply entitlements and resources”; this impact “will be reduced with implementation of the feasible mitigation measures”; and the “measures cannot reduce this impact to a less than significant level.” In the Board’s view, “CEQA requires that all feasible and reasonable mitigation be applied to reduce the Project’s potential to cause significant impacts to existing water supply entitlements and resources.” The feasible mitigation measures referred to in the Board’s findings were MM 4.17-2, 4.17-3 and 4.17-4. The Board stated these measures “will be incorporated into the Project to reduce its water supply impacts.” The Board explained the inability to mitigate the impacts to less than significant levels by stating “the allocation of water supplies and water demands, the complex laws affecting water rights, the many water districts that have legal jurisdiction over one or more sources of water in the Project Area, the varied technical feasibility of treating produced water, and the produced water reuse opportunities, all present complex variables that fall outside the scope of the County’s jurisdiction or control under CEQA.” The Board concluded: “Because of significant ongoing regional uncertainties regarding water supplies, and the need for agencies other than Kern County to take action to improve management of regional water supplies to meet existing and reasonabl[y] foreseeable demand, Project impacts to water supplies would remain significant and unavoidable.”

D. Contentions

 Sierra Club contends the County violated CEQA by failing to adequately mitigate the project water supply impacts. More specifically, Sierra Club contends the County unlawfully deferred mitigation measures for the project’s significant impact on M&I water by (1) adopting so-called mitigation measures that lacked specific, mandatory performance criteria and (2) failing to implement mitigation measures before the oil and gas activities began creating environmental impacts.

 In response, Oil Associations contend MM 4.17-2, 4.17-3 and 4.17-4 will reduce the use of M&I water and increase the reuse of treated produced water. Oil Associations argue the measures need not include precise quantitative performance standards; and mitigation measures that are at least partially effective do not violate CEQA. In addition, they contend the County did not improperly defer mitigation because, once project activities began, the mitigation measures were in place as required by CEQA. As a final point, Oil Associations contend Sierra Club’s claims fail because the County acknowledged significant and unavoidable impacts to water supply and approved the Ordinance based on a statement of overriding considerations.

E. Mitigation Measure 4.17-2

MM 4.17-2 addresses (1) the use of M&I (fresh) water and (2) the reuse of produced water. Rather than imposing a single requirement, it contains a combination of measures.

*1. The First Sentence*

The first sentence of MM 4.17-2 states: “Applicant shall *increase* the re-use of produced water and shall *reduce* its use of municipal and industrial quality ground or surface water *to the extent feasible*.” (Italics added.) The parties appear to have interpreted “increase” to mean *maximizing* to the extent feasible the use of produced water at the site and “reduce” to mean *minimizing* to the extent feasible the use of M&I water. This interpretation avoids the problem a first-time applicant would face—specifically, that applicant would have no established use of produced water or M&I water to increase or reduce and, as a result, could not comply with the literal terms of the measure.

The County’s mitigation monitoring and reporting program contains other provisions relevant to this and other mitigation measures. The program identifies the time frame for implementation of MM 4.17-2 as being during construction and operation. The program’s “Steps to Compliance” for MM 4.17-2 state (1) the permit applicant “shall implement measures as specified in the mitigation measure[]” and (2) the County’s planning and community development department “will verify.”

Sierra Club claims MM 4.17-2 fails to comply with CEQA because it unlawfully defers the formulation of the mitigation measure. “Formulation of mitigation measures should not be deferred until some future time.” (Guidelines, § 15126.4, subd. (a)(1)(B).) Thus, as a general rule, “it is inappropriate to postpone the formulation of mitigation measures.” (*POET, LLC v. State Air Resources Bd.* (2013) 218 Cal.App.4th 681, 735 (*POET I*).) However, the general rule is not absolute and “ ‘there are circumstances in which some aspects of mitigation may appropriately be deferred.’ ” (*Id.* at p. 735.) For instance, “measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.” (Guidelines, former § 15126.4, subd. (a)(1)(B).) In *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777 (*Endangered Habitats*), the Fourth District stated:

“ ‘Deferral of the specifics of mitigation is permissible where the local entity commits itself to mitigation and lists the alternatives to be considered, analyzed and possibly incorporated in the mitigation plan. [Citation.] On the other hand, an agency goes too far when it simply requires a project applicant to obtain a biological report and then comply with any recommendations that may be made in the report. [Citation.]’ (*Defend the Bay v. City of Irvine* [(2004)] 119 Cal.App.4th [1261,] 1275.) If mitigation is feasible but impractical at the time of a general plan or zoning amendment, it is sufficient to articulate specific performance criteria and make further approvals contingent on finding a way to meet them. [Citation.]” (*Endangered Habitats*, *supra*, at p. 793.)

In *POET I*, we described the exception to the general rule against deferral by stating “the deferral of the formulation of mitigation measures requires the agency to *commit* itself to *specific performance criteria* for evaluating the efficacy of the measures implemented.” (*POET I*, *supra*, 218 Cal.App.4th 738, italics added.) In *POET I*, we also recognized the distinction between stating a generalized goal and adopting specific performance criteria. (*Id*. at p. 740.) Simply stating a generalized goal for mitigating an impact does not allow the measure to qualify for the exception to the general rule against the deferred formulation of mitigation measures.

In *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099 (*Gray*), the project proponent wished to develop a hard rock quarry and applied to the county for a conditional use permit. (*Id*. at p. 1105.) The EIR concluded the project could cause the water levels in adjacent private wells to decline during the operational life of the quarry. (*Id*. at p. 1112.) A mitigation measure required monitoring of the wells and, if an impact was found, the replacement of water for nonconsumptive use from existing wells on the proponent’s property. As to consumptive use, the measure required the proponent to “ ‘provide the affected party, or parties, with bottled water or potable water from some other source that is verified to meet state and federal drinking water standards.’ ” (*Ibid*.) On the question of improper deferral of the formulation of mitigation measures, the proponent argued the county had committed to a mitigation goal of remedying the decline in water levels in the private well and had listed various ways the problem could be addressed. (*Id*. at p. 1118.) We concluded the county had not committed itself to a specific performance standard and, as a result, did not qualify for the exception to the general rule against deferral. (*Id*. at p. 1119.) We stated that “the County has committed itself to a specific mitigation goal—the replacement of water lost by neighboring landowners because of mine operations” and concluded the goal was not a specific performance standard. (*Ibid*.)

Here, we conclude the requirement that applicants shall increase or maximize their use of produced water and decrease or minimize their use of M&I water suffers from the same defect as the measures in *POET I* and *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70 (*Better Environment-Richmond*). In *Better Environment-Richmond*, the “EIR merely proposes a generalized goal of no net *increase* in greenhouse gas emissions and then sets out a handful of cursorily described mitigation measures for future consideration.” (*Id*. at p. 93, italics added.)

In *POET I*, the project was a statewide regulation containing low carbon fuel standards. (*POET I*, *supra*, 218 Cal.App.4th at pp. 700–701.) Among other things, the regulation created incentives for increased biodiesel production and use. (*Id*. at p. 704.) The mitigation in question related to the potential increase in NOx emissions caused by increased biodiesel production and use. (*Id*. at pp. 704–705.) In responding to public comments, the lead agency stated that “it would ‘ensure that biodiesel fuel use does not increase NOx emissions significantly by promulgating a new motor vehicle fuel specification for biodiesel.’ ” (*Id*. at p. 705.) In *POET I*, this court relied on *Gray* and *Better Environment-Richmond* to “conclude that ‘no increase in NOx’ is not a specific performance criterion” and, therefore, the agency’s statement that its future rulemaking would establish specifications to ensure there was no increase in NOx improperly deferred the formulation of mitigation. (*POET I*, *supra*, 218 Cal.App.4th at pp. 739–740.)

Applying the principles addressing the deferred formulation of mitigation measures to MM 4.17-2’s requirement that applicants increase or maximize the reuse of produced water and reduce or minimize the use of M&I water to the extent feasible, we conclude it defers the formulation of the mitigation measures and lacks specific performance standards. The deferral exists because the measures will not be determined until the applicant requests a permit and receives an approval from the County. The terms “increase” and “reduce”—even though preceded by the mandatory term “shall” and modified by the phrase “to the extent feasible”—are not specific performance standards. Feasible means capable of being accomplished in a successful manner within a reasonable time, taking into account various factors. (§ 21061.1; Guidelines, § 15364.) It addresses whether a measure would be employed, but does not address the performance of the measure. In other words, it does not provide a standard relating to performance for any increase in use of produced water or reduction use of M&I water.

Viewed from a broad perspective, our conclusions about the deficiencies of the measure contained in the first sentence of MM 4.17-2 can be characterized as the interpretation and application of CEQA. A basic principle of statutory construction states that when the meaning of statutory language is uncertain, courts should consider the consequences that will flow from a particular interpretation. (*Dyna-Med, Inc. v. Fair Employment & Housing Com.* (1987) 43 Cal.3d 1379, 1387; see *Weatherford v. City of San Rafael* (2017) 2 Cal.5th 1241, 1252.) Applying that principle here, we consider the consequences that would flow from establishing precedent stating (1) CEQA compliance is achieved by a mitigation measure that requires a permit applicant to reduce or offset (i.e., mitigate) a particular environmental impact *to the extent feasible* and (2) more specifically, such a measure does not impermissibly defer the formulation of mitigation. If such a measure satisfied CEQA, lead agencies and project proponents—aware of this precedent—would have little incentive to define the mitigation measures for other projects in more specific terms. Instead, the planning documents or ordinance adopted by local governments would simply say permit applicants must adopt all feasible mitigation measures for a list of significant environmental impacts. Allowing such an approach would undermine CEQA’s purpose of “systematically identifying … feasible mitigation measures which will avoid or substantially lessen such significant effects” (§ 21002) and having EIR’s provide “a detailed statement” of the “[m]itigation measures proposed to minimize the significant effects on the environment.” (§ 21100, subd. (b)(3).)

To summarize, the first sentence of MM 4.17-2 does not qualify for the exception allowing the deferred formulation of mitigation measures. As a result, it violates CEQA’s general rule against the deferred formulation. However, it does not automatically follow that the adoption of that portion of MM 4.17-2 constitutes a prejudicial abuse of discretion. The County and Oil Associations have argued that other aspects of the EIR and the Board’s findings (particularly, the adoption of a statement of overriding considerations) prevent the adoption of MM 4.17-2 through MM 4.17-4 from being an abuse of discretion warranting the issuance of a writ of mandate. These arguments are addressed after our analysis of each of the mitigation measures. (See pt. IV.H., *post*.)

*2. Biggest User Provisions*

 The remainder of MM 4.17-2 provides:

“By the end of 2016, the Applicants shall work with the County to review water use data submitted to Division of Oil Gas and Geothermal Resources under Senate Bill 1281 and identify the five biggest oil industry users of municipal and industrial water by volume. The five biggest oil industry users of municipal and industrial water shall work together to develop and implement a plan identifying new measures to reduce municipal and industrial water use by 2020. The plan shall address the following activities, as appropriate: steam generation; drilling and completions (including hydraulic fracturing); dust control; compaction activities related to construction; and landscaping. Through the KernFLOWS initiative or other efforts (e.g., Groundwater Sustainability Agency), the five biggest oil industry users of municipal-and-industrial water shall also work with local agricultural producers and water districts to identify new opportunities to increase the use of produced water for agricultural irrigation and other activities, as appropriate. Any produced water treated and used for agricultural irrigation or other activities shall be tested and monitored to assure compliance with applicable standards for such agricultural irrigation or other uses.”

To the extent the plan to be developed by the five biggest oil industry users of M&I water is regarded a mitigation measure, there is no question its formulation was deferred. Consequently, we consider whether the plan falls within the exception to the general rule against deferred formulation of mitigation measures. The exception requires the County, as lead agency, to commit itself to specific performance criteria for evaluating the efficacy of the measures implemented. (*POET I*, *supra*, 218 Cal.App.4th 738.)

We conclude the measure does not qualify for the exception. First, MM 4.17-2 lacks specific performance standards for the “plan identifying new measures to reduce municipal and industrial water use by 2020.” Second, nowhere in MM 4.17-2 did the County commit *itself* to the measures ultimately included in the plan. Instead, the measure states the five biggest oil industry users of M&I water “shall work together to … implement a plan.” Thus, implementation was assigned to unidentified third parties—parties that may or may not agree to participate in the task and, if they do participate, may or may not act in good faith. Furthermore, assuming the five biggest oil industry users successfully develop the plan and are able to implement it, the County did not commit itself to adopting the plan and requiring applicants for permits to comply with the plan’s measures. Consequently, the provision relating to M&I water does not include the commitment necessary to qualify for the exception allowing deferred formulation of mitigation measures.

Similarly, the provision in MM 4.17-2 requiring the five biggest users of M&I water to work with local agricultural producers and water districts “to identify new opportunities” to use produced water also lack specific performance standards and commits no one to adopting or implementing anything to take advantage of those opportunities. The absence of specific performance criteria and a commitment by the County leads to the conclusion that the provisions in MM 4.17-2 relating to the five biggest oil industry users of M&I water are not “fully enforceable through permit conditions, agreements, or other legally-binding instruments.” (Guidelines, § 15126.4, subd. (a)(2).)

In addition to the deferred formulation and related lack of enforceability, the provisions in MM 4.17-2 relating to the five biggest oil industry users of M&I water suffer from another defect—delayed implementation. The Ordinance became effective on December 9, 2015. Yet, any measures prescribed by the plan would not be implemented until sometime in 2020. Consequently, the Ordinance and MM 4.17-2 allowed permits for oil and gas activity to be issued (and wells to be drilled) without being subject to the measures contained in the plan. The delayed *implementation* of mitigation measures is a type of delay distinct from deferred formulation.**[[23]](#footnote-23)** In *POET I*, we noted this distinction and addressed delayed implementation by stating that “[o]nce the project reaches the point where activity will have a significant adverse effect on the environment, the mitigation measures must be in place.” (*POET I*, *supra*, 218 Cal.App.4th at p. 738.) The relevant “activity” under the Ordinance is the oil and gas activity described in a permit application. Here, the plan mentioned in MM 4.17-2 was not in place when permits began to be issued and oil and gas activity commenced. Consequently, the plan clearly violates the principle against the delayed implementation of mitigation measures.

*3. Identity of Who Tests Produced Water*

Sierra Club also challenges the last sentence of MM 4.17-2, which states that any produced water treated and used for agricultural irrigation or other activities “shall be tested and monitored to assure compliance with applicable standards for such agricultural irrigation or other uses.” Sierra Club contends the measure does not identify who will test and monitor compliance. This argument is similar to one rejected by the Supreme Court in *Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th 502. There, a mitigation measure required the selection and planting of trees to shade paved areas of the development and did not identify who would select the trees. Relying on inferences, the court stated it seemed clear the selector would be the person submitting the plans to the county for approval and concluded the measure was not vague. (*Id*. at p. 526.)

Here, the question is easily resolved because the record provides an explicit answer and we need not rely on inferences. The monitoring and reporting program states the permit applicant “shall implement measures as specified in the mitigation measure[ ].” Consequently, the persons responsible for the testing and oversight to assure compliance with the standard for irrigation water has been identified as the permit applicant. The second level of responsibility is established by the provision stating the County’s planning and community development department “will verify” the applicant’s compliance.

Also, the reference to “applicable standards” for the use of produced water does not render the measure impermissibly vague. In *Oakland Heritage Alliance v. City of Oakland* (2011) 195 Cal.App.4th 884, the First District stated, “a condition requiring compliance with regulations is a common and reasonable mitigation measure, and may be proper where it is reasonable to expect compliance.” (*Id*. at p. 906.) Here, Sierra Club has not shown it is unreasonable to expect compliance. Therefore, we conclude the reference to applicable standards for produced water does not violate CEQA.

F. Mitigation Measure 4.17-3

*1. Text of Provision*

 MM 4.17-3 addresses the use of water produced from oil and gas activities. It provides in full:

“In the County’s required participation for the formulation of a Groundwater Sustainability Agency, the Applicant shall work with the County to integrate into the Groundwater Sustainability Plan for the Tulare Lake-Kern Basin, *best practices* from the oil and gas industry *to encourage* the re-use of produced water from oil and gas activities, and (with appropriate treatment) to produce new water supplies for other uses such as agricultural irrigation and groundwater recharge. The produced water re-use goal is 30,000 acre-feet per year, which would offset more than the current use of imported water and groundwater from non-oil bearing zones by the oil and gas industry.” (Italics added.)

The mitigation monitoring and reporting program contains a box labeled “Time Frame for Implementation.” The box for MM 4.17-3 states: “Provide with Application Package; During construction and operation.” The “Steps to Compliance” for MM 4.17-3 are the same as the steps for MM 4.17-2. The permit applicant “shall implement measures as specified in the mitigation measure[]” and the County’s planning and community development department “will verify.”

*2. Failures to Comply with CEQA’s Requirements*

Sierra Club challenges MM 4.17-3 on several grounds. Sierra Club contends “best practices” is a subjective and imprecise term that lacks enforceability. Also, Sierra Club contends the “goal” of re-using 30,000 acre-feet of produced water is not a commitment to a specific performance standard. Sierra Club supports this contention by referring to the EIR, which states “the extent to which the G[roundwater Sustainability Plan] process could be used to enhance produced water reuse in the Project Area is uncertain.” More generally, the EIR stated “[t]he extent to which oilfield operators can feasibly increase produced water reuse and decrease M&I demand is uncertain.” Sierra Club also contends MM 4.17-3 does not identify what, if anything, individual applicants must contribute to the aggregate goal.

We conclude MM 4.17-3 does not comply with the requirements CEQA imposes on mitigation measures. According to the EIR, the groundwater sustainability plan mentioned must be adopted by January 31, 2020. Thus, the EIR and MM 4.17-3 referred to a nonexistent plan intended to be adopted over four years later. As a result, MM 4.17-3 and the groundwater sustainability plan violated the general rule against the deferred formulation of mitigation measures. Furthermore, the exception to this general rule does not apply because the County did not commit itself to specific performance criteria. While the goal of reusing 30,000 acre-feet per year of produced water is specific, it is merely a goal and not a commitment that third parties could enforce in “in a court mandamus proceeding.” (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 526.) Moreover, drilling and construction activity authorized by permits issued under the Ordinance is being undertaken before the plan is finalized, which is contrary to the principle prohibiting delayed implementation. (See *POET I*, *supra*, 218 Cal.App.4th at p. 738.)

G. Mitigation Measure 4.17-4

*1. Text of Provision*

 Impact 4.17-4 in the EIR addresses the water supplies available to serve the project from existing entitlements and resources. The EIR concludes these supplies are not sufficient and new or expanded entitlements would be needed. Addressing this impact, MM 4.17-4 states in full:

“The Applicant shall work with the County on the Groundwater Sustainability Plan to increase Applicant use of reclaimed water and reduce the Applicant’s use of municipal-and-industrial quality imported surface water or groundwater. The Applicant will provide copies of water use reports produced under SB 1281 to the Groundwater Management Agency, which will then integrate this information into the Groundwater Sustainability Plan required under the Sustainable Groundwater Management Act.”

The mitigation monitoring and reporting program identifies the time frame for implementation of MM 4.17-4 by stating: “Provide with Application Package; During construction and operation.” As with both MM 4.17-2 and MM 4.17-3, the “Steps to Compliance” state (1) the permit applicant “shall implement measures as specified in the mitigation measure[]” and (2) the County’s planning and community development department “will verify.”

*2. Failures to Comply with CEQA’s Requirements*

The first sentence of MM 4.17-4 is similar to the first sentence contained in MM 4.17-2, which stated the applicant “shall increase the re-use of produced water, and reduce its use of [M&I] water.” Instead of using “increase” and “reduce” as action verbs, MM 4.17-4 requires the applicant to “work with the County on the Groundwater Sustainability Plan” to attain increases and reductions. As stated in our discussion of MM 4.17-3, to the extent the groundwater sustainability plan is considered a mitigation measure, it violates the general rule against deferred formulation and does not qualify for the exception to the general rule because the County did not commit itself to specific performance standards. (See Guidelines, § 15126.4, subd. (a)(1)(B) [deferred formulation].) Also, it violates the principle prohibiting delayed implementation. (*POET I*, *supra*, 218 Cal.App.4th at p. 738.)

The foregoing conclusions about MM 4.17-2 through 4.17-4 are consistent with the statement in *Endangered Habitats* about mitigation measures adopted for a zoning amendment. The court stated that if mitigation is feasible but it is impractical to define in specific terms at the time of a zoning amendment, “it is sufficient to articulate specific performance criteria and make further approvals contingent on finding a way to meet them.” (*Endangered Habitats*, *supra*, 131 Cal.App.4th at p. 793; see *Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1028–1029.) In this case, MM 4.17-2 through 4.17-4 do not contain specific performance criteria and make the approval of permit applications contingent on finding a way to meet those performance standards. Accordingly, MM 4.17-2 through 4.17-4 do not satisfy these and other requirements CEQA imposes on mitigation measures.

H. Consequences of Defects in Mitigation Measures

The parties disagree about the consequences that flow from the failure of MM 4.17-2 through 4.17-4 to satisfy the requirements CEQA imposes on mitigation measures. In its broadest terms, the issue could be cast as whether failures of the mitigation measures to comply with CEQA’s requirements “constitute a prejudicial abuse of discretion.” (§ 21005, subd. (a).) There is no presumption that noncompliance with CEQA is prejudicial. (§ 21005, subd. (b).)

The prejudice inquiry would be relatively straightforward if the County had relied on MM 4.17-2 through 4.17-4 to find the project’s significant effects on water supply had been mitigated to less than significant levels. Had that been the case, the failures of the measures to comply with CEQA’s requirements would have constituted reversible error. (E.g., *Better Environment-Richmond*, *supra*, 184 Cal.App.4th at pp. 78, 90–91 [EIR stated all project impacts would be reduced to less than significant levels by mitigation measures; improper deferral of greenhouse gas mitigation measures resulted in reversal and remand].) Here, the County did not find the impacts on water supply would be mitigated to less than significant levels. Consequently, our inquiry into prejudice is more detailed.

*1. Contentions*

Oil Associations note “the County concluded that the effectiveness of MMs 4.17-2, 4.17-3 and 4.17-4 was uncertain, found water supply impacts to be significant and unavoidable, and approved the Project based on overriding economic and other benefits.” (Fn. omitted.) Oil Associations contend CEQA does not require the adoption of additional mitigation measures when a lead agency (1) finds all feasible mitigation has been adopted, (2) makes an informed decision that an impact is still significant and unavoidable, and (3) adopts a statement of overriding considerations. Oil Associations support their claim that all feasible mitigation measures have been adopted by asserting Sierra Club “has not suggested any mitigation measure to feasibly mitigate water supply impacts to a less-than-significant level.” They address the sufficiency of the disclosures in the EIR by stating Sierra Club “does not claim the County failed to ‘fully disclose’ Project impacts.”

Sierra Club responds by contending the County’s adoption of a statement of overriding considerations did not cure its unlawful deferral of mitigation. Sierra Club also contends the EIR is analytically deficient because it “neglects to address how and to what degree water supply mitigation is feasible because it generically instructs applicants to do what is ‘feasible’ (MM 4.17-2 … ) but defers the formulation of specific measures to a future, uncertain planning process.”

*2. Measures of Uncertain Effect—Issues and Our Legal Conclusions*

The Board’s findings addressed MM 4.17-2, 4.17-3 and 4.17-4 by stating that while the measures “would encourage the additional reuse of produced water, the extent to which oilfield operators can increase produced water reuse and decrease M&I [water] demand is uncertain.” This finding and the contentions of the parties raise the following legal question: Does CEQA allow a lead agency to adopt measures of uncertain effectiveness and label them mitigation measures? We conclude the answer is “yes,” provided (1) the lead agency has made certain findings, (2) the lead agency has adopted a statement of overriding considerations and (3) the EIR satisfies certain requirements.

The lead agency must find (1) the measures are at least partially effective, (2) all feasible mitigation measures have been adopted, and (3) the environmental impacts will not be mitigated to less than significant levels. The findings must be supported by substantial evidence. (§ 21168.5.)

Partial effectiveness is necessary for the measure to be labeled a “mitigation measure.” While the *extent* of the mitigation may be uncertain, there must be some reductions or offsets for the label “mitigation measure” to be accurate. The partial effectiveness requirement is derived from the mandatory language in our Supreme Court’s statement that “[m]itigation measures need not include precise quantitative performance standards, *but they must be at least partially effective*, even if they cannot mitigate significant impacts to less than significant levels.” (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 523, italics added.)

