The evaluation of cumulative impacts has evolved and continues to evolve within the CEQA context. Much of what is considered proper approach to cumulative impact analysis has been shaped by the courts. The earliest legal decision involving cumulative impacts occurred in 1979 (Whitman v. Board of Supervisors, (1979) 88 Cal. App. 3d 397), while current CEQA practice seems to involve at least one legal decision involving cumulative impacts per year. The following discussion outlines currently accepted practice and approach, as well as where to find additional information.

**What is a Cumulative Impact?**

**Definition Under CEQA**

Section 15355 of the State CEQA Guidelines defines a cumulative impact as the condition under which “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts... The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time” (California Code of Regulations [C.C.R.] Section 15355). In other words, a project that you’re evaluating within a certain area may contribute to a larger impact/effect if you look at other projects in that area.

For example, consider the construction of an office building along the coast with residential development and a community park that have great views of the ocean. The proposed development is taller by a couple stories than existing development in the area, but in and of itself, it’s not going to substantially impair long distance views from the residences or park. However, there are three other buildings proposed along that same stretch of coastline that would all be as tall, if not taller than the one you’re evaluating. When considered together, they would effectively form a wall that would prevent the residences and park visitors from watching sunsets.

**Why are Cumulative Impacts Important**

Cumulative impact analysis gets at the overall intent of CEQA as a piece of conservation legislation. It looks at the big picture of “preventing environmental damage, while providing a decent home and satisfying living environment for every Californian” (Public Resources Code [PRC] Section 21002[g]). By looking outside of a particular project site or action, a cumulative impact analysis allows decisionmakers to look at the impacts of a project within the greater context.

**Cumulative Context**

The term cumulative context, which can be loosely defined as the area within which an environmental document considers potential cumulative effect, is also extremely important in defining a cumulative impact. Using the previous example, an appropriate cumulative context for visual impacts might be all nearby areas that would be able to view the proposed office building upon completion of construction.
However, the cumulative context will also vary according to each issue area. An appropriate cumulative context for biological resources within the aforementioned example might be the county within which the project is located, which would encompass a much broader area than an appropriate cumulative context for aesthetics.

**When Should Cumulative Impacts Be Evaluated?**

The CEQA Guidelines within Section 15130 provides that “An EIR shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable, as defined in Guidelines Section 15065(a)(3).” That section defines “cumulatively considerable” to mean “that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” (14 C.C.R. 15065.)

Section 15130 states that where a project’s incremental effect is not “cumulatively considerable,” a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. However, “[a]n EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.” If the project contributes to a cumulative impact but the cumulative impact is not significant, the EIR must “briefly indicate” why the cumulative impact is not significant, and must identify facts and analysis supporting that conclusion.

An EIR may determine that the project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable, including when the project is required to implement or fund its “fair share” of a mitigation measure or measures designed to alleviate the cumulative impact. The lead agency must identify facts and analysis supporting its conclusion that the project’s contribution will be rendered less than cumulatively considerable.

Where a project’s contribution to a significant cumulative impact is cumulatively considerable, Section 15130(b) explains the requirements for an adequate discussion of cumulative impacts in an EIR:

(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary to an adequate discussion of significant cumulative impacts:

(1) Either:

(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or

(B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in
an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.

These two methods ("list" and "plan") are further explained below. Subsection (b) continues:

(2) When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project, and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.

(3) Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.

(4) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

(5) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project’s contribution to any significant cumulative effects.

Note that the analysis need not examine options for mitigating or avoiding impacts not attributable to the project’s contribution to the significant cumulative effects identified in the EIR, but only the project’s contribution to those effects. Guidelines Section 15130(c) further notes that, for some projects, it may not be feasible to mitigate for cumulative impacts by imposing conditions on a project-by-project basis and the only feasible mitigation for cumulative impacts “may involve the adoption of ordinances or regulations” instead. (14 C.C.R. 15130.) A careful analysis of the feasibility of mitigation of the project’s contribution to significant cumulative impacts on a project-specific basis should be included in the EIR.