The need for a finding that *all* feasible mitigation has been adopted (when impacts have not been mitigated to less than significant levels) is not a disputed issue in this case. The Board’s findings repeatedly state “CEQA requires that all feasible and reasonable mitigation be applied to reduce the Project’s [significant] impacts” to the environment. This statement is based on the provisions in section 21081 stating no public agency shall approve a project with significant effects on the environment unless specific requirements are met. The agency must find (1) changes or alterations in the project have been required to mitigate or avoid the significant environmental effects; (2) another agency has jurisdiction and responsibility over the adoption of such changes or alteration; or (3) “[s]pecific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.” (§ 21081, subd. (a).) If the agency makes the latter infeasibility finding, the project can be approved only if “the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.” (§ 21081, subd. (b).) These provisions are summarized in the principle that an agency must have adopted all feasible mitigation measures before approving a project with significant environmental effects based on overriding considerations.

Other requirements related to the adoption of mitigation measures of uncertain effectiveness address the contents of the EIR and whether its disclosures and analysis of the mitigation measures are adequate. The EIR’s discussion must justify the adoption of mitigation measures of uncertain effect and support the adoption of the statement of overriding considerations. To do so, the EIR must (1) describe the mitigation measures that are available (i.e., currently feasible) and (2) identify and explain the *uncertainty* in the effectiveness of those measures.

The requirement for a description of the mitigation is based on the general rule that “an EIR is required to provide the information needed to alert the public and the decision makers of the significant problems a project would create and *to discuss currently feasible mitigation measures*.” (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 523.) The discussion provided must contain facts and analysis, rather than the agency’s bare conclusions or opinions. (*Id*. at p. 522.) Whether the facts and analysis included in the EIR’s discussion of currently feasible mitigation measures are sufficient to comply with CEQA depends on “whether the EIR includes enough detail ‘to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.’ [Citations.] The inquiry presents a mixed question of law and fact. As such, it is generally subject to independent review.” (*Sierra Club v. County of Fresno*, *supra*, at p. 516.) However, when factual questions predominate, review under the more deferential substantial evidence standard is warranted. (*Ibid*.)

Our conclusions that the EIR must identify and explain the uncertainty in the effectiveness of the mitigation measures proposed is a specific application of the general principles governing the discussion of mitigation measures. To fulfill its informational role, an “EIR must contain facts and analysis” (*Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935). Uncertainty in the extent a measure will be effective, as well as the reasons for that uncertainty, are important facts that should be disclosed to the public and decision makers.

*3. Application of Conclusions of Law to Facts of this Case*

The foregoing conclusions of law identify the circumstances in which CEQA allows a lead agency to adopt measures of uncertain effectiveness and label them mitigation measures. The next step of our analysis is to determine if those circumstances are present in this case.

First, we consider whether the Board found the mitigation measures were at least partially effective. Having reviewed the findings, we conclude the Board’s statements about the effectiveness of the measures are not clear. The Board’s findings acknowledge CEQA requires all feasible mitigation be applied to the significant impacts to water supply and then state: “Mitigation Measures **MM 4.17-2** and **MM 4.17-3**, described above, and **MM 4.17-4**, described below, will be incorporated into the Project to reduce its water supply impacts, but … [there are many] complex variables that fall outside the scope of the County’s jurisdiction or control under CEQA.” Read in context, one of the reasonable inferences drawn from this language is that MM 4.17-2 through MM 4.17-4 actually will reduce water supply impacts. In comparison, the Board found that “while MM 4.17-2 through 4.17-4 *would encourage* the additional reuse of produced water, the extent to which oilfield operators can increase produced water reuse and decrease M&I demand is uncertain.” (Italics added.) This finding is ambiguous because it does not address how applicants would react to the encouragement. In its findings relating to overriding considerations, the Board stated: “12. Implementation of MM 4.17-2 to MM 4.17-4 *could* reduce water supply impacts, but … [there are] complex variables that fall outside the scope of the County’s jurisdiction or control under CEQA.” (Italics added.) The use of the word “could” suggests the possibility of reductions without eliminating the possibility there might not be any reductions. Stated another way, it is not a finding that reductions actually will occur and only the amount is uncertain (i.e., not reasonably foreseeable and, therefore, not subject to being forecasted). (See Guidelines, §§ 15144 [forecasting], 15145 [speculation].)

In summary, the Board’s findings are ambiguous on the question of whether MM 4.17-2 through 4.17-4 will be at least partially effective in reducing the project’s significant water supply impacts. For purposes of this appeal, we need not adopt an interpretation that resolves the ambiguity; it is described here so the County can avoid repeating it in any proceedings it conducts on remand. (See § 21168.9, subd. (c).)

Second, we consider whether the Board found all feasible mitigation measures had been adopted. The Board did not make this finding explicit, but it is reasonably implied from the statements made in the Board’s findings. The Board acknowledged CEQA required all feasible mitigation be applied to the significant impacts to water supply and then discussed MM 4.17-2 through 4.17-4. Reading these statements together, they are reasonably interpreted as a finding that all feasible mitigation measures for water supply impacts had been adopted.**[[24]](#footnote-24)**

Third, we turn from the Board’s findings to the content of the EIR and address whether the EIR identified and explained the uncertainty in the effectiveness of the mitigation measures. The EIR qualified the ability of MM 4.17-2 through MM 4.17-4 to reduce water supply impacts by stating:

“[B]ut the allocation of water supplies and water demands, the complex laws affecting water rights, the many water districts that have legal jurisdiction over one or more sources of water in the Project Area, the varied technical feasibility of treating produced water, and the produced water reuse opportunities all present complex variables that fall outside the scope of the County’s jurisdiction or control under CEQA. The County concludes that other agencies can and should cooperate in water management planning and implementation actions under the Sustainable Groundwater Management Act and other applicable laws to improve the quantity and reliability of water supplies in the Project Area. Because of significant ongoing regional uncertainties regarding water supplies, and the need for agencies other than Kern County to take action to improve management of regional water supplies to meet existing and reasonabl[y] foreseeable demand, cumulative impacts to water supplies would remain significant and unavoidable.”

In addition, the EIR stated “[t]he extent to which oilfield operators can feasibly increase produced water reuse and decrease M&I demand is uncertain.” Accordingly, the EIR discusses, in a general way, the causes of the uncertainty about the extent to which the mitigation measures actually would reduce water supply impacts. The lack of specificity in this discussion is related to the lack of specific information about the measures applicants will implement to reduce water supply impacts, such as the technology and techniques that will be used.

Fourth, we consider whether the EIR adequately described the currently feasible mitigation measures for the significant water supply impacts. As explained below, we conclude the discussion is inadequate and, therefore, the EIR fails to comply with CEQA.

“[A]n EIR is required to provide the information needed to alert the public and the decision makers of the significant problems a project would create and *to discuss currently feasible mitigation measures*.” (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 523.) To fulfill the EIR’s informational role, the discussion of the mitigation measures must contain facts and analysis, not bare conclusions and opinions. (*Id*. at p. 522.) The level of detail CEQA requires in the EIR’s discussion of facts and analysis of the mitigation measures depends on “whether the EIR includes enough detail ‘to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.’ ” (*Sierra Club v. County of Fresno*, *supra*, at p. 516.) Here, the EIR provides no information about what applicants will (or might) do at the site covered by a permit to minimize the use of M&I water and maximize the reuse of produced water. Nothing is said about technologies and techniques for achieving the general goals relating to water use. The gaps in the information provided by the EIR are made more confounding by its statement about the “complex variables that fall outside the scope of the County’s jurisdiction or control under CEQA.” Even if particular technologies and techniques had been identified and described in the EIR, this statement leaves the reader wondering if an applicant would be required to commit to any measures in its application or, alternatively, whether the applicant could omit those measures from its application because they were beyond the County’s authority or control.**[[25]](#footnote-25)** Accordingly, the level of detail provided in the EIR about mitigation for the significant water supply impacts fails to enable the public and decision makers to understand and consider meaningfully the issues relating to water supply impacts and mitigating those impacts.

This “noncompliance with the information disclosure” requirements of CEQA “preclude[d] relevant information from being presented to the public agency” and the public. (§ 21005, subd. (a).) It constitutes a prejudicial violation of CEQA by itself and supports the conclusion that the failure of the mitigation measures to comply with the general rules against deferred formulation was prejudicial.

*4. Statement of Overriding Considerations*

Next, we consider Oil Associations’ argument that the Board’s adoption of a statement of overriding considerations redresses the problems associated with the uncertain effectiveness of the mitigation measures. Oil Associations’ argument invokes the principle that, “ ‘to the extent significant impacts remain after mitigation, the agency may still approve the project with a statement of overriding considerations.’ ” (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 525.)

The argument is easily resolved because Oil Associations have assumed the EIR was adequate as an informational document. The Board’s adoption of the statement of overriding considerations was based on the EIR, which omitted information necessary to understanding both the mitigation measures and the water supply impacts being overridden. This deficiency in the information provided prevents the adoption of the statement from curing the defects in the mitigation measures or rendering them nonprejudicial. Instead, the informational deficiency undermines the foundation upon which the statement of overriding considerations rests. Consequently, the defects in the EIR’s discussion of mitigation measures must be remedied and a revised EIR considered by the Board before it adopts any statement of overriding consideration.

V. AIR QUALITY IMPACTS**[[26]](#footnote-26)\***

A. Mitigation Measures

The draft EIR addressed the air quality impacts by finding the adoption of the Ordinance would generate cumulatively significant emissions of oxides of nitrogen (NOx), reactive organic gases (ROGs), and particulate matter of 10 microns or less in diameter and, therefore, feasible mitigation was required for approval of the Ordinance. Mitigation of these emissions was addressed in MM 4.3-1 through 4.3-4 and 4.3-8. Under MM 4.3-1, stationary sources of emissions, such as a new facility or equipment must obtain an authority to construct and permit to operate from Air District, which will require compliance with its requirements, including Air District Rule 2201. Rule 2201 requires all emissions greater than two pounds per day to be offset at a ratio of greater than 1:1. MM 4.3-2 requires the applicant to implement a fugitive dust control plan in compliance with Air District regulations. MM 4.3-3 sets engine standards and limits idling of off-road construction equipment. MM 4.3-4 sets requirements for on-road heavy-duty diesel haul vehicles.

The final EIR described MM 4.3-8 by stating it “requires applicants to pay an air emission mitigation fee, or alternatively to undertake direct emissions reductions to fully offset new emission increases not already required to be offset under [Air District] rules, including emissions from permitted equipment that is not subject to the emission offset requirement.” MM 4.3-8 states:

“For criteria emissions not required to be offset under a District rule as described in MM 4.3-1, and for Project vehicle and other mobile source emissions, the County will enter into an emission reduction agreement with the San Joaquin Valley Air Pollution Control District, pursuant to which the Applicant shall pay fees to fully offset Project emissions of oxides of nitrogen, reactive organic gases, and particulate matter of 10 microns or less in diameter (including as applicable mitigating for reactive organic gases by additive reductions of particulate matter of 10 microns or less in diameter) (collectively, ‘designated criteria emissions’) to avoid any net increase in these pollutants. The air quality mitigation fee shall be paid to the County as part of the Site Plan review and approval process, and shall be used to reduce designated criteria emissions to fully offset Project emissions that are not otherwise required to be fully offset by District permit rules and regulations.

“As an alternative to paying the fee, an Applicant may reduce emissions for one or more designated criteria emissions through actual reductions in air emissions from other Applicant sources, as submitted to the County and validated by the District. This Project offset requirement alternative shall be enforced by the County and verified by San Joaquin Valley Air Pollution Control District, and must be approved in advance by the San Joaquin Valley Air Pollution Control District. If a voluntary emission reduction agreement is not executed by the County and San Joaquin Valley Air Pollution Control District, then each Applicant must mitigate for the full amount of designated criteria pollutants as verified by the San Joaquin Valley Air Pollution Control District, with evidence of such District-verified offsets presented as part of the Site Plan Conformity Review application documentation.”

The third paragraph of MM 4.3-8 provides examples of feasible air emission reduction activities that might be funded by the applicant’s fees or implemented by the applicant. They include replacing or retrofitting diesel-powered stationary and mobile engines, reducing emissions from public infrastructure, reducing water-related emissions through water conservation and reclamation, and funding lower-emission equipment and processes for schools, hospitals, local businesses, city facilities and County facilities.

The final EIR anticipated that the County and Air District would have an oil and gas emission reduction agreement in place by the time the Board considered approving the Ordinance and certifying the final EIR. This expectation was not met, since the agreement between Air District and the County was not approved by the Air District’s board until August 18, 2016—about nine months after the final EIR was certified.**[[27]](#footnote-27)**

The final EIR addressed comments to MM 4.3-8 relating to its enforceability, whether it would produce emissions reductions necessary to offset the Ordinance’s impacts, and whether it impermissibly deferred mitigation. The final EIR concluded the measure (1) was enforceable, (2) would generate real, quantifiable emission reductions, and (3) did not unlawfully defer mitigation because the mitigation fees would be paid prior to approval of a permit. In the discussion provided to support these conclusions, the final EIR stated: “If the applicant fails to either pay the fee or provide the necessary validation of emissions reductions [by the Air District], the proposed site plan will be disapproved.” It also stated that the Air District’s history of administering fees collected under its indirect source rule and voluntary emission reduction agreements made it reasonable to expect that the funds administered through the oil and gas emission reduction agreement between the County and Air District would achieve effective emission reductions to offset the project’s increases in emissions.

B. Feasible and Available Offsets under MM 4.3-8

Sierra Club’s first challenge to MM 4.3-8 asserts the County failed to assess whether sufficient pollution-reducing activities were available and feasible to offset the large volume of air pollution from new wells. Sierra Club contends the County simply assumed pollution-reducing offset projects would be implemented in the future by Air District or permit applicants even though comments pointed out the EIR failed to assess whether enough pollution-reducing projects exist to offset the substantial increase in emissions caused by the Ordinance.

This challenge appears to have two aspects. It could be claiming the discussion of the feasibility of the mitigation measure was inadequate or insufficient and, therefore, did not comply with CEQA. Alternatively, it could be claiming the finding that MM 4.3-8 was feasible is erroneous because it is not supported by substantial evidence.

*1. Adequacy of the EIR’s Discussion*

Initially, we note that CEQA and the Guidelines do not explicitly require an EIR’s discussion of a fee-based mitigation program to describe the availability of impact reducing or offsetting projects. (See generally, § 21083.1 [interpretation of CEQA and Guidelines].) Therefore, Sierra Club’s challenge does not involve a situation where the EIR fails to discuss a matter that CEQA, the Guidelines or case law says must be discussed.

Under general principles that govern whether an EIR’s discussion is adequate or sufficient, reviewing courts consider “ ‘whether the EIR reflects a reasonable, good faith effort to … identify and describe mitigation measures and alternatives.’ ” (*City of Long Beach v. Los Angeles Unified School Dist.* (2009) 176 Cal.App.4th 889, 898.) “The determination whether a discussion [in an EIR] is sufficient is not solely a matter of discerning whether there is substantial evidence to support the agency’s factual conclusions. [¶] The ultimate inquiry … is whether the EIR includes enough detail ‘to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.’ [Citations.] The inquiry presents a mixed question of law and fact. As such, it is generally subject to independent review.” (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 516.) However, when factual questions predominate, review under the more deferential substantial evidence standard is warranted. (*Ibid*.)

Here, we conclude the inquiry into the adequacy or sufficiency of the EIR’s discussion presents a mixed question of law and fact subject to our independent review. In conducting this inquiry, we assess whether the EIR provides enough detail about MM 4.3-8 to enable decisionmakers and the public to understand and consider meaningfully the feasibility of MM 4.3-8—the issue Sierra Club claims the County failed to assess.

Section 7.2, “Responses to Comments,” of the final EIR addressed MM 4.3-8 and the oil and gas emission reduction agreement between the County and Air District at pages 7-185 through 7-212. Many of those pages contain tables estimating emissions and emission reductions. One aspect of the fee-based mitigation program is described as follows: “If the applicant fails to either pay the fee or provide the necessary validation of emissions reductions, the proposed site plan will be disapproved.” In short, the fee must be paid up front.

Whether the County and Air District would be able to spend the fees collected from applicants was addressed by describing Air District’s experience in administering air emission fees to achieve emission reductions. Based on this experience, the final EIR stated it was reasonable to expect the administration of the fees collected to achieve effective emission reduction. Based on the anticipated volume of fees, the final EIR stated the magnitude of the funds offered economies of scale not previously available to Air District in its other fee-based programs and addressed the expenditure of the funds by stating “it is expected that the fund[s] will be able to advance larger projects requiring substantially more capital than was available in the past.” In addressing the expenditure of the fees paid by applicants, the final EIR made no attempt to identify specific projects that could be funded during the period analyzed—that is, through the year 2035.

We conclude specific information about projects that might be funded in the future is not required to enable persons reading the EIR to understand and consider meaningfully the issues raised by MM 4.3-8. An objectively reasonable person reading the EIR would realize the difficulty in predicting or estimating what will happen in the future, including the opportunities for reducing emissions and the technology available to achieve reductions. Bluntly stated, the reader would understand the EIR predicts Air District will be able to identify opportunities and spend the funds in a manner that achieves the required emission reductions. Contrary to Sierra Club’s arguments, this was not an assumption. Moreover, Sierra Club has not established the County failed to “disclose all that it reasonably can” about the future opportunities that might arise under the fee-based mitigation program or the technologies that might be relevant to the existence of those opportunities. (Guidelines, § 15144 [when forecasting, an agency must disclose all that it reasonably can]; see Guidelines §§ 15145 [speculation], 15146 [degree of specificity].) In sum, remanding with instructions for the County to provide a more detailed description of the difficulties in forecasting the future opportunities available would not significantly improve the EIR as an informative document.

*2. Substantial Evidence Supports Feasibility Finding*

 Sierra Club might be challenging the finding that MM 4.3-8 is feasible on the ground substantial evidence does not support a finding that future opportunities will be available and will be adequate to offset the emissions from drilling wells and related operations. “In applying the substantial evidence standard, ‘the reviewing court must resolve reasonable doubts in favor of the administrative finding and decision.’ ” (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 393; see Guidelines, § 15384, subd. (a) [definition of substantial evidence].) Our Supreme Court has described this standard as “deferential.” (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 516.)

 Here, the EIR’s statements that MM 4.3-8 is enforceable and will generate real, quantifiable emission reductions is the equivalent of a finding that it is “feasible.” Moreover, the Board’s findings list it among the feasible and reasonable mitigation that will reduce the emission of criteria pollutants. The EIR’s statements and the Board’s findings contradict Sierra Club’s claim that the County failed to assess whether MM 4.3-8 was feasible.

Next, we conclude the Board’s finding MM 4.3-8 is feasible is supported by substantial evidence in the form of inferences reasonably drawn from (1) Air District’s experience in administering fee-based emission reduction programs and (2) the amount of funds that will be available, which will allow Air District to fund larger projects than it could in the past. While other inferences could be drawn from the information provided in the EIR, we must resolve doubts in favor of the Board’s administrative finding. In other words, even though information is not provided about the availability of future emission-reducing projects that will be funded by the fees collected from applicants, the other information in the EIR is sufficient to meet the deferential substantial evidence standard.

C. Deferred Mitigation

 Sierra Club contends MM 4.3-8 unlawfully defers mitigation of air quality impacts by allowing significant polluting activities to begin without mitigation. Sierra Club relies on statements by this court about (1) deferred *formulation* of mitigation measures and (2) having the mitigation measures *in place* when the project’s impact causing activity goes forward. (*POET I, supra,* 218 Cal.App.4th at pp. 734–741). In *POET I*, the plaintiffs claimed the ARB impermissibly deferred its analysis and mitigation of potential increases in NOx emissions caused by its adoption of a new statewide fuel regulation. (*Id*. at p. 731.) We described the general rule that it is inappropriate to postpone the formulation of mitigation measures and the exception to this general rule. (*Id*. at pp. 734–738.) After reviewing the case law, we identified two principles that were important to the issues presented in *POET I*:

“First, the deferral of the formulation of mitigation measures requires the agency to commit itself to *specific performance criteria* for evaluating the efficacy of the measures implemented. Second, the ‘activity’ constituting the CEQA project may not be undertaken without mitigation measures being in place ‘to minimize any significant adverse effect on the environment of the activity.’ (§ 21080.5, subd. (d)(3)(A).) In other words, the deferral relates only to the *formulation* of mitigation measures, not the mitigation itself. Once the project reaches the point where activity will have a significant adverse effect on the environment, the mitigation measures must be in place.” (*POET I*, *supra*, 218 Cal.App.4th at. p. 738.)

 The mitigation issues presented in *POET I* are not identical to those presented by Sierra Club’s contentions because MM 4.3-8 involves a fee-based program that funds measures to offset the project activity’s emissions. *POET I* did not address that kind of mitigation measure.

*1. Formulation of Mitigation Measure 4.3-8*

On appeal, Sierra Club contends MM 4.3-8 relied upon the adoption of an oil and gas emission reduction agreement between the County and Air District and the agreement was not approved by Air District’s board until almost nine months after the Ordinance was adopted and the EIR certified. Sierra Club asserts that during the year after the Ordinance’s adoption, the County issued almost 1,200 new permits (which allowed pollution generating activities to commence immediately) while it was still working with Air District to set up processes for the transfer of mitigation fees and the selection of pollution reducing projects. Sierra Club supports this assertion of fact by citing the County’s 2016 Oil and Gas Permitting Program Annual Progress Report and asking this court to take judicial notice of the report.

The threshold question presented by Sierra Club’s contentions is whether this court should take judicial notice of the County’s 2016 report and treat it as relevant to an issue raised in this litigation. In *Porterville Citizens for Responsible Hillside Development v. City of Porterville* (2007) 157 Cal.App.4th 885, this court rejected a request to take judicial notice of documents not included in the administrative record, stating:

“It is a fundamental CEQA precept that when assessing the adequacy of CEQA compliance, [trial and appellate] courts review the environmental documentation that actually was prepared and they assess the evidence that actually was utilized in preparation of the environmental documentation and presented to or considered by the decision makers when the challenged determination was made.” (*Id*. at p. 890; see 2 *Kostka*, *supra*, § 23.73, pp. 23-85 to 23-86.)

Nearly four years later, this court, weary of CEQA appeals that included ill-founded requests for judicial notice and motions to augment the record, attempted to provide guidance to practitioners on how to preserve and present evidentiary issues in a CEQA appeal. (*Madera Oversight Coalition, Inc. v. County of Madera, supra,* 199 Cal.App.4th at p. 61.) We identified two basic categories of evidence—that which belongs in the administrative record in accordance with the provisions of subdivision (e) of section 21167.6 and that which is admissible as extra-record evidence. (*Madera Oversight*, *supra*, at p. 62.) These two categories are important because they involve different tests for admissibility. (*Ibid*.) According to our guidance, practitioners should address whether an item is part of the administrative record pursuant to subdivision (e) of section 21167.6 and, if not, then address its admissibility under the rules applicable to extra-record evidence. (See 2 *Kostka*, *supra*, §§ 23.56-23.58, pp. 23-64 to 23-67.)

In this appeal, Sierra Club has ignored this guidance and has failed to identify the test for admissibility it believes applies. Because the documents were generated after the Board adopted the Ordinance and certified the EIR and, therefore, were not part of the documentation prepared and considered by the Board, we infer Sierra Club believes it has presented admissible extra-record evidence. In any event, like the appellants in *Eureka Citizens for Responsible Government v. City of Eureka* (2007) 147 Cal.App.4th 357, Sierra Club has failed to show the materials submitted qualify for consideration by this court under the rules governing the administrative record, the admissibility of extra-record evidence, or the consideration of other evidence. (*Id*. at p. 367; see 2 *Kostka*, *supra*, § 23.58, p. 23-67 [other evidence].) Consequently, we deny Sierra Club’s request for judicial notice.

Based on the record properly before this court, we conclude MM 4.3-8 does not violate CEQA based on deferred *formulation*. The text of the measure is set forth in the EIR and the Board’s findings. The measure explicitly addressed the possibility that the oil and gas emission reduction agreement between the County and Air District would not be finalized when a permit application was presented. In that event, the “Applicant must mitigate for the full amount of designated criteria pollutants as verified by the [Air] District, with evidence of such District-verified offsets presented as part of the Site Plan Conformity Review application documentation.” Therefore, any delay in the approval of the oil and gas emission reduction agreement did not amount to a failure to *formulate* a mitigation measure because MM 4.3-8 took that possibility into account and provided an alternate route for applicants to achieve the needed emission reductions prior to the adoption of the oil and gas emission reduction agreement.

*2. Lag in Realizing Emission Offsets*

Sierra Club contends MM 4.3-8 does not mandate a schedule for air pollution reduction and the EIR concedes there will be a lag between the activities that generate air pollution and the implementation of pollution-offsetting mitigation measures. Based on this contention, Sierra Club concludes the EIR unlawfully allows significant, harmful impacts to occur before air pollution mitigation measures are in place. Sierra Club cites *POET I* for the principle that “[o]nce the project reaches the point where activity will have a significant adverse effect on the environment, the mitigation measures must be in place.” (*POET I*, *supra*, 218 Cal.App.4th at p. 738.)

Based on Sierra Club’s contentions, we consider whether the lag in realizing emission offsets, which is an admitted characteristic of the fee-based offset program adopted by the County in MM 4.3-8, constituted an unlawful deferral of mitigation.**[[28]](#footnote-28)** We conclude it did not.

First, as stated earlier, the mitigation issues presented in *POET I* did not involve a fee-based program that funded offsets to the emissions of the project. Accordingly, our general statements about when mitigation measures must be in place did not address the specific characteristics of fee-based programs that fund offsets.

Second, it is undisputed that fee-based programs are authorized by the Guidelines and have been upheld by the courts. (See Guidelines, § 15130, subd. (a)(3); *City of Marina v. Board of Trustees of California State University, supra,* 39 Cal.4th at p. 364 [“courts have found fee-based mitigation programs for cumulative impacts, based on fair-share infrastructure contributions by individual projects, to constitute adequate mitigation measures under CEQA”].) Therefore, fee-based programs provide a type of mitigation that is acceptable under CEQA.

Third, we conclude the fact that a lag may exist between the time the applicant pays its fees and the time those fees are used to fund a project that offsets the emissions caused by the applicant’s activities does not necessarily constitute a violation of CEQA. A mitigation measure may still be feasible and reasonable even where such a lag exists. Here, the EIR acknowledged that there would be a lag for wells drilled immediately upon approval of the conformity review because the emitting activity would occur in advance of the offsetting emission reductions. The EIR discussed the lag and why an alternative that would eliminate the lag was not recommended. This discussion resulted in the EIR fulfilling its role as an informative document. Moreover, the EIR stated the lag was a reason the Ordinance’s contribution to air quality was cumulatively significant. Therefore, the EIR did not rely on MM 4.3-8 as a basis for concluding the Ordinance would have no significant impact on air quality. In the circumstances presented by this case, we conclude the fee-based program with its lag does not violate CEQA so long as it is reasonable and feasible. The feasibility of MM 4.3-8 and its reasonableness present questions of fact. The Board’s resolution of those questions of fact is supported by substantial evidence and, therefore, the adoption of MM 4.3-8 does not constitute an abuse of discretion.

D. PM2.5

*1. Background*

 The EPA and ARB have established federal and state health-based ambient air quality standards for several different pollutants. These pollutants, which are commonly referred to as “criteria pollutants” and include ozone, respirable particulate matter (i.e., PM10), and fine particulate matter (i.e., PM2.5). (See 40 C.F.R. Part 50 [national primary and second ambient air quality standards].) ARB’s ambient air quality standards for criteria pollutants and other pollutants equal or exceed federal standards. (See Cal. Code Regs., tit. 17, §§ 70100–70201 [state ambient air quality standards].)

The San Joaquin Valley Air Basin does not meet the applicable federal or state ambient air quality standards for PM2.5, PM10, and ozone precursors (i.e., oxides of nitrogen, volatile organic compounds and carbon monoxide).**[[29]](#footnote-29)** Air District has established thresholds of significance**[[30]](#footnote-30)** for the emission of these pollutants. The thresholds are 15 tons per year for PM10; 15 tons per year for PM2.5; and 10 tons per year for NOx. The EIR includes many tables setting forth various estimates of annual emissions of these and other pollutants. For example, revised Table 4.3-27 provides total estimated emissions from the project in tons per year for NOx, PM10, PM2.5 and three other pollutants for the years 2012 through 2035. The estimated NOx emissions for 2019 was 11,188 tons—well above the 10-ton threshold of significance. All of the yearly estimates for PM10 and PM2.5 exceeded 1,790 tons and 1,300 tons, respectively. As a result, the Board found the construction activities and gas and oil operations that would be authorized under the Ordinance would exceed Air District’s thresholds of significance. The Board also made a finding of overriding consideration for the Ordinance’s cumulatively considerable contribution to emissions of NOx, PM10, and PM2.5.

MM 4.3-8 refers to PM10 and does not address PM2.5 separately. The oil and gas emission reduction agreement between the County and Air District stated the County and Air District entered the agreement to assure implementation of mitigation measures “with per well emission reductions in the amounts set forth in Exhibit C (EIR Table 3.4-32 for NOx, ROG, and PM (including particulate matter that is less than 10 microns in size, and the subset of 2.5-microns or less in size).”**[[31]](#footnote-31)** The agreement’s operative provisions use the term “PM” and, thus, do not distinguish between PM10 and PM2.5.

*2. Contentions*

 Sierra Club contends the EIR failed to adequately mitigate a significant increase in PM2.5. In addition, Sierra Club contends (1) the EIR failed to explain the omission of PM2.5 from MM 4.3-8 and (2) substantial evidence does not support an implied finding that offsetting PM10 emissions would fully offset PM2.5 emissions. Sierra Club also addresses the possibility that the County may have intended for PM2.5 and PM10 to be separately analyzed and offset during the implementation of MM 4.3-8. Sierra Club contends such an intent would not save MM 4.3-8 from violating CEQA because mitigation is not valid unless it is enforceable, and it cannot be enforced if it is not explicit.

 Counsel for the County prepared responses to Sierra Club’s comments and sent those responses to the Board in a letter dated November 8, 2015. In addressing the comment that offsets should be required for permitted source emissions of PM2.5 that are not otherwise required to be offset under Air District Rule 2201, the letter stated: “PM2.5 emissions are a subset of PM10, for which offsets must be provided, and so need not be addressed separately.”

On appeal, Oil Associations argue the EIR adequately mitigates for PM2.5 emissions via multiple pathways, directly and indirectly. With respect to direct emissions, Oil Associations argue (1) PM2.5 is a key target of MM 4.3-1 through 4.3-4 and (2) MM 4.3-8 refers to PM10 because of Air District policy. As to MM 4.3-8’s direct effect, Oil Associations set forth a multiple-step argument. First, PM2.5 constitutes only 35 percent of the project’s total estimated PM10 emissions. Second, the record demonstrates almost all identified emission-reduction-agreement projects would reduce PM2.5 far more than PM10. Third, based on these facts, it is reasonable to expect that Air District would select emission reduction projects that directly offset most, if not all, of the project’s PM2.5 emissions. Accordingly, Oil Associations conclude there is substantial evidence in the record to support a finding that offsetting PM10 emissions will offset PM2.5 emissions.

*3. Distinguishing PM2.5 from PM10*

The parties have cited, and we have located, no requirement in CEQA, the Guidelines or case law stating air quality mitigation measures must address PM2.5 separately from PM10.**[[32]](#footnote-32)** Consequently, we are presented with questions of first impression that are answered by applying general principles.

First, the EPA and Air District have adopted ambient air quality standards that address PM10 and PM2.5 separately. Second, Air District has adopted different plans for PM10 and PM2.5. Its first PM2.5 plan was adopted by Air District’s board in April 2008 and was approved by ARB in May 2008. Air District’s second PM2.5 was adopted in 2012. Third, Air District has set separate thresholds of significance for PM2.5 and PM10. A logical deduction from the foregoing facts is that the environmental impact of the two categories of particulate matter are not the same. Otherwise, there would be little reason for the two categories. The following hypothetical demonstrates this point. Suppose that during a proposed project’s first year of operation it was estimated to emit 16 tons of PM2.5 and to emit 17 tons of PM10 that was larger than PM2.5. If the project proponent were to enter into offset agreements that reduced PM10 that was larger than PM2.5 by 30 tons in the first year, then the net particulate matter emissions for the first year would be three tons, which is below the standard of significance for both PM10 and PM2.5. However, the 16 tons of PM2.5 emissions would not have been offset and, under Air District’s 15-ton per year threshold of significance for that air pollutant, one would conclude that the project would have a significant adverse effect on air quality despite the offsets of PM10.

*4. Adequacy of the Discussion of Mitigation Measure 4.3-8 and PM2.5*

Sierra Club challenges the adequacy of the EIR’s discussion of the effect of MM 4.3-8 on PM2.5, arguing the EIR fails to offer any explanation for the omission of PM2.5 from the measure. The respondents’ briefs of the County and Oil Associations do not directly address the adequacy of a discussion and explain how the EIR meets the applicable legal standard.

The applicable legal standard asks, “whether the EIR includes enough detail ‘to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.’ [Citations.] The inquiry presents a mixed question of law and fact.” (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 516.) In the context of this case, factual questions do not predominate and, therefore, we conduct an independent review when applying this standard and determining the adequacy of the discussion. (*Ibid*.) We conclude the EIR’s discussion is legally inadequate because it did not provide enough information to enable decisionmakers and the public to understand and consider meaningfully how implementing MM 4.3-8 would impact PM2.5 emissions. Specifically, the EIR does not (1) discuss the impact of the measure on PM2.5 emissions and (2) does not explain why there is no separate discussion of PM2.5 emissions. Stated in statutory terms, the EIR does not “include a detailed statement setting forth” how MM 4.3-8 proposes to mitigate the significant effect on the environment of the project’s PM2.5 emissions. (§ 21100, subd. (b)(3); see Guidelines, § 15126.4, subd. (a) [EIR discussion of mitigation measures].)

The statement in the November 8, 2015, letter that “PM2.5 emissions are a subset of PM10, for which offsets must be provided, and so need not be addressed separately” is not a legally adequate explanation. The fact the smaller particulate matter is encompassed by the category for larger particulate matter does not change the fact the two categories are subject to separate federal and state ambient air quality standards and separate thresholds of significance. Lumping them together would cause objectively reasonable persons who did not participate in drafting the EIR to wonder why the distinction was abandoned in MM 4.3-8 and the discussion of that measure. Without an explanation of why the two categories were lumped together, the EIR is inadequate as an informative document. In addition, the fact that other mitigation measures treat PM2.5 as a key target undermines any argument that it was “not scientifically feasible at the time of drafting to provide” a measure in MM 4.3-8 that addresses PM2.5. (See *Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 527.)

*5. Enforcing Mitigation Measure 4.3-8 to Offset PM2.5 Emissions*

Sierra Club also challenges MM 4.3-8 on the ground it cannot be enforced to require the offset of the project’s PM2.5 emissions. Section 21081.6, subdivision (b): “A public agency shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures.” Guidelines section 15126.4, subdivision (a)(2) states: “Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments.”

Here, the County and Oil Associations predict that the implementation of emission-offset projects under the fee-based mitigation program created under MM 4.3-8 will offset the PM2.5 emissions attributed to the Ordinance. Oil Associations argue “there is substantial evidence in the record to support a conclusion that offsetting PM10 emissions will offset PM2.5 emissions.” Yet, the County and Oil Associations have not described how the oil and gas emission reduction agreement between the County and Air District could be *enforced* to require the offset of PM2.5 emissions. It is not possible to interpret the oil and gas emission reduction agreement as providing a “fully enforceable” mitigation measure for PM2.5 because that agreement treats PM2.5 as a subset of PM10 and, as a result, PM2.5 is not subject to any particular requirement. Therefore, we conclude MM 4.3-8 and the related oil and gas emission reduction agreement between the County and Air District does not provide enforceable mitigation of the project’s PM2.5 emissions. Because the emissions of PM2.5 exceed the threshold of significance, the mitigation measures must address this air quality impact. Because MM 4.3-8 does not address PM2.5 separately and the EIR does not provide an explanation for why it is infeasible for that measure to address PM2.5, MM 4.3-8 does not comply with the CEQA requirement for fully enforceable mitigation measures where feasible. (See § 21081.6, subd. (b); Guidelines, § 15126.4, subd. (a)(2).)

In summary, the County violated CEQA in two ways related to MM 4.3-8. First, the EIR did not discuss the impact of the measure on PM2.5 emissions or, alternatively, provide a rational explanation for why there is no separate discussion of the measure’s impact on PM2.5 emissions. Second, MM 4.3-8 does not provide for enforceable mitigation of PM2.5 emissions, and there is no finding that mitigation of this specific pollutant was not feasible. These deficiencies must be remedied on remand. We need not address the question of whether substantial evidence supports the Board’s findings relating to MM 4.3-8 because, after proceedings on remand, the EIR’s discussion of that measure will be revised and it is uncertain what findings of fact the Board will make based on the revised discussion and any revisions to MM 4.3-8.

VI. CONVERSION OF AGRICULTURAL LAND

A. Discussion in EIR

Chapter 4.2 of the EIR addressed agricultural and forest resources and section 4.2.4 addressed specific impacts to those resources and mitigation measures. The project area contains approximately 2.1 million acres zoned for agricultural use. Based on information obtained from a statewide farmland mapping and monitoring program, the EIR stated the Tier 2 (zoned and used for agriculture) part of the project area contained 540,446 acres of prime farmland, 84,935 acres of unique farmland, and 203,591 acres of farmland of statewide significance.**[[33]](#footnote-33)** The EIR estimated annual land disturbances associated with future oil and gas exploration and production activities would result in the conversion of 298 acres of agricultural land annually, which is approximately 0.04 percent of the 828,973 acres of Tier 2 agricultural land. As a worst-case projection, the EIR estimated the project would cause 7,450 acres of agricultural land to be converted to nonagricultural use from the year 2015 through 2040. This amount represents less than one percent of the total acreage of agricultural land in Tier 2 areas.

The EIR discussed thresholds of significance by stating County environmental documents provided “that a project would normally be considered to have a significant impact if it would” (1) convert agricultural land to nonagricultural uses; (2) conflict with existing zoning for agricultural use or a Williamson Act Contract; or (3) result in the cancellation of an open space contract for any parcel of 100 or more acres. Applying these thresholds of significance to the estimated conversion of agricultural land, the EIR concluded the impact “is considered significant.”

This significant impact on agricultural land was addressed in MM 4.2-1, which requires mitigation at a ratio of 1:1 for oil and gas exploration and extraction activities on agricultural land that have been actively farmed five or more of the last 10 years. Under this measure, the mitigation ratio of 1:1 “is applied to actual ground disturbance area for oil and gas activities (inclusive of temporary construction and permanent operational impact areas), but excludes non-farmed existing areas such as roads, and tank maintenance areas, and lands for which agricultural mitigation has previously been provided at a 1:1 ratio.” Prior to undertaking ground disturbing activities, an applicant must present the County with “written evidence of completion of one or more of the following measures to achieve this 1:1 mitigation ratio:”

“a. Funding and/or purchasing agricultural conservation easements or similar instrument acceptable to the County (to be managed and maintained by an appropriate entity).

“b. Purchasing of credits for conservation of agricultural lands from an established agricultural farmland mitigation bank or an equivalent agricultural farmland preservation program managed by the County.

“c. Restoring agricultural lands to productive use through the removal of legacy oil and gas production equipment, including well abandonment and removal of surface equipment.

“d. Participating in any agricultural land mitigation program adopted by Kern County that provides equal or more effective mitigation than the measures listed above.”

The mitigation measure also addresses the quality of the mitigation lands and their location, which is allowed outside Kern County when certain conditions are met. The EIR states, “Impacts would be less than significant with mitigation.”

Agreeing with the discussion in the EIR, the Board found: “Without mitigation, the Project has the potential to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. These impacts will be reduced to a level that is less than significant with implementation of [MM 4.2-1.]”

B. Contentions of the Parties

KG Farms contends the County violated CEQA by (1) refusing to analyze the most promising mitigation to reduce the conversion of agricultural land and (2) relying on off-site measures that are too vague to prove effective. In KG Farms’ view, (1) the most promising mitigation measure would cluster future oil infrastructure sited on farmland; (2) the draft EIR failed to address this obvious measure; (3) the comments to the draft EIR raised the issue; and (4) the County did not respond to the comments about clustering infrastructure. As to MM 4.2-1, KG Farms contends MM 4.2-1 is inadequate because it relies on undefined future programs and, furthermore, it does not support the Board’s finding that conversions of agricultural land would be reduced to a less than significant level.

Oil Associations contend the challenges to the mitigation measure are subject to the substantial evidence standard of review and substantial evidence supports the effectiveness of MM 4.2-1 to mitigate the project’s limited impacts to agricultural land. Oil Associations also contend substantial evidence supports the County’s decision to adopt a performance standard (1:1 mitigation ratio) to ensure effective mitigation, rather than requiring clustering of oil and gas activities.

C. Effectiveness of the Mitigation

KG Farms challenges MM 4.2-1 on the ground it does not ensure effective mitigation. That challenge includes the specific argument that “the County has never evaluated how [the four options] would actually operate.” Because MM 4.2-1 allows a permit applicant to satisfy its requirement by adopting just one of its four options (a through d), we must evaluate the effectiveness of each option.

*1. Agricultural Conservation Easements*

MM 4.2-1.a authorizes the use of agricultural conservation easements to mitigate the impact of conversion. “ ‘Agricultural conservation easement’ ” is defined by section 10211 as “an interest in land, less than fee simple, which represents the right to prevent the development or improvement of the land, as specified in Section 815.1 of the Civil Code, for any purpose other than agricultural production.” (See Civ. Code, §§ 815.1, 815.2 [describing agricultural and other conservation easements].)

The use of agricultural conservation easements and the operation of a 1:1 mitigation ratio was discussed by Justice Robie in *Citizens for Open Government v. City of Lodi* (2012) 205 Cal.App.4th 296 (*Citizens-Lodi*). In that case, citizen groups filed a CEQA action challenging the city’s approval of a conditional use permit for a proposed shopping center anchored by a Wal-Mart Supercenter. (*Id*. at p. 300.) The EIR stated (1) the project would convert approximately 40 acres of prime agricultural land to urban uses and (2) no mitigation could reduce this impact to a less than significant level. (*Id*. at p. 322.) The EIR’s rationale for the statement that this impact would not be reduced was that the land, once converted loses its character as agricultural land and is removed from the stock of agricultural land. (*Ibid*.)

Based on the EIR, the city found no mitigation would reduce the impact on prime agricultural land to a less than significant level and adopted a statement of overriding considerations. (*Citizens-Lodi*, *supra*, 205 Cal.App.4th at p. 322.) While there were no feasible, available mitigation measures that would avoid the significant loss of 40 acres of agricultural land, the city found the acquisition of an off-site agricultural conservation easement would provide *partial* mitigation and required the applicant to “ ‘obtain a permanent [a]gricultural [c]onservation [e]asement over 40 acres of prime farmland (1:1 mitigation ratio).’ ” (*Ibid*.) In challenging the EIR and the approval of the project, the citizen groups argued a 2:1 mitigation ratio should have been adopted. (*Ibid*.) A revised EIR explained why the city rejected the higher mitigation ratio:

“ ‘The EIR acknowledges that agricultural easements are not mitigation in the true sense of the word. They do not lessen the impact to the loss of the farmland .... As such, no ratio, no matter how high[,] will achieve a mitigation effect, and no particular ratio can be ultimately justified as the scientifically correct one. For that reason, a statement of overriding considerations is necessary for the loss of farmland. The ratio is therefore a matter of local concern for the council to establish. The standard for California communities is the 1 for 1 ratio and is appropriate in this case. In addition to the City of Lodi, the following agencies in the surrounding area apply the 1:1 mitigation ratio: cities of Stockton and Elk Grove, counties of San Joaquin and Stanislaus, Tri–Valley Conservancy (Livermore/Alameda County).’ ” (*Ibid*.)

On appeal, the citizen group argued the rejection of the higher mitigation ratio was not supported by substantial evidence and, under applicable law, the city could refuse to adopt the higher ratio only if it was infeasible or ineffective. (*Citizens-Lodi*, *supra*, 205 Cal.App.4th at p. 323.) The Third District rejected this argument, concluding the legal principles relied upon by the citizen groups did not apply because “the city has specifically found mitigation measures infeasible and therefore adopted a statement of overriding considerations.” (*Ibid*.) The court concluded the EIR properly identified the loss of farmland would be a significant environmental impact and complied with Guidelines section 15091, subdivision (a)(3) by stating no mitigation measures were feasible. (*Citizens-Lodi*, *supra,* at p. 323.) Furthermore, the city adopted a statement of overriding consideration as to the significant impact on farmland before it approved the project. (*Ibid*.) Consequently, the court determined the question presented was “whether the finding there were no feasible mitigation measures was supported by substantial evidence.” (*Ibid*.) The court then concluded “substantial evidence supported the finding there were no feasible mitigation measures.” (*Ibid*.)

The foregoing discussion of *Citizens-Lodi* is included here because the city found obtaining an agricultural conservation easement at a 1:1 ratio would *not* mitigate the conversion of 40 acres of agricultural land to urban purposes. This finding directly contradicts the County’s finding that the measures in MM 4.2-1 (which include agricultural conservation easements) would reduce a significant impact on agricultural land to less than significant under the thresholds identified in the EIR. In light of this conflict between the findings in *Citizens-Lodi* and the findings of the County in this case, we must consider whether the County’s finding is (1) supported by sufficient evidence and (2) consistent with applicable law. These questions are related to KG Farms’ argument that the County never evaluated how the four options in MM 4.2-1 would actually operate.

This court addressed how agricultural conservation easements and a 1:1 mitigation program would operate in *Building Industry Assn. of Central California v. County of Stanislaus* (2010) 190 Cal.App.4th 582 (*Building Assn.-Stanislaus*), a non-CEQA case. There, the County of Stanislaus updated the agricultural element of its general plan to include a farmland mitigation program. (*Id*. at p. 586.) The farmland mitigation program was designed to address the loss of farmland to residential development by allowing the conversion of farmland if an agricultural conservation easement granted in perpetuity was acquired over an equivalent area of farmland comparable to that being developed.**[[34]](#footnote-34)** (*Ibid*.) A developer’s association sued, claiming the farmland mitigation program was facially invalid on statutory and constitutional grounds. (*Ibid*.) The trial court agreed. (*Id*. at p 587.) We reversed, concluding the farmland mitigation program (1) was a valid exercise of the county’s police power because it bore a reasonable relationship to the burden caused by residential development and (2) was valid under a statute governing the granting of conservation easements (Civ. Code, § 815.3, subd. (b)).

In *Building Assn.-Stanislaus*, *supra*, 190 Cal.App.4th 582, we described how the program’s use of agricultural conservation easements worked. (*Id*. at p. 592.) A residential development would not be approved “until the developer provides permanent protection of one acre of farmland for every acre of farmland converted to residential use.” Under an agricultural conservation easement granted in perpetuity, “for every acre of farmland lost to residential development in the County, *a loss that is permanent*, a comparable acre of farmland located in the County is protected from being lost to development in perpetuity.” (*Ibid*., italics added.) We restated this point in more detail:

“Although the developed farmland is not replaced, an equivalent area of comparable farmland is permanently protected from a similar fate. To meet the reasonable relationship standard *it is not necessary to fully offset the loss*. The additional protection of farmland that could otherwise soon be lost to residential development promotes the County’s stated objective to conserve agricultural land for agricultural uses. Further, the requirement of rough proportionality between the mitigation measure and the impact of the development project is met. [Citation.] For every acre of farmland permanently lost to residential development another acre of farmland is permanently protected from residential development.” (*Id*. at p. 592.)

Based on the foregoing cases and the statutes addressing agricultural conservation easements, we reach the following conclusions. Entering into a binding agricultural conservation easement does not create new agricultural land to replace the agricultural land being converted to other uses. Instead, an agricultural conservation easement merely prevents the future conversion of the agricultural land subject to the easement. Because the easement does not offset the loss of agricultural land (in whole or in part), the easement does not reduce a project’s impact on agricultural land. The absence of any offset means a project’s significant impact on agricultural land would remain significant after the implementation of the agricultural conservation easement.**[[35]](#footnote-35)** Restating this conclusion using the data from this case, the implementation of agricultural conservation easements for the 289 acres of agricultural land estimated to be converted each year would not change the net effect of the annual conversions. At the end of each year, there would be 289 fewer acres of agricultural land in Kern County. Accordingly, under the thresholds of significance listed in the EIR, this yearly impact would qualify as a significant environmental effect. Therefore, we agree with KG Farms’ contention that MM 4.2-1.a does not provide effective mitigation for the conversion of agricultural land.

*2. Restoration of Agricultural Lands*

MM 4.2-1.c provides for “[r]estoring agricultural lands to productive use through the removal of legacy oil and gas production equipment.” This measure stands in contrast to the use of agricultural conservation easements because its implementation would offset the conversion of agricultural land to oil and gas activities by returning previously converted land to agricultural use. If this were the sole method authorized, compliance with MM 4.2-1.c would result in no net loss of agricultural land.