Consistent with the “plan” method described in Section 15130(b) above, Section 15130(d) allows an EIR to use previously approved land use documents, “including, but not limited to, general plans, specific plans, regional transportation plans, plans for the reduction of greenhouse gas emissions, and local coastal plans” in the analysis of cumulative impacts. A pertinent discussion of cumulative impacts contained in one or more such previously certified EIRs may be incorporated by reference, pursuant to provisions in the Guidelines for tiering and program EIRs. (See 14 C.C.R. Sections 15152, 15168.) The cumulative impacts of a project that is consistent with a general, specific, master or comparable programmatic plan, where the lead agency determines the regional or areawide cumulative impacts of the project have already been adequately addressed in the certified EIR for that plan, need not be further analyzed in the project EIR. (14 C.C.R. 15130.) Similarly, if a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action or general plan and the project is consistent with that plan or action, the EIR for the project should not further analyze the cumulative impact, consistent with other provisions of the Guidelines relating to tiering. (See 14 C.C.R. Sections 15152, 15183.)
The following pages present a step-by-step approach for navigating the analysis described in Section 15130. However, one of the most important things that carries through is that cumulative impacts must be evaluated/considered when your project would have a “less-than-significant” or greater impact; if the project’s contribution to the impact is not “cumulatively considerable, the EIR must explain the basis for that conclusion. If there is no impact associated with your project, be it overall or with respect to a particular CEQA threshold, discussion of cumulative impacts is not required.

Types of Documents
The evaluation of cumulative impacts should be considered when preparing any of the following:

- Environmental Impact Report (EIR)
- Mitigated Negative Declaration (MND)
- Negative Declaration (ND)
- Notice of Exemption (NOE)

While the evaluation of cumulative impacts as part of an EIR is widely understood and acknowledged, the second, third, and fourth bullets sometimes get overlooked with respect to the need to evaluate cumulative impacts. Beginning with MNDs and NDs, the second Initial Study (IS) question (“Does the project have impacts that are individually limited, but cumulatively considerable...?” [Appendix G of the State CEQA Guidelines]) associated with Mandatory Findings of Significance clearly requires the evaluation of the project within the cumulative context. However, CEQA Guidelines Section 15064(h)(2) provides that a lead agency may determine in an initial study that a project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus not significant. When a project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable through mitigation measures in a mitigated negative declaration, the initial study must briefly indicate and explain how the contribution has been rendered less than cumulatively considerable. (14 C.C.R. 15064(h)(2).) Finally, Guideline 15064(h)(4) provides that the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project’s incremental effects are cumulatively considerable. (14 C.C.R. 15064(h)(4).)

In general, the evaluation of cumulative impacts is not required for most exemptions. More specifically, the need to evaluate cumulative impacts as part of NOEs is limited to categorical exemptions, as stated within Section 15300.2. NOEs relying on categorical (not statutory) exemptions are required to evaluate whether the cumulative impacts of successive projects of the same type and place over time are significant; if there is such an impact and there is substantial evidence the project would actually contribute to that impact, the exemption is inapplicable. These statements were also the subject of the Santa Monica Chamber of Commerce v. City of Santa Monica decision identified in the following pages. However, for GHG impacts in particular, the legislature has provided that a project’s greenhouse gas emissions shall not, in and of themselves, be deemed to cause an exemption to be inapplicable, if the project complies with all applicable regulations or requirements adopted to implement statewide, regional or local plans consistent with Guidelines Section 15183.5. (PRC 21084(b).)
How Should Cumulative Impacts Be Evaluated

As a first step, practitioners should identify what issue areas need to be evaluated for cumulative impacts. A cumulative impact analysis should be provided for any impact that is concluded to less than significant or greater (i.e., less than significant with mitigation or significant and unavoidable.) Cumulative analysis is not required for any no-impact determinations. For example, a project located more than 5 miles from an airport/airstrip would not be required to evaluate potential cumulative hazards impacts related to airport safety or excessive noise associated with airport/airstrip operations.

Following that determination, practitioners should define the cumulative context (see above) for each issue area. As noted previously, this can differ depending on the resource area. For example, construction noise impacts associated with a particular development are generally localized and may not be cumulatively considerable beyond 500 feet from the construction site or along roadways by which construction traffic would access the site. On the other side, construction impacts (specifically, criteria pollutant emissions) are more regional and may affect the local air basin’s ability to achieve attainment.

Next, the cumulative analysis will need to determine whether or not a significant cumulative impact exists within the context that has been defined. As part of that determination, practitioners will need to select an appropriate analytic method.