This restoration of agricultural land is comparable to one of the mitigation measures adopted in *Friends of Kings River v. County of Fresno* (2014) 232 Cal.App.4th 105, a case in which the plaintiffs raised CEQA challenges to the validity of an EIR for a project that included a new surface mine for aggregate and related processing plants. (*Id*. at p. 109.) One of the mitigation measures involved saving the topsoil and overburden from areas converted from agricultural production to mining and using that material to reclaim some of the mined land to farmland. (*Id*. at p. 124.) The final EIR for the project noted “that mitigation measure AG–2 preserves farmland at a 1:1 ratio for the life of the Project, which is 100 years.” (*Ibid*.) This mitigation measure for the *reclamation* of mined land is similar to the mitigation measure that provides for the *restoration* of agricultural land. Such measures “[c]ompensat[e] for the impact by replacing or providing substitute resources or environments.” (Guidelines, § 15370, subd. (e).) Here, the restoration of agricultural land to productive use would offset the loss of agricultural land caused by the County’s approval of a permit for oil and gas activity. Furthermore, the use of the 1:1 ratio would result in full compensation for the loss of agricultural land. As a result, the net change in the amount of agricultural land would be zero—that is, the impact would be fully mitigated. Therefore, we conclude MM 4.2-1.c provides effective mitigation for the conversion of agricultural land.

*3. Purchase of Conservation Credits*

MM 4.2-1.b provides for “[p]urchasing of credits for conservation of agricultural lands from an established agricultural farmland mitigation bank or an equivalent agricultural farmland preservation program managed by the County.” KG Farms contends such mitigation banks and preservation programs do not exist and, thus, were never evaluated in the EIR. As a result, KG Farms implies there is no basis for finding this option constitutes effective, feasible mitigation.

The parties dispute how to apply the principles this court set forth in *Gray*, *supra*, 167 Cal.App.4th 1099, a case involving challenges to various mitigation measures incorporated into the conditions of approval for a hard rock mining permit. (*Id*. at p. 1116.) One of the mitigation measures addressing the project’s traffic impacts required the project proponent to pay a long-term maintenance fee based on annual aggregate tonnage mined. (*Id*. at p. 1121.) The plaintiff argued the measure was not enforceable and lacked details and performance standards. (*Ibid*.) The plaintiff also argued no substantial evidence supported the finding that the fees collected would actually be spent on mitigation. (*Ibid*.)

In *Gray*, we stated “[a]ssement of a traffic impact fee is an appropriate form of mitigation when it is linked to a reasonable plan for mitigation.” (*Gray*, *supra*, 167 Cal.App.4th at p. 1122.) Here, we extend this principle to assessment of fees and the purchasing of credits as a way to mitigate the conversion of agricultural land. Thus, the money spent on fees or credits is an appropriate form of mitigation if linked to a reasonable plan for mitigation.

The record in this appeal is such that we cannot determine whether the credits that might be purchased from an “established agricultural farmland mitigation bank or an equivalent agricultural farmland preservation program” are linked to a reasonable plan for mitigation. Oil Associations have cited to nothing in the record establishing such banks or programs exist. Moreover, Oil Associations have not addressed whether any such bank or program constitutes a reasonable plan for mitigation. Instead, Oil Associations argue “the other options under MM 4.2-1 ensure mitigation even if the County never adopts an agricultural land banking program.” In effect, Oil Associations contend the unavailability of MM 4.2-1.b is not fatal because permit applicants simply would be required to implement other options until a land banking program is up and running.

We conclude the record does not contain substantial evidence showing the mitigation banks or preservation programs referred to in MM 4.2-1.b were available. It follows that the record does not contain substantial evidence to support a finding that participation in a banking or preservation program actually would offset the conversion of agricultural land to oil and gas activities like MM 4.2-1.c. Any such programs might operate like the agricultural conservation easements specified in MM 4.2-1.a, which do not actually offset the applicant’s conversion of agricultural land. Consequently, we conclude MM 4.2-1.b does not provide effective mitigation for the project’s conversion of agricultural land.

*4. Other Measures*

MM 4.2-1.d provides for “[p]articipating in any agricultural land mitigation program adopted by Kern County that provides equal or more effective mitigation than the measures listed above.” KG Farms contends this open-ended measure does not commit to reducing the loss of agricultural land. We agree. A future program might have an effect equivalent to the agricultural conservation easements specified in MM 4.2-1.a. In that case, the future program would not reduce the impact on agricultural land because agricultural conservation easements do not actually offset the conversion of agricultural land. Alternatively, a future program might have an effect equivalent to the restoration described in MM 4.2-1.c. In that situation, the conversion of agricultural land would be offset, reducing the significance of the conversion. Because the record does not identify any program that qualifies as an “agricultural land mitigation program adopted by Kern County” for purposes of MM 4.2-1.d, we conclude that option does not provide available, effective mitigation for the project’s conversion of agricultural land.

*5. Noncompliance with CEQA*

The Board applied the thresholds of significance described in the EIR to the Ordinance’s estimated conversion of agricultural land and found “this impact is considered significant.” This finding as to significance is supported by substantial evidence. The Board also found the estimated “[i]mpacts would be less than significant with mitigation.” This finding as to the effectiveness of MM 4.2-1 is not supported by substantial evidence and is based on a legally incorrect view of the operation of agricultural conservation easements—one of the two options available under MM 4.2-1.

As described earlier, the EIR did not identify any programs fitting the descriptions set forth in MM 4.2-1.b and MM 4.2-1.d. Consequently, the finding the impact would be mitigated to a less than significant level must be based on the options that were available to permit applicants when the EIR was certified—namely, the agricultural conservation easements of MM 4.2-1.a and the agricultural land restoration described in MM 4.2-1.c. Because permit applicants could rely on an agricultural conservation easement under MM 4.2-1.a and because such easements do not actually offset the conversion of farmland, the Board erred when it found the impact to agricultural land would be less than significant with mitigation. Therefore, we conclude the EIR and the Board’s finding as to the mitigation of a significant impact on agricultural land do not comply with CEQA.

D. Clustering Wells as Mitigation

Next, we consider KG Farms’ contention that the County violated CEQA by failing to respond to comments proposing feasible mitigation for the project’s significant conversion of agricultural land. In KG Farms’ view, (1) the most promising mitigation measure would cluster future oil infrastructure sited on farmland; (2) the draft EIR failed to address this obvious measure; (3) the comments to the draft EIR raised the issue; and (4) the County did not respond to the comments about clustering infrastructure.

*1. Principles Governing Responses to Comments*

CEQA requires a public review period for draft EIR’s of at least 30 days. (§ 21091, subd. (a).) “The lead agency shall consider comments it receives on a draft [EIR] if those comments are received within the public review period.” (§ 21091, subd. (d)(1).) “[T]he lead agency shall evaluate comments on environmental issues … and shall prepare a written response.” (§ 21091, subd. (d)(2)(A).) The agency’s written response must describe the disposition of each significant environmental issue raised in the comments. (§ 21091, subd. (d)(2)(B).) “The responses shall be prepared consistent with Section 15088 of [the Guidelines].” (§ 21091, subd. (d)(2)(B).)

The version of Guidelines section 15088 in effect when the County prepared and certified the EIR repeated some of the requirements in section 21091. Also, subdivision (c) of Guidelines section 15088 provided an expanded description of what the agency’s written responses must contain:

“In particular, the major environmental issues raised when the lead agency’s position is at variance with recommendations and objections raised in the comments must be *addressed in detail* giving reasons why specific comments and suggestions were not accepted. There must be good faith, *reasoned analysis* in response. Conclusory statements unsupported by factual information will not suffice.” (Italics added.)

In *Residents Against Specific Plan 380 v. County of Riverside* (2017) 9 Cal.App.5th 941, the court concluded this regulatory language set forth the obligations of the lead agency in responding to mitigation measures proposed in comments. (*Id*. at p. 971.) The meaning of the language stating that comments must be “addressed in detail” by the lead agency has been explained in judicial decisions. The detail required of a response is correlated to the detail in the comment. (*Paulek v. Department of Water Resources* (2014) 231 Cal.App.4th 35, 48.) Where the comment is general in nature, a general response is sufficient. (*Ibid*.)**[[36]](#footnote-36)**

The requirement for a “reasoned analysis” is satisfied when the lead agency “particularly set[s] forth in detail the reasons why the particular comments and objections were rejected.” (*People v. County of Kern* (1974) 39 Cal.App.3d 830, 841.) The requirement for a detailed statement is designed to promote the integrity of the process by preventing stubborn problems or serious criticism from being swept under the rug. (*People v. County of Kern*, *supra,* at p. 841.) Also, conclusory statements afford no basis for a comparison of the problems involved with the mitigation proposed by the agency and the mitigation proposed in comments. (See *ibid*.) Despite the requirements for details and a reasoned analysis, agencies “generally have considerable leeway” regarding their response to a public comment. (*Environmental Protection Information Center v. California Dept. of Forestry & Fire Protection* (2008) 44 Cal.4th 459, 487, fn. 9.)

*2. Comments About Clustering Infrastructure*

Counsel for KG Farms submitted written comments to the draft EIR that addressed the conversion of agricultural land and asserted a requirement for clustering oil and gas infrastructure would reduce the amount of agricultural land converted to nonagricultural use. The letter stated the draft EIR included “no measures that require wells and facilities to be clustered to avoid unnecessary disruptions of agricultural activities.” The letter proposed mitigating the project’s significant land use impacts with a mitigation measure stating: “The location of all wells and improvements shall be clustered to the extent feasible and shall not disturb more surface area than is reasonable and necessary.” The comment letter also referred to the general plans of the County and Bakersfield, stating those plans required industrial development to be clustered next to existing industrial uses rather than dispersed throughout Kern County.

*3. The County’s Responses and the Board’s Findings*

The County responses to the comments about clustering wells and clustering industrial uses were combined in a response assigned number 0044-159. The response acknowledged the policy in County’s general plan of promoting the clustering of industrial uses and stated:

“[T]he Energy Element of the [general plan] include numerous and more specific policies concerning promotion and implementation of oil and gas activities in [Kern] County that do not require clustering. [Citation.] The County is entitled to balance its General Plan policies when determining whether the Project is consistent with the General Plan. [Citations.] Here the Revised Amended Ordinance reflects an appropriate balance of interests between economic development and environmental protection, as reflected in the [general plan] policies concerning the petroleum industry.”

The Board addressed the issue of clustering new wells in its findings relating to a third alternative to the project, which was labeled the “Reduced Ground Disturbance Alternative” and “Alternative 3.” The Board described the alternative as “identical to the Project, except that it would prohibit all new well drilling activities outside existing DOGGR-designated ‘Administrative Boundary’ areas and would require subsurface oil and gas to be extracted from surface equipment located within such Administrative Boundary areas.” Also, the alternative limited “the disturbance footprint on existing agricultural lands [by] requiring clustering of new wells in locations immediately adjacent to existing oil and gas equipment.”

The Board rejected Alternative 3 on the grounds it was environmentally inferior in some respect and was economically and legally infeasible. The Board found Alternative 3 “would achieve some environmental benefits,” but would incentivize horizontal and directional subsurface drilling “that would generate greater air quality, greenhouse gas, and toxic air contaminant emissions,” compared to the proposed project. To support its finding that Alternative 3 was legally and economically infeasible, the Board found “its adoption would conflict with applicable regulatory limitations, would have a significant adverse economic impact on a key County economic sector, and would imprudently expose the County to significant and unreasonable legal liability, as explained below.”

*4. Application of Principles to the County’s Responses*

The first question we address in our analysis of KG Farms’ claim that the County failed to comply with CEQA in responding to the comment proposing the clustering of wells is whether clustering qualifies as a mitigation measure for the conversion of agricultural land. (See Guidelines, § 15370.) Although clustering would not allow the project to avoid the impact altogether, it would “[m]inimiz[e] impacts by limiting the degree or magnitude of the action and its implementation.” (Guidelines, § 15370, subd. (b).) Therefore, we conclude the proposal for clustering presented a type of mitigation that would lessen, but not eliminate, a significant environmental impact. As a result, the comment addressed a “major environmental issue[]” as that phrase was used in Guidelines section 15088, subdivision (c).

The second question we address is whether County’s response to the comments proposing clustering of wells and other infrastructure provided the details and reasoned analysis required by Guidelines section 15088, subdivision (c). Response number 0044-158, which was quoted in part earlier, addressed whether clustering was required by the County’s general plan and stated that the competing policies were, on balance better served by the proposed project than by Alternative 3. The response did not separately address the clustering of wells and infrastructure as a possible measure for mitigating the significant environmental impact resulting from the estimated conversion of agricultural land, particularly the proposal to require the clustering of wells and infrastructure *when feasible*. As a result, the response did not provide a detailed, reasoned analysis of why the suggested measure for clustering of wells and infrastructure when feasible was not accepted. As such, the response did not comply with the requirements of Guidelines section 15088, subdivision (c) or CEQA.

Based on our earlier determination that substantial evidence does not support the finding MM 4.2-1 mitigated the project’s impact on agricultural land to a less than significant level,**[[37]](#footnote-37)** it follows that the failure to provide a reasoned analysis of the proposed mitigation measure was prejudicial because an EIR must describe and impose feasible mitigation measures, if any exist, to minimize or eliminate significant impacts. (Guidelines, § 15126.4, subd. (a)(1).) This failure to comply with CEQA constitutes a prejudicial abuse of discretion. (§ 21168.5.)

VII. BIOLOGICAL RESOURCES**[[38]](#footnote-38)\***

A. Contentions of the Parties

Sierra Club contends the EIR did not adequately analyze impacts to biological resources because it provided no meaningful analysis of edge effects—that is, project impacts that extend beyond the boundaries of the worksite and disturb or destroy surrounding habitat. Sierra Club contends the edge effects must be analyzed as “reasonably foreseeable indirect physical changes in the environment.” (Guidelines, § 15064, subd. (d).) Sierra Club asserts the EIR did not disclose the true level of habitat disturbance, which resulted in a drastic and systematic underestimation of impacts to species. In addition, Sierra Club contends a mitigation measure was inadequate because it allows destroyed or degraded habitat to be replaced by habitat of a completely different quality or type, rendering the replacement meaningless for the impacted species.

In response, the County contends the EIR’s analysis and mitigation of impacts to biological resources is reasonable and supported by substantial evidence. The County asserts the EIR considered habitat outside the footprint of development at every stage, including the discussion of environmental setting, regulatory setting, impacts, and formulation of mitigation measures. With respect to mitigation, the County argues that when the various mitigation measures are viewed together, substantial evidence supports its finding that the impacts to biological resources will be mitigated to less than significant levels.

Sierra Club’s reply brief reiterates the argument that the EIR ignored adverse edge effects to species and habitat and vastly understated the potential harm to wildlife. Sierra Club claims the EIR’s analysis of edge effects was not meaningful and violated CEQA.

B. Legal Principles

CEQA and the Guidelines do not use the term “edge effect” and, thus, contain no specific legal requirements for discussing edge effects. Sierra Club characterizes edge effects as *indirect* effects or impacts to the environment. Several provisions in CEQA and the Guidelines refer to indirect environmental effects.

Section 21065 defines “ ‘[p]roject’ ” to mean an activity that might cause “either a *direct* physical change in the environment, or a reasonably foreseeable *indirect* change in the environment.” (§ 21065, italics added.) “ ‘Project-specific effect’ means all the direct or indirect environmental effects of a project other than cumulative effects and growth-inducing effects.” (§ 21065.3; Guidelines, § 15191, subd. (j) [same].)

Guidelines section 15358, subdivision (a)(2) defines “[e]ffects” and “impacts” to include “[i]ndirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable.” (See Guidelines, § 15064, subd. (d)(2) [evaluating indirect physical changes].) Guidelines section 15126.2, subdivision (a) requires an EIR to clearly identify and describe the project’s direct and indirect significant effects on the environment, giving due consideration to both the short-term and long-term effects. “The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and … the human use of the land.” (Guidelines, § 15126.2, subd. (a).)

C. Adequacy of the EIR’s Discussion

We conclude Sierra Club’s challenges to the EIR’s discussion of edge effects is a challenge to the adequacy of the EIR’s discussion of indirect environmental effects to the project area’s biological resources. Consequently, the applicable legal standard is “whether [the] EIR’s discussion of environmental impacts is adequate, that is, whether the discussion sufficiently performs the function of facilitating ‘informed agency decisionmaking and informed public participation.’ ” (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 513.)

*1. Standard of Review*

The next step after identifying the type of claim being raised is to determine the applicable standard of review. Claims that an EIR’s discussion is inadequate cannot be neatly categorized as either factual or procedural error. (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 513.)

“The ultimate inquiry … is whether the EIR includes enough detail ‘to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.’ [Citations.] The inquiry presents a mixed question of law and fact. As such it is generally subject to independent review. However, underlying factual determinations—including, for example, an agency’s decision as to which methodologies to employ for analyzing an environmental effect—may warrant deference.” (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 516.) When factual questions predominate, the more deferential substantial evidence standard of review applies. (*Ibid*.) When factual questions do not predominate, courts conduct an independent review when determining the adequacy of the EIR’s discussion. (*Ibid*.) To determine whether factual questions predominate, we must examine the discussion provided in the EIR.

*2. EIR’s Discussion*

Chapter 4.4 of the EIR addresses biological resources. Section 4.4.2 describes the project’s environmental setting for biological resources using approximately 134 pages. Section 4.4.3 describes the federal, state, regional and local biological resource policies and regulations applicable to the project area. Included in this description are recovery plans developed by the United States Fish and Wildlife Service. One such plan is the “Recovery Plan for Upland Species of the San Joaquin Valley,” which the EIR states “recommends the protection of land in large blocks to minimize edge effects, increase the likelihood that ecosystem functions will remain intact, and facilitate management.”

Section 4.4.4 of the EIR describes “potential impacts related to biological resources that could occur as a result of the Project, and proposed mitigation measures.” It discusses the potential impacts most likely to be associated with construction and operation of the project. The EIR states construction and operational impacts would “include both direct and indirect impacts to biological resources” and “[o]perational impacts would remain an ongoing source of disturbance for many plants and wildlife species that occur within the facility perimeter and *in adjacent habitat*.” (Italics added.)

Direct construction impacts include the permanent removal or temporary disturbance of native vegetation, dust, noise and vibration, lighting, increased human activity, increases in nonnative and invasive species, and loss or degradation of native habitat. In turn, these physical changes in the environment could impact plants and wildlife. Dust can decrease the vigor and productivity of vegetation. Loss of vegetation can decrease the food and shade available to wildlife. Also, noise, vibration and lighting can affect the behavior of wildlife in several ways, including the abandonment of nests or burrows. Other indirect impacts include alterations to topographical conditions through erosion and sediment transport and changes to hydrological conditions.

As “Impact 4.4-1,” the EIR considered whether the project would have a substantial adverse effect, either directly or through habitat modifications, on species identified as candidate, sensitive or special status in local or regional plans, policies or regulations by the Department of Fish and Wildlife or the United States Fish and Wildlife Service. The EIR concluded “potential project impacts to special status plants and wildlife would be significant without mitigation.” The EIR specified 16 mitigation measures and concluded the impact would be less than significant after mitigation.

The EIR’s analysis of Impact 4.4-1 began with an estimate of the annual number of future production wells subject to the Ordinance and allocated that total (2,697 wells) by subarea (western, central and eastern) and by tier (1 through 5). The estimates were set forth in Table 4.4-70. These estimates of the number of wells was multiplied by the average historical disturbance area per production well to get the potential disturbance acreage for each subarea and tier. The results were set forth in Table 4.4-71, which was labeled “Assumed New Disturbance Acres per Year by Tier and Subarea.” The total amount of new disturbance was estimated to be 4,856 acres per year, of which 4,400 acres (91 percent) would be in Tier 1 areas—that is, areas where oil and gas activities predominate. Of the estimated disturbance acreage, approximately 71 percent would occur in the western subarea (3,460 acres), 21 percent in the eastern subarea (1,003 acres), and 8 percent in the central subarea (393 acres). The estimates of disturbance acreage were based on the assumption that all future oil and gas exploration and production subject to the Ordinance’s review process would occur on land undisturbed by existing oil and gas activity, urban development or agriculture. The EIR stated this assumption made the estimates conservatively high because some future oil and gas activities would utilize existing actively disturbed areas, such as existing well pads, access roads, pipelines, tanks and other facilities.

The estimates of disturbance acreage were used in both a modeled species analysis approach and a nonmodeled species analysis approach. The estimates of disturbance acreage do not include acres that could experience edge effects.

*3. Evaluation of the Adequacy of the Discussion*

As background to our evaluation of the adequacy of the discussion of impacts on biological resources, we note that CEQA, the Guidelines and existing case law do not require areas that experience edge effects to be included in areas that are identified in the EIR as disturbed. Therefore, the County did not violate an established principle of law when it chose to exclude edge-effect acreage for its estimates of disturbed acreage.

Next, Sierra Club’s claim about the adequacy of the EIR’s discussion could be interpreted as a challenge to the methodology chosen by the County. In other words, Sierra Club may be contending the method of analysis used to determine the significance of the impacts on biological species was legally flawed and an appropriate (i.e., adequate) method would include edge-effect acreage with disturbed acreage. Our Supreme Court has concluded that an agency’s decision as to which methodologies to employ for analyzing an environmental effect may be a factual determination entitled to deference under the substantial evidence standard of review. (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 516.) Here, Sierra Club has not attempted to demonstrate the absence of substantial evidence supporting the County’s choice of methodologies for analyzing the significance of the impacts on biological species. Consequently, we conclude Sierra Club has not established an abuse of discretion based on that choice.

Based on these preliminary conclusions, our inquiry boils down to whether the EIR includes enough detail to enable decisionmakers and the public to understand and to consider meaningfully the project’s potential impacts on biological species—that is, vegetation and wildlife. (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 516 [ultimate inquiry].) As described below, we conclude the EIR provided enough detail to satisfy this standard.

First, the discussion of impacts in section 4.4.4 of the EIR included a description of indirect impacts. Using broad language, the EIR stated construction and operational impacts would “include both direct and indirect impacts to biological resources.” It also stated operations would disturb “many plants and wildlife species that occur within the facility perimeter and in adjacent habitat.” Providing more detail, the EIR stated the increase of oil and gas operations will increase vehicular traffic on access roads and this increase in traffic will increase the “risk of injury or mortality” to wildlife. The indirect impacts mentioned in the EIR are the harms arising from edge effects. Therefore, we disagree with Sierra Club’s contention that the EIR “refused to analyze the harms arising from edge effects.” Consequently, the EIR cannot be deemed inadequate on this ground.

Second, under the method of analysis chosen, the EIR determined the impacts to modeled and nonmodeled species would be significant without mitigation. With these species, it cannot be argued that the failure to include edge-effect acreage with disturbed acreage resulted in an erroneous determination as to the significance of the potential impacts.

Third, the chosen method of analysis has not been shown to have influenced the formulation of mitigation measures and caused them to overlook the indirect impacts that might occur beyond the site of the oil and gas activity. For instance, the mitigation measures refer to exclusion barriers or buffers and setback distances.

We conclude factual questions predominate in determining whether the EIR’s discussion of impacts to biological resources was inadequate as a result of using estimates of disturbance acreage that excluded acres that could experience edge effects. Consequently, the substantial evidence standard of review applies to the question of whether the EIR’s discussion of direct and indirect impacts to biological resources was adequate. Based on our review of the record, we conclude substantial evidence supports the adequacy of the analysis provided. Therefore, we reject Sierra Club’s claim the EIR provided no meaningful analysis of edge effects.

D. Mitigation Measure: Replacing Habitat

Mitigation measure 4.4-16 provides that ground disturbance shall be mitigated at a 1:1 ratio, except a 1:0.5 ratio shall be used in Tier 1 areas that contain existing disturbance of 70 percent or greater. The ratio compares the acres of new disturbance to the acres subject to the mitigation measure. The requirement for disturbance mitigation acreage may be satisfied by one or a combination of (1) conservation easements, (2) land preservation credits from a mitigation bank, (3) removal of legacy oil and gas equipment and restoration of the surface (including reseeding with native species), and (4) enhancement or restoration of existing habitat on lands already subject to a conservation easement or similar agreement.

Sierra Club contends the EIR does not ensure adequate compensation for disturbed habitat because MM 4.4-16 attempts to mitigate disturbed habitat by requiring applicants to conserve 0.5 to 1.0 acre for every acre of habitat disturbed and fails to require the disturbed habitat to be replaced with habitat of the same quality or type. Consequently, Sierra Club asserts MM 4.4-16 allows habitat important to a particular species to be offset by preserving habitat of an entirely different species. This approach, in Sierra Club’s view, is flawed because it treats habitat of any quality or type as an adequate substitute for disturbed habitat.

The County argues Sierra Club’s reasoning fails to consider the effect of the many other mitigation measures relied upon to reduce or eliminate adverse impacts to biological resources. In County’s view, the “suite of [mitigation] measures are complementary, working together through a combination of identification (*e.g.*, pre-disturbance surveys), avoidance, exclusion, and compensation.” Furthermore, the County argues its finding that such impacts will be mitigated to less than significant is supported by substantial evidence.

We conclude Sierra Club’s challenge to MM 4.4-16 fails to demonstrate a CEQA violation. If MM 4.4-16 had been the only mitigation measure proposed to reduce impacts to biological resources, Sierra Club would have had a better chance of succeeding. However, because a variety of mitigation measures were adopted, MM 4.4-16 cannot be viewed in isolation. Consequently, despite the similarities between the options set forth in MM 4.4-16 and the options contained in 4.2-1 for mitigating the conversion of agricultural land, the outcome is different because there are other mitigation measures addressing impacts to biological resources.

Furthermore, CEQA does not require that each acre of habitat lost be replaced in order to reduce the impact on biological resources to less than significant levels. Thus, to the extent Sierra Club implies each acre of disturbed habitat *must* be replaced with an acre of like quality, it seeks to impose a standard not required by CEQA. Consequently, we reject Sierra Club’s challenge to MM 4.4-16.

VIII. NOISE IMPACTS

A. CEQA and the Guidelines

*1. Impacts and Thresholds of Significance*

CEQA defines the “ ‘[e]nvironment’ ” to mean “the physical conditions which exist within the area which will be affected by a proposed project, including … noise.” (§ 21060.5.) The phrase “ ‘[s]ignificant effect on the environment’ means a substantial, or potentially substantial, adverse change in the environment.” (§ 21068.) Thus, for purposes of CEQA, the noise caused by a project can result in a significant effect on the environment.

The Legislature declared it is the policy of California to “[t]ake all action necessary to provide the people of this state with … freedom from excessive noise.” (§ 21001, subd. (b).) In addition, it is the policy of California to “[r]equire governmental agencies at all levels to consider *qualitative* factors as well as economic and technical factors .…” (§ 21001, subd. (g), italics added.)

The concept of a “threshold of significance” is defined in the Guidelines as “identifiable quantitative, qualitative or performance level of a particular environmental effect, noncompliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant.” (Guidelines, § 15064.7, subd. (a).) CEQA does not include a particular threshold for determining the significance of an increase in ambient noise. Similarly, the Guidelines do not mandate the use of a specific threshold of significance for evaluating an increase in noise. Appendix G, which is printed following Guidelines section 15387, is an environmental checklist that includes questions about various aspects of the environment, including noise. The questions about noise in the version of Appendix G in effect in 2015 asked if the project would result in (1) “[e]xposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies”; (2) “[a] substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project”; and (3) “[a] substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.”**[[39]](#footnote-39)** Each question is answered by checking a box to indicate whether the impact would be potentially significant, less than significant with mitigation, less than significant without mitigation, or nonexistent.

Initially we note the Guidelines and Appendix G do not set forth numeric thresholds of significance for noise. In addition the references in Appendix G to a “substantial … increase in ambient noise levels” creates a definitional loop and provides little insight into what the threshold of significance should be. CEQA defines a significant effect on the environment as a “substantial, or potentially substantial, adverse change in the environment.” (§ 21068; Guidelines, § 15382 [definition of significant effect on the environment].) As a result, the terms “significant effect” and “substantial, adverse change” are synonymous and the Appendix’s references to a “substantial” increase in noise simply reflects the definition of a significant impact.

*2. Agency Discretion to Determine Thresholds of Significance*

The absence of a mandatory standard in CEQA, the Guidelines or judicial decisions for determining the significance of a noise increase means it is the responsibility of lead agencies to choose the thresholds of significance to be applied to a project’s noise impacts. (Guidelines, § 15064.7 [thresholds of significance].) “The lead agency has substantial discretion in determining the appropriate threshold of significance to evaluate the severity of a particular impact.” (*Mission Bay Alliance v. Office of Community Investment & Infrastructure* (2016) 6 Cal.App.5th 160, 192; *Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068 [“CEQA grants agencies discretion to develop their own thresholds of significance]”.) Similarly, our Supreme Court stated: “A lead agency enjoys substantial discretion in its choice of methodology” for evaluating the significance of an impact. (*Center for Biological Diversity, supra,* 62 Cal.4th at p. 228.)

Generally, agencies are encouraged to develop and publish thresholds of significance to use in determining whether a project has a significant environmental effect. (Guidelines, § 15064.7, subd. (a).) When an agency has not published a threshold of significance for a particular impact, it must adopt a threshold of significance during its evaluation of the project. This flexibility is allowed because “[a]n ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.” (Guidelines, § 15064, subd. (b)(1).)

B. Case Law

Many CEQA cases have discussed a project’s noise impacts and the thresholds of significance used to evaluate the impacts. The usefulness of a particular decision in analyzing the issues presented in this appeal depends in part on the judicial stage of the environmental review process addressed in the decision. As described by this court in *Citizens for the Restoration of L Street v. City of Fresno, supra,* 229 Cal.App.4th 340, CEQA provides for three stages of environmental review. (*Citizens, supra,* at pp. 363–364.) First, a preliminary review is conducted to determine if the proposed activity is a CEQA project and, if so, whether it is exempt from CEQA. (*Citizens, supra,* at p. 363.) Second, an initial study is undertaken to inform the lead agency whether the environmental review can be concluded with the adoption of a negative declaration or, alternatively, the agency must prepare an EIR. (*Id*. at pp. 363–364.) Under the fair argument standard applied when conducting an initial study, an EIR is required if substantial evidence supports a fair argument that the proposed project may have a significant adverse effect on the environment. (*Id*. at p. 364.) The third stage of the environmental review process is the preparation of an EIR. (*Ibid*.)

Here, we consider cases involving an initial study and the application of the fair argument standard. Then we address a case where an EIR used a single threshold for determining the significance of the project’s noise impacts.

*1. Fair Argument Standard*

In *Oro Fino Gold Mining Corp. v. County of El Dorado* (1990) 225 Cal.App.3d 872 (*Oro Fino*), a mining company applied for a special use permit for drilling holes to explore for minerals. (*Id*. at p. 876.) The mining company argued the proposed mitigated negative declaration prohibited noise levels above the applicable county general plan noise standard maximum of 50 dBA and, therefore, there could be no significant noise impact.**[[40]](#footnote-40)** (*Oro Fino*, *supra*, 225 Cal.App.3d at p. 881.) The court rejected this argument on two grounds. “Initially, we note that conformity with a general plan does not insulate a project from EIR review where it can be fairly argued that the project will generate significant environmental effects.” (*Id.* at pp. 881–882.) Second, the court reviewed the record and, like the trial court, concluded it contained substantial evidence supporting a fair argument that noise from drilling would exceed the county standard of 50 dBA. (*Id*. at p. 882.) Thus, the court concluded an EIR was required.

In *Citizens for Responsible & Open Government v. City of Grand Terrace* (2008) 160 Cal.App.4th 1323 (*Grand Terrace*), the city approved a 120-unit senior housing facility based on a mitigated negative declaration. (*Id*. at p. 1327.) A citizen’s group argued substantial evidence supported fair arguments that the project would result in significant environmental impacts, including the impact of noise from air conditioners. (*Ibid*.) The trial court agreed and issued a writ of mandate requiring the preparation of an EIR. (*Id*. at p. 1326–1327.) The appellate court affirmed. (*Id*. at p. 1327.)

In *Grand Terrace*, the noise element of the city’s general plan stated exterior noise levels in residential areas should be limited to 65 dB CNEL.**[[41]](#footnote-41)** (*Grand Terrace*, *supra*, 160 Cal.App.4th at p. 1338.) The initial study concluded the facility’s air conditioner units would cause noise impacts, but with mitigating measures the project would operate within the general plan’s noise standard. The appellate court cited *Oro Fino* for the principle that “ ‘conformity with a general plan does not insulate a project from EIR review where it can be fairly argued that the project will generate significant environmental effects.’ ” (*Grand Terrace, supra,* at p. 1338.) The court considered the record as a whole, including testimony about the noise generated by the proposed window-mounted air conditioners; took into account the mitigation measures; and concluded “there is substantial evidence that it can be fairly argued that the Project may have a significant environmental noise impact.” (*Id*. at p. 1341.) The court was not able to analyze numerical data about the noise generated by the air conditioners because the project proponent “did not provide a noise rating on the units” and its representative conceded “he did not know what the decibel level was for the units.” (*Id*. at pp. 1339, 1340.)

The case involving an initial study that is closest to the present appeal is *Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 Cal.App.4th 714 (*Keep Our Mountains Quiet*). In that case, the county adopted a mitigated negative declaration and granted a use permit to the project proponent to host weddings and other events on property located in the Santa Cruz Mountains. (*Id*. at p. 719.) An association of residents in the vicinity filed a CEQA action, contending an EIR was required for the project. (*Ibid*.) The trial court agreed, and the Sixth District affirmed. (*Ibid*.)

In *Keep Our Mountains Quiet*, the parties disputed what constituted a significant noise impact. “The County employed the noise standards set forth in its noise ordinance and general plan as the thresholds for significant noise exposure, deeming any increase to be insignificant so long as the absolute noise level did not exceed those standards.” (*Keep Our Mountains Quiet*, *supra*, 236 Cal.App.4th at p. 732.)**[[42]](#footnote-42)** The residents’ association quoted the principle that “ ‘ “conformity with a general plan does not insulate a project from EIR review where it can be fairly argued that the project will generate significant environmental effects.” ’ ” (*Ibid*.) The Sixth District concluded “an EIR is required if substantial evidence supports a fair argument that the Project may have significant unmitigated noise impacts, even if other evidence shows the Project will not generate noise in excess of the County’s noise ordinance and general plan.” (*Ibid*.) With respect to noise that did not exceed the maximum level adopted in the general plan, the residents’ association (like KG Farms in this appeal) argued “the County should have focused on the magnitude of the increase in ambient noise levels caused by the Project.” (*Ibid*.) The court concluded “the lead agency should consider *both* the *increase* in noise level and the *absolute* noise level associated with a project.” (*Id*. at p. 733, italics added.) The court then reviewed the evidence and concluded it was sufficient to support a fair argument that events authorized by the permit may have significant noise impacts on surrounding residents. (*Id*. at p. 734.) As a result, the court required an EIR be prepared before the project could be approved.

The importance of *Oro Fino*, *Grand Terrace*, and *Keep Our Mountains Quiet* in this appeal is their conclusion that conformity with the absolute or maximum noise level specified in a general plan does not prevent a fair argument from being made that the proposed project will generate environmentally significant noise impacts. (See *Keep Our Mountains Quiet*, *supra*, 236 Cal.App.4th at p. 732.) In addition, the court in *Keep Our Mountains Quiet* set forth the principal that “the lead agency should consider both the increase in noise level and the absolute noise level associated with a project.” (*Id*. at p. 733.)

*2. An EIR’s Use of a Single Threshold for Noise Impacts*

*Berkeley Keep Jets Over the Bay Com. v. Board of Port Cmrs.* (2001) 91 Cal.App.4th 1344 (*Berkeley Jets*) is a case where an EIR was prepared for a proposed expansion of the Oakland Airport and the lead agency determined the significance of the noise impacts based solely on whether the estimated level of sound with the project would exceed 65 dB CNEL. (*Id*. at p. 1373.) As explained in the lead agency’s responses to public comments, this significance standard automatically excluded “ ‘all residential uses within the 65 CNEL contour *regardless of the change in noise*’ ” due to the airport expansion. (*Id*. at p. 1381.) “Consequently, implementation of the [expansion] could increase a community’s nighttime noise level to 64.9 CNEL, and under the sole criterion of the CNEL metric, this increase would not create a significant impact for purposes of CEQA.” (*Ibid*.)

On appeal, the petitioners challenged the use of the cumulative CNEL metric as the sole indicator of significant effects from noise. (*Berkeley Jets, supra,* 91 Cal.App.4th at p. 1377.) They argued the EIR’s noise analysis was flawed because it did not provide “ ‘the most fundamental information about the project’s noise impacts, specifically the number of additional nighttime flights that will occur under the [airport expansion], the frequency of those flights, and their effect on sleep.’ ” (*Ibid*.) The court agreed. Citing *Oro Fino*, the court concluded “the fact that residential uses are considered compatible with a noise level of 65 decibels for purposes of land use planning is not determinative in setting a threshold of significance under CEQA.” (*Berkeley Jets, supra,* at p. 1381.) The court determined the EIR did not provide a meaningful analysis of, among other things, the “degree single overflights will create noise levels over and above the existing ambient noise level at a given location, and the community reaction to aircraft noise, including sleep disturbance.” (*Id*. at p. 1382.) Referring to documents included in an appendix to the EIR, the court stated the probability of being repeatedly awaken by multiple single-event sounds could be calculated, given sufficient data. (*Id*. at p. 1382.) The court concluded the potential noise impact of increased nighttime flights mandated further study. (*Ibid*.)

C. EIR’s Discussion of Noise

Chapter 4.12 of the EIR addressed noise impacts. To describe the environmental setting for the impacts, ambient noise was measured at 18 sites selected to represent typical acoustic settings within the project area. The results of the January 2015 ambient noise monitoring were summarized in Table 4.12-3 of the EIR. At the six sites in the western subarea, the DNL/CNEL measurements ranged from 55.9 to 67.8 dBA. At the six sites in the central subarea, the DNL/CNEL measurements ranged from 44.8 to 64.4. At the six sites in the eastern subarea, the DNL/CNEL measurements ranged from 46.9 to 55.4. The overall average was 54.7 dBA.

Section 4.12.4 of the EIR stated the significance of the project’s noise impacts was assessed by (1) establishing thresholds of significance, (2) predicting the noise levels associated with construction and operational activities, and (3) comparing the predictions to the significance thresholds.

*1. General Description of the Thresholds of Significance*

The draft EIR referred to the “Kern County CEQA Implementation Document” and “Kern County Environmental Checklist” for thresholds of significance for noise. Those documents set forth six standards. Under those standards, an impact would be significant if it resulted in (1) “[e]xposure of persons to, or generate, noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies; [(2) e]xposure of persons to, or generate, excessive groundborne vibration or groundborne noise levels; [(3) a] substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; [(4) a] substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; [(5) f]or a project located within the Kern County Airport Land Use Compatibility Plan, expose people residing or working in the project area to excessive noise levels; or [(6) f]or a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.” The wording of these standards tracked the language in the questions about noise contained in the then-current version of Appendix G.

To summarize, the first standard referred to the absolute noise level that would exist with the project. Under that standard, the estimated future noise level would represent a significant noise impact if the level exceeded a maximum established in the general plan or other applicable regulation. In contrast to an established maximum noise level, the third (permanent) and fourth (temporary)**[[43]](#footnote-43)** standards referred to an *increase* in ambient noise that is “substantial.” The general description of the standards for permanent and temporary noise increases did not state what constituted a “substantial” increase in ambient noise. Later in the EIR, the County set forth its choice of how to define “substantial.”

*2. Threshold for Maximum Noise Level*

The County’s general plan includes a noise element stating that in areas with noise sensitive land uses (residential areas, schools, convalescences and acute care hospitals, parks and recreation areas, and churches), exterior noise levels generated by new projects are to be mitigated to 65 dBA DNL or less in outdoor activity areas and to 45 dBA DNL or less within interior living or other noise sensitive interior spaces. This level of 65 dBA DNL was used as the established standard under the first threshold of significance, which considered only the estimated noise level with the project. The threshold did not consider the magnitude of the increases caused by the project.

*3. Thresholds for Substantial Increases in Noise*

As Impact 4.12-3, the EIR also discussed a permanent increase in ambient noise levels in the project vicinity above levels existing without the project. The threshold of significance for this type of increase was described as follows: “A substantial permanent increase in ambient noise levels would occur if noise levels increase in excess of 65 dBA CNEL.” The EIR concluded that this noise impact would be less than significant with the implementation of MM 4.12-2, which specifies setback distances from sensitive receptors. The same threshold of significance was adopted for temporary increases in ambient noise (i.e., construction noise).

Comments to the draft EIR raised questions about the threshold of significance selected by the County for temporary and permanent increases in ambient noise levels. The response to the comments stated the County had “exercised its discretion to formulate significance thresholds by using language from Appendix G of the CEQA Guidelines” and referred to the general description of the thresholds that stated a “substantial” increase in temporary or permanent noise levels would be significant. The response stated: “While these two thresholds *qualitatively* assess temporary or permanent increases over ambient noise without the project, the lead agency—Kern County—maintains discretion to determine the *quantitative* threshold applicable to each project.” (Italics added.) Next, it stated: “For this project, the County applied a quantitative threshold of 65 dB DNL/CNEL, which represents the exterior noise levels the County has deemed to be acceptable for noise sensitive areas.”

In practical effect, the County adopted a single threshold of significance for noise impacts because it used the same threshold for evaluating (1) the noise level after the project, (2) permanent increases in ambient noise levels, and (3) temporary increases in ambient noise levels. Some comments challenged the use of the quantitative 65 dBA DNL threshold for determining the significance of noise increases, arguing the County should have considered a 5 dBA increase over the existing ambient noise levels as significant. The County’s response rejected this suggestion, stating “CEQA does not require the County to adopt such threshold” and again referring to the lead agency’s discretion to determine the appropriate threshold of significance.

*4. Noise Study*

The comments to the draft EIR were not the first time an increase of 5 dBA was suggested as a threshold of significance for an increase in ambient noise. This amount of an increase was mentioned in the environmental noise study dated February 16, 2015, and prepared by Brown-Buntin Associates, Inc. The original noise study was included in the draft EIR as Appendix V. The revised noise study was included in the final EIR as Appendix V-1.**[[44]](#footnote-44)**

Page 14 of each version of the noise study stated: “Noise levels generated by the project are considered a significant impact if any of the following conditions would be expected to occur.” The first condition referred to a level of exterior noise at any noise-sensitive receptor exceeding 65 dBA DNL. The fourth condition stated:

“The project will cause a 5 dB or greater increase in the ambient noise level, as defined by the annual average DNL, at the location of any existing or planned noise-sensitive receptor. The annual average DNL may be estimated from noise exposure information contained within the general plan of the affected jurisdiction, or from the findings of a project-specific noise analysis performed by a qualified individual.”

Despite including this description of a significant noise impact, the noise studies did not address whether this condition would be expected to occur if the project was approved. Instead, the noise studies stated the “determination of whether the project could result in a 5 dB or greater increase in existing annual average DNL will require that existing noise exposure information for the project site be analyzed by reference to appropriate documents or a site-specific analysis be conducted.”

Thus, the approach taken by the County in the EIR to determine whether an increase in ambient noise levels was significant did not conform with the approach suggested in the noise study.

C. Contentions of the Parties

 On appeal, KG Farms challenges the EIR’s analysis of noise impacts and its selection of a threshold of significance for noise increases. KG Farms contends the County’s general description of the thresholds of significance as including “substantial” increases in ambient noise levels was ignored in the subsequent analysis and, as a result, noise increases were not properly examined. KG Farms also contends the County improperly concluded the mitigation measure designed to avoid noise levels above 65 dBA would prevent all significant increases in ambient noise. In KG Farms’ view, this erroneous approach allowed the County “to dismiss as less than significant *any* noise increases—even increases of 20 dB or more—that do not result in noise levels at or exceeding 65 dB.”

The County contends it is entitled to substantial deference in selecting significance thresholds, the EIR properly reviewed and disclosed potential impacts on ambient noise increases, and substantial evidence supports the EIR’s conclusion that mitigation measures would reduce noise impacts to less than significant. The County argues the cases relied upon by KG Farms can be distinguished.

D. CEQA Compliance

*1. Background: 5 dBA Increases*

The 5-dBA increase in ambient noise levels referred to by KG Farms and the noise study prepared by Brown-Buntin Associates, Inc. is not a threshold of significance adopted by CEQA, the Guidelines, the case law or the County’s general plan. Nonetheless, the 5-dBA increase is a common threshold of significance for noise increases when the ambient noise level is less than an upper boundary specified in planning documents or noise ordinances. For example, in *Mission Bay Alliance v. Office of Community Investment & Infrastructure, supra,* 6 Cal.App.5th 160, the EIR stated: “ ‘[F]or noise environments where the ambient noise level is 65 dBA DNL or less, the significance threshold applied is an increase of 5 dBA or more, which Caltrans recognizes as a readily perceptible increase. In noise environments where the ambient noise level exceeds 65 dBA DNL, the significance threshold applied is an increase of 3 dBA or more, which Caltrans recognizes as a barely perceptible increase.’ ” (*Id*. at p. 193.) In *Gray*, *supra*, 167 Cal.App.4th 1099, the EIR stated “a 3-5 dB increase in traffic noise is commonly required to identify noise impacts” and, therefore, the EIR considered an increase of 2.1 dB or less as less than significant. (*Id*. at p. 1123.) A further example is provided by “Implementation Measure 10” of the noise element of the “Metropolitan Bakersfield General Plan,” which states a significant increase of existing ambient noise levels affecting noise sensitive land uses is deemed to occur where the project will cause “[a]n increase of the existing ambient noise level by 5 dB or more, where the existing ambient level is less than 60 dB CNEL.”

Consequently, the 5-dBA increase has been used as a threshold of significance for increases in ambient noise, but it is not a required threshold. Therefore, the County’s decision not to use that threshold was not an automatic violation of CEQA.

*2. Single Threshold of Significance for Noise Impacts*

Based on the principles adopted in *Berkeley Jets* and *Keep Our Mountains Quiet*, we conclude the question presented in this appeal is whether the County violated CEQA by using a single standard relating to the absolute noise level as a threshold of significance for evaluating all ambient noise impacts. In *Berkeley Jets*, the lead agency adopted a single, fixed threshold of 65 dB CNEL for determining whether the project’s noise impacts would be significant. (*Berkeley Jets*, *supra*, 91 Cal.App.4th at p. 1373.) Similarly, in *Keep Our Mountains Quiet*, the lead agency deemed any *increase* in noise to be insignificant so long as the *absolute* noise level did not exceed the standards set forth in the County’s general plan and noise ordinance. (*Keep Our Mountains Quiet*, *supra*, 236 Cal.App.4th at p. 732.) In each case, the use of an absolute noise level as the threshold of significance was determined to violate CEQA. We reach the same conclusion here. The EIR’s exclusive reliance on the cumulative DNL metric does not provide a complete picture of the noise impacts that may result from the project.

The cumulative noise level of 65 dBA DNL does not provide a complete and reasonable method of evaluating the significance of noise impacts because an increase in ambient noise of 20 dBA at monitoring site number 12, which was recorded as being 44.8 dBA, would not be a significant, adverse change in the noise environment. In contrast, a 2 dBA increase at monitoring site number 2, which was recorded as being 63.9 dBA, would be considered a significant adverse change in the noise environment. The EIR does not provide a rational explanation for this approach to environmental *change*. Simply saying the cumulative noise level would not be exceeded at site number 12 and would be exceeded at site number 2 does not provide a rational explanation for why a 20-dBA increase is an insignificant increase at site 12.

The County’s justification for this result is based primarily on a self-serving legal analysis of its discretionary authority to select thresholds of significance. The legal analysis in County’s responses to comments is self-serving in the sense it refers to authority that supports the County’s position and ignores cases like *Oro Fino*, *Berkeley Jets* and *Keep Our Mountains Quiet* and the principles set forth in those cases. For instance, the County’s justification for applying only the cumulative metric contained in its general plan did not directly explain why the principle that “ ‘ “conformity with a general plan does not insulate a project from EIR review where it can be fairly argued that the project will generate significant environmental effects” ’ ” had no application to the project. (*Keep Our Mountains Quiet*, *supra*, 236 Cal.App.4th at p. 732.) Similarly, the EIR did not explain why “the magnitude of the increase in ambient noise levels caused by the Project” played no role in determining whether the change was significant. (*Ibid*.) We recognize our Supreme Court has described the discretion to choose thresholds of significance as “substantial,” but that discretionary authority is not unlimited or absolute. (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 228.) In *Center for Biological Diversity*, the Supreme Court concluded the lead agency was required “to support its chosen quantitative method for analyzing significance with evidence and reasoned argument.” (*Ibid*.) Thus, “when the agency chooses to rely completely on a single quantitative method to justify a no-significance finding, CEQA demands the agency research and document the quantitative parameters essential to that method.” (*Ibid*.) Here, the County has not documented how the single quantitative method, which does not consider the magnitude of the increase in noise, accurately describes how changes in noise levels affect human beings.