Analytic Methods for Assessing the Cumulative Impact

There are generally two accepted methods of evaluating cumulative impacts: the plan method and the list method. These two approaches are included as part of Section 15130 (above) and state that a cumulative impact analysis must include either 1) a list of past, present, and probable future projects that may contribute to the effects of the project, or 2) a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document that describe or evaluate contributions to a cumulative effect.

Certain environmental analyses may also consider a hybrid approach that uses both the plan and list method, and the potential benefits of that approach are also explained below.

Plan Method

With the plan method, practitioners will want to use the most recent projections in an adopted local, regional, or statewide plan that is germane to the project area. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program.

Most commonly, a lead agency’s general plan and general plan EIR (if adopted within a reasonable period [i.e., no more than ten years] of the current analysis effort) are used. Things to consider that may not lend themselves to use of the plan method include:
If the project is located on the edge of a jurisdiction. Using a City’s general plan projections as the only way of assessing cumulative conditions would potentially belie the cumulative context as the adjacent county/city could be interpreted to contribute to the cumulative context.

If there have been major amendments or updates, or probable future projects likely to contribute to cumulative effects that are not considered by the plan. General plans are major efforts for jurisdictions and may not always reflect the most current information, especially if a major specific plan within the jurisdiction has been adopted recently.

How to use the information. A growth factor over time to buildout of the general plan may be appropriate for assessing certain issue areas like population and housing, while overall buildout conditions may be appropriate for assessing potential cumulative water supply impacts.

List Method
When using the list method, practitioners should adhere to C.C.R. Section 15130(b)(1)(A) above, which stipulates that the list should include past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency. At a minimum, these should include:

- projects with an active application or undergoing environmental review (including those with a negative declaration or exemption) at the time of NOP or other reasonable time cut-off;
- future projects of which the lead agency has knowledge, but for which no current plans have been submitted for review, so long as they are not unduly speculative;
- projects included in an adopted CIP, general plan, RTP, etc.;
- projects included in summary of projections for a GP or similar plan;
- later phases of a previously approved project; or
- public agency projects for which money has been budgeted.

Depending on the type of project, past projects may also need to be considered and may include historic development that has combined to create a current environmental condition. However, the degree to which past projects are included within the list of projects is generally limited, due to the fact that current environmental conditions are already considered as part of the baseline. One example where past projects were considered germane was the subject of a 2008 Supreme Court decision involving logging operations in Humboldt County (see Important Cases section, below). The court determined that the logging company’s historic activities in the area constituted a “past” project within the cumulative context and were germane to the evaluation of potential cumulative impacts of the project under consideration.

Hybrid Approach
A hybrid approach has also been used in numerous CEQA documents to date in order to depict the cumulative conditions more accurately, and it reflects elements of both the list and plan methods for certain issue areas and impact discussions. In general, the list method is better at assessing localized and near-term impacts, whereas the plan method provides a more accurate evaluation of cumulative conditions within the regional context. For example, the list method will typically (and more accurately) capture localized impacts like noise, aesthetics (views and nearby visual character), utilities (e.g. capacity
of distribution facilities), geology, hydrology, hazards, and some air quality (e.g., hazardous air pollutants), whereas the plan method can more accurately capture broader cumulative impacts like population and housing, public services, air quality, habitat, and utilities (e.g. capacity of treatment facilities).

Assuming that a cumulative impact is determined to be significant, practitioners next need to evaluate whether the project’s contribution is cumulatively considerable. As noted above, Guidelines Section 15064(h)(1) defines “cumulatively considerable” as a condition when the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. There are instances under which a significant cumulative impact would occur but the project’s contribution (either on its own or with implementation of mitigation) can be determined to be less than cumulatively considerable. There are also instances where a project-level impact is less than significant but may be considered cumulatively considerable with respect to a significant cumulative impact. There is no specific amount or ratio to which a project’s contribution should be considered “cumulatively considerable”; in the case of Communities for a Better Environment v. California Resources Agency described below, a de minimis exception has been found invalid and inconsistent with CEQA and case law. In making a determination of whether a project’s contribution to a significant cumulative impact is cumulatively considerable, consideration of the following questions is advisable:

- Is the resource already significantly affected?
- Is the resource sensitive?
- Is the contribution of the project quantifiable? Noticeable? Measurable?