The County also attempted to justify its use of the cumulative noise level of 65 dBA DNL as the sole threshold of significance by stating a 5-dBA increase is not a threshold of significance required by law. This is an accurate statement of California environmental law, but it does not justify the extrapolation that the magnitude of noise increases need not be evaluated. Had the EIR acknowledged the principle that “the lead agency should consider both the increase in noise level and the absolute noise level associated with a project” (*Keep Our Mountains Quiet*, *supra*, 236 Cal.App.4th at p. 733), it might have been able to refer to evidence showing why the magnitude of an increase was irrelevant in determining the significance of a change in noise.

Finally, the County’s claim that its general plan constitutes substantial evidence supporting its choice of thresholds suffers from the same defect as its other justifications. The general plan does not conclude that all increases in the magnitude of noise are insignificant until the cumulative noise level of 65 dBA DNL is exceeded. Furthermore, it is not reasonable to assume or infer from the terms of the general plan that only noise increases that result in cumulative noise levels exceeding the maximum specified are significant. (See Guidelines, § 15064, subd. (f)(5) [what constitutes substantial evidence to support a finding on significance].) As a result, the general plan does not constitute substantial evidence that the magnitude of an increase in ambient noise is irrelevant to the significance of the change in the noise environment.

In summary, we conclude the County’s exclusive reliance on a single cumulative DNL metric for determining the significance of the project’s noise impacts and the absence of an analysis, supported by substantial evidence, for concluding the magnitude of the increase in ambient noise is irrelevant to the significance of the noise impact, does not comply with CEQA.

IX. CONDITIONAL USE PERMITS AS A SUPERIOR ALTERNATIVE**[[45]](#footnote-45)\***

A. Alternatives to the Project

Six alternatives to the project, along with each alternative’s relationship to the project’s objectives, were addressed in Section 6.6 of the EIR. “Alternative 2—CUP Alternative” provided that “all new oil and gas exploration, development, and production activities would be permitted in the Project Area only upon County’s issuance of a conditional use permit that authorizes such activities.” Like the Ordinance adopted by the Board, the CUP Alternative would establish updated development standards and conditions to address environmental impacts of new oil and gas activities. The EIR stated that “under [the CUP] Alternative [], implementation of the updated development standards and conditions would occur on a case-by-case basis, as deemed necessary, through the standard conditional use permit approval and compliance monitoring processes.” Thus, unlike the Ordinance, the CUP Alternative did not include ministerial conformity review.

The EIR stated the CUP Alternative “would achieve most, but not all, of the Project’s objectives.” Although it would update the procedures and conditions for permitting new oil and gas activity, the CUP Alternative would not streamline the permitting process. The EIR described the CUP Alternative as a lengthy and cumbersome discretionary permitting process that would discourage ongoing economic development by the oil and gas industry, which arguably would frustrate that project objective. In addition, the EIR stated the CUP Alternative “would not develop comprehensive mitigation strategy that implements industry-wide best practices, performance standards and mitigation measures that ensure adequate protection of public health and safety and the environment.”

B. Contentions of the Parties

KG Farms contends the County’s rejection of the CUP Alternative lacks support in the administrative record or the law. Specifically, KG Farms contends the County erred in concluding the alternative (1) was environmentally inferior to the project and (2) conflicts with project objectives. KG Farms also contends the County improperly rejected “a more limited alternative requiring CUPs to drill on split-estate agricultural lands.”**[[46]](#footnote-46)**

The County argues it properly analyzed and permissibly rejected the CUP Alternative because (1) it was not feasible in light of the project’s fundamental purpose and core objectives and (2) the Ordinance was environmentally superior. The County contends the Ordinance is environmentally superior because its conservative mitigation measures apply to every future approval, regardless of whether the individual activity could have a significant impact necessitating mitigation. The County also contends the superior protection of the Ordinance is possible only because Oil Associations consented to its mitigation measures in exchange for streamlined processing and regulatory certainty. In comparison, the County states the CUP Alternative would not implement these conservative mitigation measures on all oil and gas activities. The County addresses KG Farms’ argument about requiring conditional use permits only on split-estate agricultural land by arguing CEQA does not require the EIR to analyze a variant of the properly rejected CUP Alternative.

C. CEQA and the Guidelines

It is the policy of California “that public agencies should not approve projects as proposed if there are feasible alternatives … which would substantially lessen the significant environmental effects of such projects.” (§ 21002.) CEQA’s procedures “are intended to assist public agencies systematically identifying both the significant effects of proposed projects and feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.” (§ 21002.) Accordingly, one purpose of an EIR is “to identify alternatives to the project.” (§ 21002.1, subd. (a); see § 21061.) Therefore, CEQA requires an EIR to include a detailed statement of the alternatives to the proposed project. (§ 21100, subd. (b)(4).)

The basic principles governing judicial review of the sufficiency of the selection, description and analysis of alternatives are set forth by the Guidelines and by the California Supreme Court in *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553 and *In re Bay-Delta etc.* (2008) 43 Cal.4th 1143. The selection and description of alternatives is addressed by Guidelines section 15126.6, subdivision (a), which provides:

“An EIR shall describe a range of reasonable alternatives to the project ... which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decisionmaking and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. [Citations]”

The rule of reason, as described in subdivision (f) of Guidelines section 15126.6, “requires the EIR to set forth only those alternatives necessary to permit a reasoned choice” and to “examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project.” (*Ibid.*)

A lead agency’s first step in selecting the alternatives to be included in the EIR is the establishment of project objectives. (*North Coast Rivers Alliance v. Kawamura* (2015) 243 Cal.App.4th 647, 666–667.) “A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings.… The statement of objectives should include the underlying purpose of the project.” (Guidelines, § 15124, subd. (b).)

After the project’s objectives have been selected—an element necessary to making feasibility determinations—there are two points during the environmental review process when the feasibility of project alternatives is addressed. (*San Diego Citizenry Group v. County of San Diego* (2013) 219 Cal.App.4th 1, 18.) “First, alternatives are determined to be potentially feasible in the EIR. [Citation.] Second, in deciding whether to approve the project, the decision maker determines whether an alternative is actually feasible. [Citatiton.] ‘At that juncture, the decision makers may reject as infeasible alternatives that were identified in the EIR as potentially feasible.’ [Citation.]” (*Ibid*.) “Broader considerations of policy thus come into play when the decisionmaking body is considering actual feasibility than when the EIR preparer is assessing potential feasibility of the alternatives.” (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1000.)

In *Jones v. Regents of University of California* (2010) 183 Cal.App.4th 818, the court concluded substantial evidence supported the determination that an alternative would not achieve the project’s objectives. (*Id*. at p. 829; see *In re Bay-Delta etc.*, *supra*, 43 Cal.4th at p. 1167.) “[A] lead agency may reject an alternative as infeasible because it cannot meet project objectives, as long as the finding is supported by substantial evidence in the record.” (*Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 948.) Accordingly, we apply the substantial evidence test to the determination whether an alternative could feasibly achieve the project’s objectives.

D. Objectives and Feasibility of CUP Alternative

*1. Project Objectives*

Sections 1.4.3 and 3.6 of the EIR set forth the project objectives by listing the objectives of the County in its role as lead agency and the objectives of Oil Associations in their capacity as the proponents of the project.

The County’s objectives included (1) updating its zoning ordinance to include additional procedures and compliance standards for the purpose of reducing significant environmental impacts of future oil and gas activities; (2) encourage economic development by the oil and gas industry; (3) continuing to improve and streamline current energy regulations; (4) protect areas of important mineral, petroleum and agricultural resource potential for future use by promoting sustainability and by encouraging best management practices; and (5) ensure the protection of environmental resources.

The stated objectives of Oil Associations proposal to amend the zoning ordinance were to (1) create an effective regulatory and permitting process for oil and gas exploration and production, which could be relied upon by the County, DOGGR and other agencies; (2) achieve an efficient and streamlined environmental review and permitting process for all oil and gas operations covered by the proposed amendment; and (3) develop industry-wide best practices, performance standards, and mitigation measures to ensure adequate protection of public health and safety and the environment. If these efficiencies were attained, Oil Associations believed it would increase oil and gas exploration and production in Kern County, which in turn would benefit the local economy.

The Board’s findings addressed each proposed alternative to the Ordinance. The Board explicitly rejected the CUP Alternative, finding it would “not achieve the Project’s basic objective and is environmentally inferior to the proposed Project.” The Board supported its determination that the CUP Alternative was environmentally inferior by finding the project’s mitigation program would provide mitigation in excess of that which would occur if new wells were subject to discretionary approval following individual environmental review. The County’s appellate brief expands on this finding by stating Oil Associations, the project applicants, agreed to the conservative mitigation measures in exchange for streamlined processing and regulatory certainty and without these benefits, the project applicants would not have supported amending the zoning ordinance.

The Board’s findings also addressed the implications of conducting an individualized review if every oil and gas well drilled within Kern County required a conditional use permit. The Board found there were approximately 75 active oil and gas fields in the project area and over 2,500 wells are drilled every year. The Board stated the County lacked the resources to process this volume of oil and gas negative declarations or EIR’s each year. The Board found “the basic objective of the Project and this EIR is to eliminate time-consuming and costly discretionary reviews of individual well and field development activities by establishing a ministerial site plan review process which incorporates mitigation identified in th[e] EIR.” The Board also found adoption of the Ordinance and certification of the EIR often would eliminate the need for other responsible agencies to conduct additional environmental review. The Board relied on *San Diego Citizenry Group v. County of San Diego*, *supra*, 219 Cal.App.4th 1 to conclude streamlining the permitting process is a permissible objective reflecting land use policy decisions within its authority as a county board of supervisors.

*2. Analysis of CUP Alternative*

KG Farms contends the Board’s finding that the project was environmentally superior to the CUP Alternative is not supported by the law or the evidence in the record. KG Farms argues the Board erred in finding the mitigation measures adopted with the Ordinance could not be implemented as part of the CUP Alternative.

KG Farms’ argument challenges the Board’s determination that the CUP Alternative was not practical (i.e., feasible) because it was not supported by Oil Associations. The record supports the finding that project applications did not support the CUP Alternative. The record includes statements made by a representative of Western States Petroleum Association at the November 9, 2015, hearing before the Board. The representative stated its members were willing to undertake the many new mitigation measures “in order to obtain the economic certainty of a streamlined permitting process.” Similarly, the representative’s October 5, 2015, letter to the Board and the County’s planning commission opposed the CUP Alternative on the ground it would impose “substantial delays and costs without further protection of the environment.” Consequently, the record contains substantial evidence to support the finding that Oil Associations would not support the CUP Alternative.

The next question is whether this lack of support rendered infeasible the CUP Alternative with the mitigation measures proposed for the Ordinance. The County argues the views of all affected parties were considered in crafting the Ordinance and many parties worked together and found common ground so that the Ordinance would balance fairly diverse interests. The County notes the Ordinance was opposed by parties advocating more onerous requirements and by parties seeking more lenient treatment of members of the oil and gas industry. As a result, the County asserts the Ordinance reflects the Board’s legislative decision to strike a compromise between the extreme positions presented. We conclude the record contains sufficient evidence to support the Board’s finding that the lack of support from Oil Associations was among the factors that rendered infeasible the CUP Alternative with the mitigation measures proposed for the Ordinance.

Another factor underlying the Board’s finding that the CUP Alternative with the mitigation measures proposed for the Ordinance would be infeasible relates to the objective of implementing a streamlined permitting process, which was intended to promote economic development. We conclude streamlining a permitting process is a legally appropriate objective. (*San Diego Citizenry Group v. County of San Diego*, *supra*, 219 Cal.App.4th 1, 18 [core objective of amending zoning ordinance was streamlining the approval process and permitting boutique wineries by right, which would encourage growth of agriculture and the wine industry].) Furthermore, we conclude the Board’s finding that adopting the CUP Alternative would not achieve the streamlining objective is supported by substantial evidence. This evidence includes, without limitation, the forecasts of the volume of permits that the County would need to process under the CUP Alternative and the greater level of attention that type of review would entail.

Consequently, we conclude the Board did not err when it determined the CUP Alternative was not feasible and would not achieve a basic objective of the project.

*3. Requiring a CUP Only for Split-Estates*

KG Farms contends substantial evidence does not support the Board’s rejection of the modified version of the CUP Alternative that imposes a conditional use permit requirement only on split-estate lands. County argues this alternative was not adopted because (1) it was not actually feasible in light of the project’s objectives, which included streamlining the permitting process, and (2) it was environmentally inferior to the project.

First, the CUP Alternative limited to split-estate lands was not supported by Oil Associations. As a result, if litigation arose under that version, the costs of the lawsuit would be paid by County, not by Oil Associations in their capacity as project proponents.**[[47]](#footnote-47)** Thus, as with the broader CUP Alternative, the absence of backing from the Oil Associations is a factor providing some support for the finding that requiring a conditional use permit for oil and gas activities on split-estate lands was not a feasible alternative. Second, in responding to a comment that the number of applications would be too few to be a burden on County, the November 9, 2015 staff report addressed the volume of applications for conditional use permits that County would have to process. The report estimated that there would be more than 100 such applications. At the Board’s November 9, 2015 hearing, the planning director stated her department could probably do 60 CUP’s a year. This evidence, while far from overwhelming, constitutes substantial evidence supporting a finding that the burden on County’s staff of processing permit applications generated by the modified version of the CUP Alternative exceeded staff’s capacity and, thus, was infeasible. Consequently, the record contains sufficient evidence for the Board’s rejection of the alternative requiring a conditional use permit for oil and gas activities on split-estate lands.

X. PARTICIPATION IN CEQA PROCESS**[[48]](#footnote-48)\***

A. Spanish Language Translations

*1. Contentions*

Sierra Club contends County failed to make the EIR understandable to a large segment of its population by (1) failing to translate into Spanish relevant documents such as various notices and the EIR’s executive summary and (2) failing to provide Spanish interpreters at public workshops.

*2. Constitution*

The California Constitution provides that “English is the official language of the State of California.” (Cal. Const., art. III, § 6, subd. (b).) It also requires the Legislature to “take all steps necessary to insure that the role of English as the common language of the State of California is preserved and enhanced.” (Cal. Const., art. III, § 6, subd. (c).) These provisions, however, do not *require* or *prohibit* public agencies from translating CEQA documents into other languages such as Spanish.

*3. CEQA and the Guidelines*

Similarly, neither CEQA nor the Guidelines require or prohibit public agencies from translating CEQA documents into other languages or from providing access to translators during CEQA workshops, public meetings or other administrative proceedings. Provisions of CEQA and the Guidelines do address in general terms how language should be used in CEQA documents. For example, section 21003, subdivision (b) states the policy that CEQA documents “be organized and written in a manner that will be meaningful and useful to decisionmakers and to the public.” In Sierra Club’s view, the CEQA documents lacked meaning for people who did not read English and, thus, were not useful to that segment of the public.

Guidelines section 15123, subdivision (a) states the EIR shall include a summary and “[t]he language of the brief summary should be as clear and simple as reasonably practical.” Guidelines section 15140 states “EIRs shall be written in plain language and may use appropriate graphics so that decisionmakers and the public can rapidly understand the documents.” Sierra Club also relies on Guidelines section 15201, which addresses the role of public participation in the environmental review process by stating:

“Public participation is an *essential part* of the CEQA process. Each public agency should include provisions in its CEQA procedures for wide public involvement, formal and informal, consistent with its existing activities and procedures, in order to receive and evaluate public reactions to environmental issues related to the agency’s activities. Such procedures should include, whenever possible, making environmental information available in electronic format on the Internet, on a web site maintained or utilized by the public agency.” (Italics added.)

Public participation is closely related to two basic purposes of CEQA. The first is CEQA’s purpose of informing “decision makers *and the public* about the potential significant environmental effects of proposed activities.” (Guidelines, § 15002, subd. (a)(1), italics added.) The second is to “[d]isclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.” (Guidelines, § 15002, subd. (a)(4).) This type of disclosure enables the public “to determine the environmental and economic values of their elected and appointed officials, thus allowing for appropriate action come election day should a majority of the voters disagree.” (*People v. County of Kern, supra,* 39 Cal.App.3d at p. 842; Guidelines, § 15003, subd. (e).)

Although not part of CEQA, section 8 provides that “[w]henever any notice, report, statement or record is required by [the Public Resources Code], it shall be made in writing in the English language.” This provision does not prohibit a public agency from issuing a second version of the document in another language.

*4. No Mandatory Requirement*

The trial court reviewed the authorities cited by Sierra Club and concluded the County was not *expressly* required by CEQA, the Guidelines, or other applicable law to provide interpreters or translations of documents. Next, the court addressed whether such a requirement was *implied*. The court referred to section 21083.1, which states courts “shall not interpret [CEQA] or the state guidelines … in a manner which imposes procedural or substantive requirements beyond those explicitly stated in [CEQA] or in the state guidelines.” Based on this provision, the court concluded it must not interpret the statute or regulations to impliedly require the County to provide interpreters or translations of documents.

We agree with the trial court’s determinations. Although translations would be commendable, applicable law contains no *express* requirements for interpreters or translation of documents. Second, such a *mandatory* requirement cannot be implied. (§ 21083.1.) Consequently, the trial court correctly decided CEQA, the Guidelines, and other applicable laws did not *require* the County to provide interpreters or translations of documents.

*5. Finding Facts and Exercising Discretion*

The trial court also addressed whether the County’s action was an abuse of its discretion. We, like the trial court, interpret CEQA and the Guidelines as granting public agencies the discretionary authority to provide interpreters and translations of CEQA documents. This discretionary authority is derived from CEQA’s purposes of (1) informing the public of the potentially significant environmental effects of proposed activities and (2) promoting public participation in the environmental review process. (Guidelines, §§ 15002, subd. (a)(1), 15201.) As the matter is committed to the public agency’s discretion and requires the agency to evaluate the facts and circumstances, the factual basis for the agency’s decision is reviewed under the substantial evidence standard. (*Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 512 [standard of review].)

Sierra Club disagrees with treating the question as being committed to the agency’s discretion and applying the substantial evidence standard to the findings of fact underlying the agency’s exercise of that discretion. Sierra Club’s theory of reversible error asserts the County’s failure to provide interpreters and to translate documents constitutes “a procedural error subject to de novo review.” Having adopted this legal theory, Sierra Club has not attempted to demonstrate the absence of substantial evidence to support the implied findings of fact underlying the County’s decisions. Because Sierra Club has not challenged the sufficiency of the evidence and made the demonstration necessary to establish that type of error, we need not undertake a substantial evidence review. (See generally, *In re Dakota H.* (2005) 132 Cal.App.4th 212, 228 [appellant has burden of showing there is no evidence of a sufficiently substantial nature to support the challenged finding].)

Consequently, Sierra Club has not established the County abused its discretion when it chose not to provide interpreters and chose not to translate notices or parts of the EIR into Spanish. (§ 21168.5.) Accordingly, Sierra Club has not demonstrated prejudicial error.

B. Circulation of Cumulative Health Risk Analysis

*1. Significant New Information and Recirculation*

The legal principles governing the recirculation of an EIR are set forth in part III.C.3, *ante*. To summarize, recirculation is required when “significant new information” is added to an EIR after the draft EIR has been circulated for public review. (§ 21092.1; Guidelines, § 15088.5, subd. (a); see *Clover Valley Foundation v. City of Rocklin*, *supra*, 197 Cal.App.4th at p. 223.) New information is “significant” if “the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project .…” (Guidelines, § 15088.5, subd. (a).) Recirculation is unnecessary if “the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.” (Guidelines, § 15088.5, subd. (b).) A lead agency’s “decision not to recirculate an EIR must be supported by substantial evidence.” (Guidelines, § 15088.5, subd. (e).)

*2. Contentions*

KG Farms contends the County’s late release of the Cumulative Health Risk Assessment (Appendix M-2 to the EIR)**[[49]](#footnote-49)** and subsequent refusal to circulate it for public comment violated CEQA. The assessment was released on November 2, 2015, a week before the Board certified the EIR and approved the Ordinance. KG Farms contends the Multi-Well Health Risk Assessment contained significant new information about the project’s public health effects and, therefore, recirculation was mandatory under CEQA and the Guidelines. KG Farms contends the County’s four excuses for refusing to allow public comment on the Multi-Well Health Risk Assessment are meritless.

Oil Associations contend recirculation of the EIR is not needed because the Multi-Well Health Risk Assessment did not identify any new or substantially more severe impacts. Furthermore, they contend substantial evidence supports the Board’s determination not to recirculate the EIR.

*3. Initial and Revised Health Risk Assessments*

In July 2015, the County released the draft EIR for public comment. Appendix M was the Health Risk Assessment of the proposed drilling and oil and gas operations related to the Ordinance. The assessment addressed the cancer risk associated with drilling and production activity in terms of the distance needed between the activity and the property boundary of a sensitive receptor, such as a private residence, to reduce the estimated risk to 10 cases in one million. DOGGR submitted a comment letter that included the assertion the Health Risk Assessment should take into account cumulative impacts.

In September 2015, the County released chapter 7 of the final EIR, “Responses to Comments.” One of the appendices listed in chapter 7 was designated M-1, “Revised Health Risk Assessment.” In its Global Response Air-5, the County responded to comments suggesting the Health Risk Assessment was inadequate because it did not address the cumulative risk from drilling and operating multiple wells close to a sensitive receptor. Global Response Air-6 described a change in the methodology used to model the health risks of air pollutants. In addition, the last paragraph of Global Response Air-6 stated:

“The County and its experts have reviewed both this Revised HRA (available in Appendix M-1) and the Cumulative HRA (available in Appendix M-2 and discussed further in GR Air-5), and concluded that no changes to the setback distances included in MM 4.3-5 are necessary as these are greater than warranted based on the analyses and conclusions included in these revised H[ealth Risk Assessments]. The greater setback distances included in MM 4.3-5 provide an extra margin of safety to protect the public health of nearby homes, schools, and other sensitive receptors under both single-well and multiple-well exposure scenarios.”

This paragraph contained statements that were not correct. The Multi-Well Health Risk Assessment did not exist, was not available in the appendix, and was not discussed further in Global Response Air-5. Because the Multi-Well Health Risk Assessment did not exist, it follows the County and its experts could not have reviewed it in reaching their conclusions.

*4. Multi-Well Health Risk Assessments*

In October 2015, the County received an inquiry about the existence of the Multi-Well Health Risk Assessment because it was not among the materials posted online. On November 2, 2015, the County released chapter 12 of the EIR, “Final Environmental Impact Report Consolidation.” Chapter 12 included (1) revisions to the zoning amendment recommended by staff; (2) clarifications and modifications to the draft EIR; (3) all written comments received by the County *after* the period for comments to the draft EIR and after the planning commission’s October 5, 2015, hearing on the project; (4) staff-initiated clarification and amplifications made following the September 25, 2015, publication of chapter 7; and (5) additional appendices including the Multi-Well Health Risk Assessment, Appendix M-2. Chapter 12 addressed the missing Multi-Well Health Risk Assessment by stating:

“Due to a drafting error during the preparation of Volume 3, Chapter 7, some responses in that chapter (Global Response Air-6 and responses to comments 0002-029, -034, -037 and -038) referred to a [Multi-Well] Health Risk Assessment, Appendix M-2. These references were erroneous at the time that Volumes 3 and 4 were published, since at that time, no cumulative Health Risk Assessment had been prepared.

“Subsequent to the publication of Volumes 3 and 4, the [Multi-Well] Health Risk Assessment anticipated in those responses has been prepared. It is attached as Appendix M-2 to Volume 5. This HRA specifically studied the potential cumulative health impacts associated with multiple well drilling operations occurring in proximity to a sensitive receptor. The analysis included in Appendix M-2 provides further quantitative confirmation that cumulative impacts from multiple well drilling operations that occur near sensitive receptors, in the conservative 48-well drilling scenario described below and analyzed in Appendix M-2, do not create significant air quality risks based on the San Joaquin Valley Air Pollution Control District’s risk assessment methodology.”

Chapter 12 also described the conclusions resulting from the change in methodology for modeling health risks: “The results of the cumulative modeling study indicate results of a 9.3 in one million potential cancer risk. This result is less than half of the 20 in one million risk significance threshold established by San Joaquin Valley Air Pollution Control District. This quantitative Cumulative HRA further confirms the earlier qualitative conclusions reached in the EIR.”

*5. Board’s Findings*

Section VII of the Board’s findings addressed whether the EIR needed to be recirculated. The Board did not specifically address the Multi-Well Health Risk Assessment, but found “no documentation produced by, or submitted to, the County and relied on by the County after publication of the Final EIR, including but not limited to the Late Comments described above, identifies any new significant effect; substantial increase in the severity of any environmental effect, or feasible project alternatives that would clearly lessen the environmental effects of the project.” Based on this and other findings, the Board concluded “recirculation of the EIR is not required.”