If the project’s contribution is initially determined to be cumulatively considerable, practitioners should consider appropriate and feasible mitigation measures. These measures may already be proposed as part of the project-level evaluation and can be referred to in the cumulative discussion. For example, impacts to sensitive species that are covered by a regional habitat conservation plan (HCP) identified in the project-level and cumulative impacts evaluation can be mitigated through compliance with the HCP.

It is also possible to take advantage of certain streamlining opportunities for cumulative analyses within CEQA. Pursuant to C.C.R. Section 15130(d), cumulative impact analyses can also be streamlined by incorporating by reference the cumulative impact analysis from a prior EIR that addresses the project and explaining how it applies and adequately addresses cumulative conditions of the project. One example of this is a project that is consistent with a general plan or area plan, including zoning and land use designations, such that the project would not result in any changes within the cumulative context that may result in new or potentially more significant cumulative impacts.

**Practice Pointers**

In general, one of the biggest pitfalls with cumulative impact analysis is that it doesn’t cover all the potential impacts of the project. Again and as noted above, cumulative impact analysis of a particular threshold is not required if the project would result in no impact. However, even a small (in quantity or ratio) contribution to a significant cumulative impact can be cumulatively considerable. In order to
ensure that this is handled appropriately, it’s important to maintain a checklist of all project-level impacts when preparing/reviewing a cumulative analysis. This can either be done as part of the EIR or separately. As part of the EIR, this is often performed by providing separate cumulative impact statements and/or thresholds that correspond to all of the project-level impacts identified. Other cumulative impact analyses provide a more general discussion that addresses all of the potential cumulative impacts for a particular issue area. Either way is acceptable, but maintaining the ability to point to where each project-level impact is assessed for whether or not it is cumulatively considerable is key.

As shown by the number of legal challenges involving cumulative impacts, it is also essential that the evaluation of cumulative impacts is not a last step in document preparation. Although the discussion of cumulative impacts need not be as detailed as the discussion of effects attributable to the project alone, the discussion must reflect the severity of the cumulative impacts and the likelihood of their occurrence. Often times a cumulative impact analysis can be more complicated that the project-level impacts. It is advisable to prepare a cumulative impact analysis at the same time as the project-level analysis, which then requires selection of either analytic method prior to that. If selecting the list method, it is also key to maintain an accurate information of when and how the cumulative project list information was obtained, and the basis for any geographic or time limits on projects included.

It is also considered advisable to develop a consistent structure to the evaluation of cumulative impacts within a particular document. A simple structure for discussion of each issue area could include:

- Context description
- Is there a significant cumulative impact?
- Cumulatively considerable?
- Mitigation
- Post-mitigation significance determination

### Important Cases

There are numerous important legal decisions that involve cumulative impacts. It is one of the most commonly challenged pieces of environmental documentation. As noted previously, on average, one important case decision per year involves cumulative impacts. The following is a list of some of the major case decisions involving cumulative impacts that have led to refinements in approach or amendments to the CEQA Guidelines. For a more comprehensive list, please refer to the CEQA Portal Case Law Database and select “Cumulative Impacts” from the first pulldown menu.

**Whitman v. Board of Supervisors (1979) 88 Cal. App. 3d 397:** Phoenix West Oil and Gas Corporation filed an application for an exploratory oil and gas well in Ventura County, adjacent to the Ojai Oil Field. This case decision more clearly defined the CEQA requirement for cumulative impact analysis within environmental documentation.

**San Franciscans for Reasonable Growth v. City and County of San Francisco (1984) 151 Cal. App. 3d 61:** This case was tied to four proposals for high-rise office buildings in the downtown area of San Francisco. The EIRs for the proposals had considered only approved projects, not yet constructed, and projects
under construction. The case decision identified the need to include “projects under review” as part of the cumulative condition.

**Kings County Farm Bureau v. City of Hanford (1990) Call. App. 3d 692:** An EIR was prepared for a proposed coal-fired cogeneration power plant in the City of Hanford. The court decision held that it was reasonable and practical to include projects of similar type within the same air basin, which the EIR had not provided (in the court’s opinion).

**Laurel Heights Homeowners Association v. Regents of the University of California (1988) 47 Cal. 3d 376:** This case involved the construction of biomedical research facilities at the University of California, San Francisco. In this case, the court found that the EIR had not adequately described the project because it did not discuss the future cumulative effects of the relocation of additional UCSF operations to the Laurel Heights site.