*6. Analysis*

First, we conclude the Multi-Well Health Risk Assessment qualifies as “information” as that term is defined in Guidelines section 15088.5, subdivision (a) because the assessment includes “additional data” and additional analysis. Second, it constitutes “new” information because the additional data and analysis was not included in the draft EIR or in the County’s responses to comments—that is, Chapter 7 of the final EIR. Based on these two conclusions, the dispositive issue is whether the new information provided by the Multi-Well Health Risk Assessment was “significant.”

KG Farms contends the new information meets the relevant significance standard because the draft EIR, as updated by the County’s responses to comments, was inadequate in a way that precluded “meaningful public review and comment.” (Guidelines, § 15088.5, subd. (a)(4).)**[[50]](#footnote-50)** In contrast, Oil Associations argue meaningful public comment was not precluded. Oil Associations point to the November 6, 2015, comment letter submitted by counsel for KG Farms, which included five pages devoted to the Multi-Well Health Risk Assessment.

KG Farms’ comment letter stated the release of the Multi-Well Health Risk Assessment five business days before the Board’s public hearing on the project “was not an adequate amount of time to allow experts and members of the public to thoroughly review the document, which contains 1,691 pages, many very complex spreadsheets, produced only as inaccessible pdf files, rather than live Excel files.” The letter also asserted, based on a preliminary review, that “it is simply not plausible that the County’s asserted cumulative scenario would not result in significant health impacts and is conservative.”

We conclude the “draft EIR was [] fundamentally and basically inadequate … in nature” in addressing the question of the health risks posed to sensitive receptors located near multiple wells. (Guidelines, § 15088.5, subd. (a)(4).) No analysis of this question was included in the draft EIR and, therefore, the question of inadequacy can be determined as a matter of law. (See *Sierra Club v. County of Fresno*, *supra*, 6 Cal.5th at p. 516.) Furthermore, under the peculiar facts of this case, this omission of information was exacerbated by the misstatements of fact included in the County’s responses to comments received from other agencies and the public. These misstatements create the appearance that the County had decided the results of the Multi-Well Health Risk Assessment before it existed, which suggests the document was little more than a post hoc justification. The misstatements and the inferences reasonably drawn from them heighten the need for public review of, and comment on, the Multi-Well Health Risk Assessment. In other words, these factors are relevant to applying the phrase “*meaningful* public review and comment” to the undisputed facts of this case. (Guidelines, § 15088.5, subd. (a)(4), italics added.) Here, the ability of the public to review and comment upon the Multi-Well Health Risk Assessment was limited. The fact one comment letter mentioning the Multi-Well Health Risk Assessment was submitted does not support the conclusion that members of the public and other government agencies had a meaningful opportunity to scrutinize the Multi-Well Health Risk Assessment and evaluate its merits and shortcomings.

Based on the foregoing and the fact a revised EIR must be recirculated if other violations of CEQA are to be corrected, we conclude the Multi-Well Health Risk Assessment must be included in any revised EIR recirculated for public comment before that revised EIR is presented to the Board for certification.

XI. DISCRETIONARY OR MINISTERIAL PERMITS**[[51]](#footnote-51)\***

A. Background

*1. Scope of CEQA*

Section 21080, subdivision (a) states that CEQA “shall apply to *discretionary projects* proposed to be carried out or approved by public agencies.” (Italics added.) Conversely, CEQA “does not apply to … [¶] [m]inisterial projects proposed to be carried out or approved by public agencies.” (§ 21080, subd. (b)(1).) Accordingly, the scope of CEQA is defined in part by the line dividing discretionary projects from ministerial projects. The rationale for this line is that when approval of a project is purely ministerial, an environmental review under CEQA would be useless to the officials carrying out the ministerial task because they lack the authority to withhold project approval or require project modifications addressing the adverse impacts identified in the environmental review. (See *Mountain Lion Foundation v. Fish & Game Com.* (1997) 16 Cal.4th 105, 117.)

“‘Discretionary project’” means a project that “requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, [or] regulations ….” (Guidelines, § 15357.) Thus, “where a governmental agency can use its judgment in deciding whether and how to carry out or approve a project,” the project is discretionary. (Guidelines, § 15002, subd. (i).) In contrast, an agency’s “ministerial decision involves only the use of fixed standards or objective measurements, and the public official [does not] use personal, subjective judgment in deciding whether or how the project should be carried out.” (Guidelines, § 15369; see Guidelines, § 15002, subd. (i)(1).)

*2. The Ordinance*

Here, the County has classified the act of approving a permit under the Ordinance as ministerial. (See Guidelines, § 15268, subd. (a) [public agency should analyze its own laws and make determination of what is ministerial].) For example, the Ordinance refers to applicants for “a *ministerial* Oil and Gas Conformity Review permit” and applicants for “a Minor Activity Review *ministerial* permit” (Ordinance, §§ 19.98.090(A), 19.98.100(A), 19.98.110, 19.98.120(A), italics added).**[[52]](#footnote-52)** Also, section 19.98.040 of the Ordinance is titled “Oil and Gas Activities by Ministerial Permit.” (Boldface omitted.) “Ministerial projects are exempt from the requirements of CEQA.” (Guidelines, § 15268, subd. (a).) Consequently, if permit approvals were correctly classified as ministerial, no further environmental review under CEQA would be required before the County approved a permit application.

Ordinance section 19.98.040 provides an overview of the permit review process by stating that no well for the exploration, development, or production of oil or gas may be drilled, or related accessory equipment or structure installed in certain areas “until an application for Oil and Gas Conformity Review or Minor Activity Review has been submitted to and approved by the Planning Director as consistent” with Chapter 19.98. The Ordinance provides two procedural pathways for conformity review and the applicable pathway is determined by whether or not the permit applicant has obtained the signature of the relevant surface owner.

When the signature has been obtained, the applicable oil and gas conformity review is set forth in section 19.98.090 of the Ordinance. Ordinance section 19.98.090(B) states:

“The Planning Director shall inform the applicant in writing within seven (7) business days of receipt that the application is complete and shall issue the permit if he/she determines that the proposed use meets the implementation standards and conditions specified in … this chapter or inform the applicant that additional information is needed to complete the application and therefore the application is deemed incomplete.”**[[53]](#footnote-53)**

Ordinance sections 19.98.100 and 19.98.120 contain similar language for the review of permit applications involving (1) conformity review where the permit applicant has not obtained the signature of the surface owner and (2) minor activity review, respectively. (See Ordinance, §§ 19.98.100(C)(5), 19.98.120(B).)

The “implementation standards and conditions” are addressed in section 19.98.060 of the Ordinance, which states (1) no well shall be drilled within certain distances of other existing uses, such as highways, homes and hospitals; (2) the drilling and production activity must conform to all applicable fire and safety regulations; and (3) the applicant must comply with all required federal, state and county rules and regulations. (Ordinance, § 19.98.060(A), (B), (C).) Section 19.98.060(D) also provides: “The applicant shall demonstrate compliance with all applicable Mitigation Measures as listed in the approved Mitigation Monitoring and Reporting Program (MMRP) for the Revisions of the Zoning Ordinance (C) – 2015.”

To summarize, when deciding whether to approve a permit application, the County must determine whether the proposed activity conforms to all applicable fire and safety regulations, complies with all required federal, state and county rules and regulations, and complies with all applicable mitigation measures. These are the determinations the Ordinance has classified as ministerial.

*3. Sierra Club’s Request for Declaratory Relief*

Sierra Club labeled its pleading a “VERIFIED PETITION FOR WRIT OF MANDATE AND COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF.” The caption referred to Code of Civil Procedure sections 1060, 1085, 1094.5, CEQA, and the Planning and Zoning Law (Gov. Code, § 65000 et seq.). Sierra Club’s prayer for relief requested (1) a writ of mandate to address the CEQA violations alleged and (2) permanent injunctions restraining the approval of permits and other activity under the Ordinance pending full compliance with CEQA, the Guidelines and the Planning and Zoning Law. Sierra Club also sought a judgment declaring the Ordinance “[d]oes not, within in the meaning of CEQA, establish a ministerial, nondiscretionary permitting scheme for approving future oil and gas activities such that the County’s decisions under the Ordinance are exempt from further CEQA review.”

On appeal, Sierra Club contends the text of the Ordinance establishes that the County chooses the mitigation measures it believes are applicable to each new permit application and includes them in its final permit approval letter. Sierra Club refers to provisions stating that, upon issuance of a permit, the approval letter shall include (1) a “list of applicable conditions and mitigation measures”; (2) a determination that the permit falls within the scope of the EIR; and (3) a determination that other state, regional, and local agencies are responsible agencies under CEQA. (Ordinance, §§ 19.98.090(H)(1), 19.98.100(I)(1).) Sierra Club contends the Ordinance does not describe or circumscribe the County’s authority to decide which among the EIR’s 88 mitigation measures apply to a new site. Sierra Club interprets the absence of express language of delineating the County’s authority to mean the County necessarily must deliberate and exercise judgment in deciding to approve a new permit and list the applicable mitigation measures. Consequently, Sierra Club contends the Ordinance incorrectly labels future permit approvals as ministerial and impermissibly seeks to foreclose CEQA review of those approvals. Sierra Club argues declaratory relief is appropriate in the circumstances presented.

*4. Declaratory Relief Statute*

 Sierra Club’s request for declaratory relief is governed by Code of Civil Procedure section 1060, which authorizes a superior court to issue a declaratory judgment. “Any person … who desires a declaration of his or her rights or duties with respect to another … may, in cases of actual controversy relating to the legal rights and duties of the respective parties, bring an original action or cross-complaint in the superior court for a declaration of his or her rights and duties.” (Code Civ. Proc., § 1060.) The request for a declaration of rights or duties may be made alone or with other relief and “the court may make a binding declaration of these rights or duties.” (*Ibid*.)

B. Availability of Declaratory Relief

 Sierra Club’s request for a judgment declaring the Ordinance’s permitting scheme is not ministerial raises questions about (1) whether the approval of permits is discretionary or ministerial and (2) whether declaratory relief is available in this case. Our analysis begins with the legal issues relating to the availability of declaratory relief.

*1. CEQA and Declaratory Relief*

First, we conclude “the interpretation of ordinances and statutes are proper subject of declaratory relief” so long as the customary limitations upon granting such relief are observed. (*Redwood Coast Watersheds Alliance v. State Bd. of Forestry & Fire Protection* (1999) 70 Cal.App.4th 962, 968, 970 (*Redwood Coast*), quoting *Walker v. County of Los Angeles* (1961) 55 Cal.2d 626, 637.)

Second, we conclude Sierra Club’s request for relief under CEQA does not preclude it from seeking a declaratory judgment under Code of Civil Procedure section 1060. Nothing in section 21168.9, which sets forth the requirements for a court order addressing a public agency’s noncompliance with CEQA, bars the entry of a declaratory judgment. Instead, that provision identifies the mechanism for implementing the remedy or remedies to correct CEQA violations. (*POET I*, *supra*, 218 Cal.App.4th at p. 756.) Courts are required to order the issuance of a writ of mandate to remedy a failure to comply with CEQA. (*POET I, supra,* at pp. 756–757.) Thus, a court could enter a declaratory judgment and remedy the noncompliance with CEQA identified in the declaratory judgment by issuing a writ of mandate. Furthermore, subdivision (c) of section 21168.9 states: “Except as expressly provided in this section, nothing in this section is intended to limit the equitable powers of the court.” “[D]eclaratory relief is an equitable remedy.” (*Artus v. Gramercy Towers Condominiums Assn.* (2018) 19 Cal.App.5th 923, 930.) Because section 21168.9 does not expressly restrict a court’s authority to enter declaratory relief, such relief is allowed pursuant to subdivision (c) of section 21168.9.

*2. Application of Standards for Granting Declaratory Relief*

Declaratory relief is appropriate when the controversy is “ ‘ “of a character which admits of specific and conclusive relief by judgment within the field of judicial determination, as distinguished from an advisory opinion upon a particular or hypothetical state of facts.” ’ ” (*Redwood Coast*, *supra*, 70 Cal.App.4th at p. 968.) In light of this principle and the reference in Code of Civil Procedure section 1060 to “cases of actual controversy,” we consider whether Sierra Club has demonstrated there was an actual controversy that would render declaratory relief appropriate.

Sierra Club’s claim for declaratory relief sought to address how the Ordinance would be applied to future permit applications. An “actual controversy” for purposes of Code of Civil Procedure section 1060 includes “a probable future controversy relating to the legal rights and duties of the parties” provided that the controversy is “ripe.” (*Environmental Defense Project of Sierra County v. County of Sierra* (2008) 158 Cal.App.4th 877, 885 (*Sierra*).) The ripeness requirement is satisfied when the dispute has reached the point where the facts have sufficiently congealed to allow the court to make an intelligent and useful decision. (*Ibid*.) Ripeness and the broader “actual controversy” issue are questions of law subject to de novo review. (*Ibid*.)

Here, Sierra Club cites *Sierra* as a case in which “declaratory relief interpreting zoning ordinance was appropriate when there was no question about how county would implement zoning.” In *Sierra*, the plaintiff challenged a so-called “ ‘streamlined zoning process’ ” on the ground it did not comport with notice provisions in the Planning and Zoning Law. (*Sierra*, *supra*, 158 Cal.App.4th at p. 881.) The dispute about the interpretation of the Planning and Zoning Law arose “in the context of a landowner’s request for a zoning ordinance amendment to remove a prohibition on the subdivision of his land.” (*Ibid*.) The plaintiff filed a motion for summary judgment requesting declaratory relief that the Planning and Zoning Law required the county to give 10 days’ notice of a public hearing on zoning matters *after* it had received the planning commission’s recommendation. The trial court determined the issue was ripe for review and granted summary judgment based on its interpretation that the Planning and Zoning Law required the notice of hearing on a proposed zoning change be given after the planning commission had issued its recommendation. (*Id*. at pp. 883–884.) The Third District upheld the summary judgment and issuance of declaratory relief. (*Id*. at p. 884.)

In *Sierra*, the appellate court considered whether there was an actual controversy between the parties on the question of whether the streamlined zoning process established by the ordinance violated the Planning and Zoning Law. (*Sierra*, *supra*, 158 Cal.App.4th at p. 886.) The court distinguished a Supreme Court case that held a facial challenge to guidelines adopted by the California Coastal Commission relating to beach access was not a ripe controversy, stating “we do not have to guess how the county will interpret and carry out the notice provisions in [the statute].” (*Id*. at pp. 886–887, discussing *Pacific Legal Foundation v. California Coastal Com.* (1982) 33 Cal.3d 158.) No guessing was required in *Sierra* because the streamlined zoning process actually had been applied to a request by a landowner for a zoning amendment.

In contrast to the circumstances presented in *Sierra*, we must guess (1) what future permit applications will contain and (2) how the County will apply the various mitigation measures incorporated into the Ordinance to those applications. Accordingly, we conclude the request for declaratory relief does not present an “actual controversy” within the meaning of Code of Civil Procedure section 1060. How particular mitigation measures will be applied to a permit application cannot be determined on the face of the Ordinance and the mitigation measures. As a result, we are not presented with a purely legal question. (See *Farm Sanctuary, Inc. v. Department of Food & Agriculture* (1998) 63 Cal.App.4th 495, 502 [whether regulation allowing ritualistic slaughter of poultry was invalid on its face due to inconsistency with California’s Human Slaughter Law presented a purely legal question and was ripe for decision].)

Sierra Club claims an imminent and significant hardship will result from a delay in deciding the discretionary-ministerial issue because applications will be processed quickly and the Ordinance does not require any public notice when a permit has been issued. This argument is based on a prediction about how the County and an applicant will behave in the future. That prediction may not be accurate because the County could choose to file a notice of exemption with the county clerk to obtain the benefit of a shorter statute of limitations. (See Guidelines, §§ 15062, 15374 [notice of exemption].) When a notice of exemption that complies with Guidelines section 15062 is filed, a 35-day limitations period applies rather than the 180-day limitations period. (*Coalition for Clean Air v. City of Visalia* (2012) 209 Cal.App.4th 408, 420–421; see § 21167, subd. (d) [limitation periods].) Furthermore, if no notices of exemption are filed, the public may be able to learn of the applications for permits from the County based on public disclosures by other agencies that might issue permits covering the proposed exploration and production activities.**[[54]](#footnote-54)** Therefore, the facts currently available do not show the barriers to challenging the exempt status of permits after they are issued are so significant that the issue should be considered ripe for decision now.

In summary, we conclude the request for declaratory relief about the discretionary nature of the Ordinance and its various mitigation measures does not present an actual controversy for purposes of Code of Civil Procedure section 1060. Without a factual record of how the Ordinance is being applied, we lack sufficient information to issue a declaratory judgment stating that approvals under the Ordinance are not exempt from further CEQA review.**[[55]](#footnote-55)**

XII. APPELLATE RELIEF

A. Summary of CEQA Violations

Our review has identified five areas in which the EIR did not comply with CEQA: (1) mitigation of water supply impacts, (2) impacts from PM2.5 emissions, (3) mitigation of conversion of agricultural land, (4) noise impacts, and (5) recirculation of the Multi-Well Health Risk Assessment for public review and comment.

First, the mitigation measures for the project’s significant impacts to water supplies inappropriately deferred formulation of the measures or delayed the actual implementation of the measure and the EIR’s discussion of those mitigation measures was inadequate. Second, the EIR failed to discuss the impact of a mitigation measure on PM2.5 emissions or, alternatively, provide an explanation for why there is no separate discussion of the measure’s impact on PM2.5 emissions. Also, the mitigation measure addressing particulate matter does not provide for enforceable mitigation of PM2.5 emissions and the Board made no finding that mitigation of PM2.5 was not feasible.**[[56]](#footnote-56)** Third, the finding that the project’s conversion of agricultural land would be mitigated to a less than significant level is not supported by substantial evidence and, therefore, the EIR should have considered other proposed mitigation measures. Fourth, the County inappropriately applied a single threshold for determining the significance of the project’s noise impacts. The use of a maximum noise level of 65 dB DNL as the sole threshold fails to consider whether the magnitude of changes in noise levels is significant. Fifth, when a revised EIR correcting the foregoing CEQA violations is circulated, it must include the Multi-Well Health Risk Assessment and subject that assessment to public review and comment.

B. Judicial Remedies Provided in Section 21168.9

Section 21168.9 governs the judicial remedies for CEQA violations. (*POET I*, *supra*, 218 Cal.App.4th at p. 756.) The statute requires the courts to issue a peremptory writ of mandate to remedy each failure to comply with CEQA. (*Ibid*.; see § 21168.9, subd. (b).)

Section 21168.9 provides that the writ of mandate may direct “the determination, finding, or decision be voided by the public agency, in whole or in part” (§ 21168.9, subd. (a)(1)) and, when certain conditions exist, may direct the public agency and real parties in interest to “suspend any or all specific project activity or activities.” (§ 21168.9, subd. (a)(2).) The phrases “in whole or in part” and “any or all” allows some parts of the approvals and the project to be severed from other parts with only the severed parts being invalidated or suspended. (*POET, LLC v. State Air Resources Bd.* (2017) 12 Cal.App.5th 52, 91 (*POET II*).) Courts must consider severance. “Any order pursuant to subdivision (a) *shall* include only those mandates which are necessary to achieve compliance with [CEQA] and only those *specific project activities* in noncompliance with [CEQA].” (§ 21168.9, subd. (b), italics added.) However, a suspension limited to noncompliant project activities is allowed “only if a court finds that (1) the portion or specific project activity or activities are severable, (2) severance will not prejudice complete and full compliance with [CEQA], and (3) the court has not found the remainder of the project to be in noncompliance with [CEQA].” (§ 21168.9, subd. (b).)

“In most cases, when a court finds that an agency has violated CEQA in approving a project, it issues a writ of mandate requiring the agency to set aside its CEQA determination, to set aside the project approvals, and to take specific corrective action before it considers reapproving the project. See, *e.g., Nelson v County of Kern* (2010) 190 [Cal.App.4th] 252, 285[.]” (2 *Kostka*, *supra*, § 23.124, p. 23-140.) This usual remedy of setting aside a project approval has been applied by our Supreme Court in cases where the project was a local ordinance. (See *Friends of Sierra Madre v. City of Sierra Madre* (2001) 25 Cal.4th 165, 196 [where local ordinance was approved by voters without CEQA compliance, the appropriate relief was invalidation of the ordinance]; *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 88 [city had not made required CEQA determinations before adopting ordinances creating oil drilling districts; Supreme Court stated “superior court shall set aside the ordinances”].)

C. Application of Section 21168.9

Based on section 21168.9 and our discussion in *POET I* of the provisions that may be included in a peremptory writ of mandate issued to remedy CEQA violations (*POET I*, *supra*, 218 Cal.App.4th pp. 756–766), we reach the following conclusions in fashioning a remedy for the CEQA violations in this case.

First, the County’s CEQA determination—namely, the certification of the EIR—shall be set aside. Second, the County shall set aside its approval of the Ordinance, effective 30 days from the date this opinion is filed. Third, the Ordinance itself shall be invalidated, effective 30 days from the date this opinion is filed and, therefore, the County’s review and approval of permit applications pursuant to the Ordinance will cease. Fourth, with respect to permits issued under the Ordinance before the date of its invalidity, those permits may remain in effect.**[[57]](#footnote-57)** Fifth, if the County decides to readopt the Ordinance (in its present or modified form), the County must take the corrective action necessary to bring the EIR and the mitigation measures into compliance with CEQA, which corrective action shall include recirculating revised EIR and Multi-Well Health Risk Assessment and allowing and responding to comments, before recertifying a revised EIR and approving the project.

D. Leaving the Ordinance in Effect

The County specifically requests this court to exercise its equitable powers, which include the inherent power to issue orders preserving the status quo, and allow the Ordinance to remain in effect while the County corrects the deficiencies in the EIR and mitigation measures. The County relies on this court’s decisions in *County Sanitation Dist. No. 2 v. County of Kern, supra,* 127 Cal.App.4th 1544 (*County Sanitation*) and *POET I*, *supra*, 218 Cal.App.4th 681.

In *County Sanitation*, the County did not prepare an EIR before it adopted an ordinance requiring sewage sludge be treated to heightened standards before being applied to agricultural land. We concluded the County’s reliance on a negative declaration and failure to prepare an EIR violated CEQA. On the question of appellate relief, the parties agreed the heightened treatment standards in the ordinance should stay in effect pending the completion of an EIR. (*County Sanitation*, *supra*, 127 Cal.App.4th at pp. 1604–1605.) Because CEQA is designed to protect public interests in the environment, we did not automatically accept the parties’ agreement about the appropriate relief. We conducted an analysis to determine whether allowing the ordinance to remain in effect was consistent with the purposes of CEQA. That analysis “is limited to situations where the parties agree to preserving the status quo, which is not the situation presented in the instant case.” (*POET I*, *supra*, 218 Cal.App.4th at p. 763.) Because the parties have not agreed on the appropriate relief, *County Sanitation* is distinguishable and does not support the County’s request to allow the Ordinance to remain in effect.

In *POET I*, we determined the ARB committed three violations of CEQA in connection with its approval of statewide regulations containing low carbon fuel standards. (*POET I*, *supra*, 218 Cal.App.4th at p. 759.) We concluded the regulations, which were the “project” for purposes of CEQA, could not be separated into a part that complied with CEQA and a part that did not comply with CEQA. (*POET I, supra,* at pp. 759–760.) As a result, we concluded it was not appropriate to direct the ARB to void its approval of the regulations in part. (*Id*. at p. 760.) Based on that determination as to severance and the circumstances of the case, we directed the ARB to set aside its approval of the regulations. (*Ibid*.) In addition, we stated:

“To summarize our statutory interpretation, we conclude that a court’s decision to void the approval of a regulation, ordinance or program does not necessarily require the court to invalidate or suspend the operation of the regulation, ordinance or program. Instead, in extraordinary cases, the court may exercise its inherent equitable authority to maintain the status quo and allow the regulations to remain operative. The more common alternative is for the court to exercise its discretionary authority under section 21168.9, subdivision (a)(2) by suspending the operation of the regulation, ordinance or program.” (*POET I*, *supra*, 218 Cal.App.4th at p. 761.)

Based on the foregoing, the County’s request that the Ordinance remain in effect raises the question whether this is an extraordinary case that justifies an exercise of this court’s inherent equitable authority to allow the Ordinance to remain operative. As explained below, this case is not extraordinary. Consequently, we will adopt the commonly applied remedy and direct the County to suspend the operation of the Ordinance pending CEQA compliance.

In *POET I*, the Legislature required the ARB to implement low carbon fuel standards by adopting regulations. Consequently, the ARB did not have the discretionary authority to abandon the project. In contrast, the County is not required by law to adopt the Ordinance. As a result, whether it decides to readopt the Ordinance, adopt a modified version, or abandon the project are questions committed to the Board’s discretion. Allowing the Ordinance to remain operative would be, in effect, a prediction of how the Board would exercise its discretion—a prediction this court is reluctant to make. (See § 21168.9, subd. (c).)

In addition, the Ordinance was approved despite its significant, adverse environmental impacts based on a statement of overriding considerations. The Ordinance’s basic purpose is the acceleration of oil and gas development and the economic benefits that might be achieved by that development. Unlike the regulation in *POET I*, its basic purpose is not the protection of the environment. While the Ordinance has provisions that protect the environment, the Board still found the increased oil and gas activities would result in significant environmental effects. In *POET I*, it was uncertain whether incentivizing increased biodiesel use would increase NOx emissions. (*POET I*, *supra*, 218 Cal.App.4th at p. 740 [on remand, agency required to make finding of fact on whether project would result in a potential increase in NOx emissions].) Here, there is no uncertainty. Therefore, based on the Ordinance’s significant environmental impacts and CEQA’s basic purpose of protecting the environment, we conclude the Ordinance should not be allowed to remain in effect.

E. Baseline for Revised EIR

A key component of an EIR’s identification and quantification of a project’s environmental effects is the baseline environment. (*POET II*, *supra*, 12 Cal.App.5th at p. 78.) The general rule for choosing the baseline environmental conditions is set forth in Guidelines former section 15125, subdivision (a), which provides in part:

“An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will *normally* constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.”

In this case, the normal choice of baseline conditions does not apply to the revised EIR’s analysis of water supply impacts and air quality impacts because significant new information has become available on each subject.**[[58]](#footnote-58)**

*1. Water Supply*

The EIR’s analysis of water supply impacts concluded the implementation of SGMA created uncertainty in predicting the available water supplies for the project area. Under SGMA, one or more local groundwater sustainability agencies must be formed to cover the Kern County subbasin. Those agencies have been formed and they may have released a groundwater sustainability plan, or a coordinated set of plans, by January 31, 2020. The formation of these agencies constitutes significant new information as will the plan or plans they adopt.

The availability of information about new wells in critically overdrafted groundwater basins was increased by legislation adopted in 2017 and operative through January 30, 2020. (Wat. Code, §§ 13807–13808.8; see fn. 9, *ante*.) The information was intended to support groundwater management by local agencies and to provide greater transparency regarding applications for new well permits. (Wat. Code, § 13807, subds. (d), (e).) When an applicant for a new well applied to a city or county for a well permit, the application was required to provide specific information about the proposed well. (Wat. Code, § 13807, subds. (a)(1)–(11).) The city or county receiving the application was required to make the information “easily accessible and available to both the public and to groundwater sustainability agencies located within the basin.” (Wat. Code, § 13808.2.)

Accordingly, the information about groundwater supply and use has increased since the preparation of the draft EIR and that information will have lessened the uncertainty described in the draft EIR. Consequently, for a revised EIR to provide a meaningful analysis of the project area’s water supply that is useful to the public and decisionmakers evaluating whether to reapprove the Ordinance, the analysis of water supply must be brought up to date.

*2. Noise and Agricultural Land*

 Whether the baselines used in analyzing noise impacts and conversion of agricultural land should be updated presents questions that cannot be resolved on the record before this court. Accordingly, the County should resolve these questions in the first instance and explain its decision in the revised EIR released for public comment.

*3. Air Quality and PM2.5 Emissions****[[59]](#footnote-59)\****

Section 4.3 of the EIR states the San Joaquin Valley is designated nonattainment for federal PM2.5 standards and describes a 2008 PM2.5 plan and a 2012 PM2.5 plan adopted by the Air District to reduce PM2.5. The EIR states the 2008 PM2.5 plan “estimates that the [San Joaquin Valley Air Basin] will reach the [federal] PM2.5 standard by 2014.” The EIR also states the 2012 PM2.5 plan demonstrates that by 2019 the San Joaquin Valley Air Basin will achieve the 2006 24-hour PM2.5 National Ambient Air Quality Standards set by the EPA.

The public and decisionmakers should not have to rely on these predictions in evaluating the impact of the project’s PM2.5 emissions. Whether the 2008 PM2.5 plan’s estimate was accurate and whether the federal standards were attained in 2019 is significant new information. Accordingly, the revised EIR should update its analysis of air quality and PM2.5 levels. Whether this new information requires a further revision of the Multi-Well Health Risk Assessment is a question that the County, as lead agency, should address in the first instance and provide an explicit answer in the revised EIR released for public comment.

F. Second or Modified Writ

 The disposition directs the superior court to issue a second or a modified peremptory writ of mandate for corrective action that is not inconsistent with this opinion. The superior court’s choice between sequential writs and a single writ that encompasses all the CEQA violations should take into consideration the status of the first writ and any return filed by the County.

G. Leave to Amend**[[60]](#footnote-60)\***

 Our conclusion that declaratory relief is not available for the claim that the Ordinance involves discretionary approvals may cause Sierra Club to seek leave to amend its petition to allege that permits actually issued required the exercise of personal judgment by the County. Nothing in this opinion should be interpreted as expressing a view, one way or the other, on the question of whether Sierra Club should be granted leave to amend. That question, if raised, must be resolved by the superior court in the first instance.

**DISPOSITION**

The judgment entered in Case Nos. BCV-15-101666 and BCV-15-101679 on April 20, 2018, is reversed in part and affirmed in part. The first sentence of paragraph No. 1, all of paragraph Nos. 2 and 4 through 6, and (except as described below) all of paragraph No. 3 are affirmed. The second sentence of paragraph No. 1 and the clause in paragraph No. 3 set forth the finding “that the mandates described in Public Resources Code section 21168.9(a)(1) and (a)(2) are not appropriate remedies under the circumstances of this case” are reversed.

On remand, the superior court is directed to (1) vacate its March 12, 2018, order denying the petitions for writ of mandate as to the claims for the CEQA violations identified in this opinion; (2) enter a modified order granting those claims; (3) enter a modified judgment; and (4) issue a second or a modified peremptory writ of mandate for corrective action that is not inconsistent with this opinion.

The modified judgment and the peremptory writ of mandate shall direct the Board to (1) set aside the certification of the EIR, (2) set aside the Board’s adoption of its findings of fact and statement of overriding considerations, and (3) set aside the approval of the Ordinance, effective as of 30 days from the filing of our opinion in this appeal. The writ of mandate also shall direct the County, in the event it decides to present the Ordinance (in its present or a modified form) to the Board for reapproval, to correct the CEQA violations identified in this opinion by (4) preparing a revised EIR correcting the CEQA violations relating to (a) water supply impacts and mitigation measures, (b) PM2.5 emission impacts and mitigation measures, (c) agricultural land impacts and mitigation measures, and (d) the analysis of noise impacts; (5) circulating the revised EIR and the Multi-Well Health Risk Assessment for public review and comment; and (7) preparing and publishing responses to the comments received before certifying the revised EIR and reapproving the Ordinance.

Appellants shall recover their costs on appeal. (Cal. Rules of Court, rule 8.278.)

Sierra Club’s request for judicial notice, filed on December 11, 2018, is denied.

FRANSON, Acting P.J.

WE CONCUR:

PEÑA, J.

SNAUFFER, J.

1. 51 As a general matter, if CEQA projects consisting of an ordinance or regulation were allowed to remain operational while the promulgating agency corrected the defects in its environmental analysis, the incentives to comply with CEQA before adopting an ordinance or regulation would be undermined, decisionmakers would not be fully informed before enacting measures, and leaving the measure in place would limit the consideration of alternatives and mitigation measures. (See Guidelines, § 15003 [policies and purpose]; *Mountain Lion Foundation v. Fish & Game Com.*, *supra*, 16 Cal.4th at p. 112 [interpreting CEQA to provide fullest possible protection to environment within the reasonable scope of statutory language].) [↑](#footnote-ref-1)
2. \* Pursuant to California Rules of Court, rules 8.1105(b) and 8.1110, this opinion is certified for publication with the exception of parts V., VII., IX., X., XI., XII.E.3. and XII.G. [↑](#footnote-ref-2)
3. The term “County” is used to refer to the governmental entity and “Kern County” to refer to the geographical area. (See *County of Kern v. T.C.E.F., Inc.* (2016) 246 Cal.App.4th 301, 306, fn. 1; *County Sanitation Dist. No. 2 v. County of Kern* (2005) 127 Cal.App.4th 1544, 1557, fn. 1.) [↑](#footnote-ref-3)
4. All unlabeled statutory references are to the Public Resources Code. [↑](#footnote-ref-4)
5. Effective January 1, 2020, DOGGR was renamed the “Geologic Energy Management Division in the Department of Conservation.” (§ 3002; Stats. 2019, ch. 771, § 8.) For purposes of this opinion, we continue to refer to the division as DOGGR. [↑](#footnote-ref-5)
6. “Ministerial projects are exempt from the requirements of CEQA.” (Guidelines, § 15268, subd. (a).) “Guidelines” refers to the regulations that implement CEQA and are codified in California Code of Regulations, title 14, section 15000 et seq. [↑](#footnote-ref-6)
7. “PM10” refers to particulate matter less than 10 micron. Federal regulations define “PM2.5” as “particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers.” (40 C.F.R. § 50.7(a); cf. Cal. Code Regs., tit. 17, § 70100, subds. (i), (j) [definitions of suspended particulate matter (PM10) and fine suspended particulate matter (PM2.5)].)

 The “standards are specified concentrations and durations of air pollutants.” (Cal. Code Regs., tit. 17, § 70100, subd. (a).) The concentrations for some standards are stated in parts per million or in micrograms per cubic meter. (*Id*., subds. (c), (d).) [↑](#footnote-ref-7)
8. “A properly filed and posted notice of determination starts the 30-day statute of limitations for court challenges to the agency’s CEQA determination. (§ 21167, subd. (e); Guidelines, § 15075, subd. (g).)” (*Citizens for the Restoration of L Street v. City of Fresno* (2014) 229 Cal.App.4th 340, 351, fn. 11.) [↑](#footnote-ref-8)
9. Under California policy, “noncompliance with the information disclosure provisions of [CEQA that] precludes relevant information from being presented to the public agency … may constitute a prejudicial abuse of discretion … regardless of whether a different outcome would have resulted if the public agency had complied with those provisions.” (§ 21005, subd. (a).) [↑](#footnote-ref-9)
10. A bulletin released by the Department of Water Resources (DWR) in 1980 identified five of the seven southern San Joaquin Valley groundwater subbasins as being subject to conditions of critical overdraft. By “critical overdraft,” DWR means a condition in which continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts. [↑](#footnote-ref-10)
11. “In 2014, California adopted landmark legislation, the Sustainable Groundwater Management Act [SGMA] (Part 2.74 (commencing with Section 10720) of Division 6 [of the Water Code]), to sustainably manage groundwater resources. The act will not be fully implemented for several years, allowing groundwater overdraft to continue in some regions.” (Wat. Code, § 13807, subd. (b).) Under SGMA, specified groundwater basins, which include those in the project area, must be managed under a new groundwater sustainability plan, or a coordinated set of plans, by January 31, 2020.

In 2017, the Legislature added article 5 (Wat. Code, §§ 13807–13808.8) to chapter 10 of division 7 of the Water Code to address new wells in critically overdrafted groundwater basins, which includes the project area. (Stats. 2017, ch. 538, § 1, pp. 4053–4055.) Among other things, the legislation (1) required applicants for new wells in such basins to include information about the proposed well in their permit applications and (2) made that information available to the public and groundwater sustainability agencies. (Wat. Code, §§ 13808, 13808.2; see pt. XII.E.1., *post*.) [↑](#footnote-ref-11)
12. The WSA states fresh water is referred to as M&I water. It also states high quality water from the State Water Project and the Central Valley Project are sources of M&I water. [↑](#footnote-ref-12)
13. The revised WSA prepared in September 2015 updated the estimate of agricultural use of treated produced water to 38,658 acre-feet. [↑](#footnote-ref-13)
14. In 2009, the Legislature amended the Water Code to require the DWR to develop and implement this monitoring program. [↑](#footnote-ref-14)
15. According to the WSA, the figures for a single dry year were “based on a repeat of the worst-case historic[al] hydrologic conditions of 1977.” The estimates for supplies over a multiple dry year period were based on average conditions created by the four-year drought of 1931-1934. [↑](#footnote-ref-15)
16. In another case, this court stated that “whether the EIR’s disclosures regarding the project’s water supply complies with CEQA is a question of law.” (*Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 102.) That conclusion did not state an all-encompassing rule of law. Instead, the conclusion was based on the circumstances presented in that case. [↑](#footnote-ref-16)
17. However, as explained in part IV.H. of this opinion, the EIR’s discussion of mitigation measures for the project’s significant impacts to water supplies was inadequate and, as a result, the EIR’s discussion must be revised if the County chooses to readopt the Ordinance. In the “Appellate Relief” section of this opinion, we conclude the revised EIR’s analysis of water supply must be brought up to date. Whether the updated information will warrant an analysis of impact to water supplies at a level other than the subareas used in the original EIR is a question that must be decided in the first instance by the County in its role as lead agency. [↑](#footnote-ref-17)
18. Similarly, page 23 of the WSA states: “During the drought years of 2012-2014 it has transpired that portions of the Project Area have not received any imported water and thus are totally dependent upon groundwater. This has negatively impacted groundwater levels in the Project Area.” [↑](#footnote-ref-18)
19. Section 3.1.3 of the WSA stated the most recent published information available for the State Water Project supply delivery reliability was set forth in the DWR’s State Water Project Final 2013 Delivery Reliability Report, which was released in December 2014. [↑](#footnote-ref-19)
20. Here, page 50 of Attorney Rachel B. Hooper’s September 11, 2015, comment letter asserted the “County must revise and recirculate the [draft EIR] to provide adequate information about the environmental setting, including a complete description of the affected aquifers and a realistic assessment of the drought’s effect on water supplies in the Project Area. Without this information, it is impossible for the document to provide an accurate analysis of the Project’s water supply impacts.” Based on this comment letter, we conclude the issue of recirculation with updated data about the drought was exhausted for purposes of section 21177, subdivision (a) and, consequently, the issue may be raised in this litigation. [↑](#footnote-ref-20)
21. Nonetheless, as discussed in part XII. of this opinion, the EIR must be revised if the County chooses to readopt the Ordinance. The revised discussion of water supply impacts must be updated; providing that updated information and describing the new baseline conditions necessarily will take account of the conditions created by the drought. [↑](#footnote-ref-21)
22. The program adopted by the Board is set forth in a 53-page exhibit attached to the Board’s resolution adopting the Ordinance. [↑](#footnote-ref-22)
23. For example, when a proposed project involves a large development, mitigation measures not finalized at the environmental review stage might be in place before ground is broken and construction begins. In such a case, only the formulation of the mitigation measure was delayed as the final measure would be applied to the construction. In contrast, if the construction activity began before the measure was finalized, there would be no measure restricting the activity and its impacts. This would be a case of delayed implementation. [↑](#footnote-ref-23)
24. Whether the record supports this finding is a separate question addressed below. [↑](#footnote-ref-24)
25. The lack of information about what might occur at a well site to reduce impacts also demonstrates the Board’s implied finding that all feasible mitigation measures relating to the project’s significant water supply impacts had been adopted is not supported by substantial evidence. It is unclear if *any* mitigation will be imposed during the permitting process. [↑](#footnote-ref-25)
26. \* See footnote, *ante*, page 1. [↑](#footnote-ref-26)
27. The Board approved the Ordinance and certified the final EIR in November 2015, stating the Ordinance would take effect on December 9, 2015. [↑](#footnote-ref-27)
28. Sierra Club’s petition-complaint challenged the County’s compliance with CEQA during the environmental review process. It did not allege the County and Air District were *implementing* the air pollutants mitigation measures in a manner that contradicted the discussion in the EIR and failed to provide the mitigation promised. Sierra Club attempted to expand the scope of its claims below, but it does not appear Sierra Club amended its petition-complaint *to enforce* the air quality mitigation measures in a manner that comports with the discussion in the EIR. (See § 21081.6, subd. (b) [measures must be fully enforceable].) Thus, claims seeking the enforcement of the mitigation measures are beyond the scope of this litigation.

 This opinion should not be construed as (1) holding the County is properly monitoring and enforcing MM 4.3-8 or (2) preventing or approving Sierra Club seeking leave to amend to pursue such a claim on remand. If Sierra Club moves for leave to amend, the trial court should rule on the motion in the first instance. [↑](#footnote-ref-28)
29. For these pollutants, the San Joaquin Valley Air Basin is designated “nonattainment”—the status assigned to “any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant.”  (42 U.S.C. § 7407(d)(1)(A)(i).)  An area’s federal designation is reported in the EPA’s regulations.  (See 40 C.F.R. §§ 81.305 [attainment status designations for areas in California], 93.152 [definition of nonattainment area].) [↑](#footnote-ref-29)
30. A “threshold of significance” is defined in the Guidelines as “identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant.” (Guidelines, § 15064.7, subd. (a).) [↑](#footnote-ref-30)
31. The reference to “Table 3.4-32” is a typographical error. Table 4.3-32 in the EIR is titled: “Total Estimated per Well Emissions for Preliminary Considerations in OG-ERA.” That table refers only to PM10. It is the only table in the response to comments “Air-2” that does not list PM10 and PM2.5 separately. [↑](#footnote-ref-31)
32. The only CEQA provision mentioning PM2.5 is section 21168.6.8, which was adopted in 2018 to provide for expedited procedures for the construction of a sports complex in Inglewood. [↑](#footnote-ref-32)
33. These three classifications are taken from CEQA, which defines “agricultural land” as “prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture land inventory and monitoring criteria, as modified for California.” (§ 21060.1, subd. (a).) Under the definitions adopted in the EIR, lands in the first two categories “must have been irrigated for production of irrigated crops at some time during the four years prior to the mapping date.” Unique farmland must have been cropped within the prior four years and usually is irrigated. This opinion uses the term “agricultural land” as defined in CEQA and the EIR. Approximately 980,000 acres of grazing land in the project area is excluded from this definition of agricultural land. [↑](#footnote-ref-33)
34. For parcels less than 20 acres in size, the board of supervisors was granted the authority to allow the payment of an in-lieu mitigation fee. (*Building Assn.-Stanislaus*, *supra*, 190 Cal.App.4th at p. 588.) [↑](#footnote-ref-34)
35. The determinations reached in *Masonite Corp. v. County of Mendocino* (2013) 218 Cal.App.4th 230 do not contradict this conclusion. In *Masonite*, the court did not consider the net effect of implementing an agricultural conservation easement and whether a significant impact could be reduced to a less than significant level by such an easement. In *Masonite*, the court concluded “the EIR’s determination that [agricultural conservation easements] are legally infeasible cannot be sustained” and remanded for further environmental review. (*Id*. at p. 241.) [↑](#footnote-ref-35)
36. The current version of Guidelines section 15088 explicitly addresses the detail required: “The level of detail contained in the response, however, may correspond to the level of detail provided in the comment (i.e., responses to general comments may be general). A general response may be appropriate when a comment does not contain or specifically refer to readily available information, or does not explain the relevance of evidence submitted with the comment.” (Guidelines, § 15088, subd. (c).) [↑](#footnote-ref-36)
37. The County’s failure to analyze clustering as a measure to mitigate the project’s conversion of agricultural land, which was found to be a significant environmental impact, probably was based on its incorrect belief that MM 4.2-1 would mitigate the impact to a less than significant level. [↑](#footnote-ref-37)
38. \* See footnote, *ante*, page 1. [↑](#footnote-ref-38)
39. The current version of Appendix G has combined these three questions and asks: “Would the project would result in: [¶] a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?” [↑](#footnote-ref-39)
40. A decibel (dB) is a unit that describes the amplitude of sound and is expressed on a logarithmic scale. A common metric is the overall A-weighted sound level measurement (dBA), which measures sound in a fashion similar to the way a person perceives or hears sound. [↑](#footnote-ref-40)
41. “CNEL” is the “Community Noise Equivalent Level,” which is a state standard used to describe aircraft noise exposure. “DNL” is the “Day-Night Average Level,” which is the average equivalent sound level during a 24-hour day, obtained after adding 10 decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m. The DNL represents the existing ambient conditions, as measured over a 24-hour period. In the present appeal, DNL and CNEL were considered equivalent descriptors for purpose of the EIR’s noise study. [↑](#footnote-ref-41)
42. Here, County took the same approach, adopting, in practical effect, a single threshold of significance for noise exposure. The decision in *Keep Our Mountains Quiet*, which was filed in May 2015, was available prior to the release of the draft EIR in July 2015. [↑](#footnote-ref-42)
43. The permanent standard was applied to operational activities and the temporary standard was applied to construction activity. [↑](#footnote-ref-43)
44. The revised noise study provided additional information about appropriate setbacks and increased slightly the setback distance for each construction activity. The new setback distances were incorporated into MM 4.12-1. [↑](#footnote-ref-44)
45. \* See footnote, *ante*, page 1. [↑](#footnote-ref-45)
46. The term “split-estate” is used to describe lands where the surface rights and mineral rights are held by different persons or entities. “[T]he owner of the oil and mineral estate has a right to enter upon the surface of the property and make such use thereof as is reasonably required for the enjoyment of his estate.” (*Wall v. Shell Oil Co.* (1962) 209 Cal.App.2d 504, 511; see Civ. Code, § 848, subd. (a)(2) [mineral rights owner must provide 30 days’ notice to owner of surface rights of its intent to enter the real property and conduct surface-disturbing activities].) [↑](#footnote-ref-46)
47. A staff report suggests that requiring a CUP based on how the agricultural land is owned is arbitrary because the environmental consequences of oil and gas activities are not related to legal formalities and whether the land is a split-estate. This implies that staff did not believe the distinction could survive judicial scrutiny or, at least, it would be difficult (i.e., costly) for County to defend an ordinance imposing more onerous environmental review on split-estate agricultural lands than on single-owner agricultural lands. [↑](#footnote-ref-47)
48. \* See footnote, *ante*, page 1. [↑](#footnote-ref-48)
49. The title of the assessment uses the term “cumulative” to refer to the effects of multiple wells drilled specified distances from a central receptor. The assessment does not address the “cumulative impact from several projects” on human health risk in the project area. (Guidelines, § 15355, subd. (b) [definition of “[c]umulative impacts”].) We agree with County’s statement that the assessment “was not a ‘cumulative impact analysis’ within the meaning of CEQA. For the remainder of this opinion, we refer to the document as the “Multi-Well Health Risk Assessment.” [↑](#footnote-ref-49)
50. The Board’s findings did not address this prong of the definition of significant new information. [↑](#footnote-ref-50)
51. \* See footnote, *ante*, page 1. [↑](#footnote-ref-51)
52. Minor activity review applies to replacing tanks on an existing tank farm, replacing or adding new pipelines, and adding a support facility building. [↑](#footnote-ref-52)
53. Ordinance section 19.98.090(G) states an application also must have received a permit to conduct well operations from DOGGR prior to conducting any drilling activity, unless the activity involves facility placement not subject to DOGGR permit approval. [↑](#footnote-ref-53)
54. Section 1.2 of the EIR identifies many other agencies whose discretionary approvals may be needed for the oil and gas activity described in the permit application. Those agencies include DOGGR, the Air District, the Central Valley Regional Water Quality Control Board, the Department of Fish and Wildlife, the California Department of Toxic Substances, the California Department of Transportation, the Central Valley Flood Protection Control Board, the Kern County Water Agency, and other water districts. [↑](#footnote-ref-54)
55. Nothing in this opinion should be interpreted as a determination that the application of the Ordinance is always or is never ministerial. Thus, no law of the case is established on that question. [↑](#footnote-ref-55)
56. Whether the updated information about the levels of PM2.5 in Kern County affect any assumptions made in the Multi-Well Health Risk Assessment is an issue that must be addressed in the first instance by the County in the revised EIR. [↑](#footnote-ref-56)
57. We recognize that, absent a stipulation by the parties, remittitur will not be issued until after the 30 days has expired. If permits are issued after that date, the order invalidating the Ordinance also would render those permits invalid. [↑](#footnote-ref-57)
58. In part III.C.3. of this opinion, we concluded the Board’s finding that there was no significant new information requiring the recirculation of the EIR in November 2015 was supported by substantial evidence. The Board’s finding does not extend to the circumstances that existed in January 2020. [↑](#footnote-ref-58)
59. \* See footnote, *ante*, page 1. [↑](#footnote-ref-59)
60. \* See footnote, *ante*, page 1. [↑](#footnote-ref-60)