**Sierra Club v. Gilroy (1990) 220 Cal. App. 3d 30:** In this case, an application for development was considered that involved 239 acres of residential development within a 1,716-acre parcel. The EIR identified impacts to California tiger salamander (CTS) and provide project mitigation to reduce the impact to less than significant. Within the cumulative analysis, a brief (i.e. two sentence) discussion of the status of CTS statewide was provided and noted that because the project mitigation would be implemented, no significant cumulative impacts to the species would occur. The court concluded that the City had complied with CEQA’s mandate by determining that no statewide cumulative effects would occur because 11 fully protected California Tiger Salamander sites existed and that no regional cumulative effects would occur because California Tiger Salamander had been reported at two other undeveloped sites in the Gilroy area.

**Citizens to Preserve the Ojai v. County of Ventura (1985) 176 Cal. App. 3d 421:** An EIR prepared for the expansion and modification of an oil refinery had excluded outer continental shelf emissions from its cumulative analysis based on a previous air quality management plan’s analysis that had also excluded those emissions. However, the court found that where cumulative impacts are not deemed significant, the EIR should nevertheless “briefly indicate the reasons for determining that the effect is not significant and therefore not discussing it in detail.”

**Concerned Citizens of South Central Los Angeles v. Los Angeles Unified School District (1994) 24 Cal. App. 4th 826:** This case involved a Subsequent EIR for an elementary school that would remove 67 units of affordable housing and displace 280 people. The court decided that the Subsequent EIR statements regarding the inability to further evaluate where displaced residents might move were guided by the standards of practicality and reasonableness, consistent with CEQA guidance.

**Santa Monica Chamber of Commerce v. City of Santa Monica (2002) 101 Cal. App. 4th 786:** The Santa Monica Chamber of Commerce challenged the City’s adoption of a preferential parking zone within the city using the argument that cumulative impacts to traffic, parking, air quality, and fiscal effects could occur. The court found that the Chamber of Commerce had failed to present evidence that a cumulative physical impact on the environment could occur (i.e., fair argument standard).
Communities for a Better Environment v. California Resources Agency (2002) 103 Cal. App. 4th 98: This was an appeal of a trial court case that then overturned certain amendments to the CEQA Guidelines related to de minimis contributions to cumulative impacts in 1998. This decision held that de minimis thresholds defeated the purpose of cumulative impact analysis by comparing the project’s contribution to the overall impact rather than the cumulative contributions of all projects. Per the court, smaller and smaller individual contributions become cumulatively considerable as the cumulative impact becomes more acute. The court specifically stated that this decision does not put into place the “one molecule rule”, however.

Environmental Protection Information Center v. California Department of Forestry and Fire Protection (2008) 44 Cal. 4th 459: The case centered around logging operations by Pacific Lumber Company and its proposed Sustained Yield Plan for continued logging of an area in Humboldt County. The court concluded that the EIR must reasonably include information about past projects (e.g., historic logging impacts) to the extent such information is relevant to the understanding of the environmental impacts of the present project considered cumulatively with other pending and possible future projects.

Gray v. Madera (2008) 167 Cal. App. 4th 1099: Discussion of cumulative impact of noise from proposed quarry was inadequate; EIR should have considered whether noise, when added to existing levels, would be significant, rather than assessing additional amount alone.

Preserve Wild Santee v. Santee (2012) 210 Cal. App. 4th 310: EIR for residential development project properly concluded cumulative impacts on biological resources would not be considerable; EIR assumed subsequent development in surrounding areas would comply with existing, approved land use plans.

San Francisco Baykeeper v. State Lands Com. (2015) 242 Cal. App. 4th 202: EIR adequately analyzed cumulative impact of continued dredge mining on erosion of beaches and offshore bar; after more than cursory review of pertinent studies, EIR concluded there was insufficient proof of significant impact.

Cumulative Impacts in the CEQA Guidelines
Cumulative impacts are addressed in the following sections of the CEQA Guidelines:

- **Section 15064(h)** – Defines the process by which a lead agency may determine that an EIR is required due to a significant cumulative effect and because the project is “cumulatively considerable.”
- **Section 15065(a)(3)** – Defines “cumulatively considerable” as used in Section 15130.
- **Section 15130** – As noted above, Section 15130 provides overarching guidance regarding how cumulative impact analyses should be prepared, the methods available to practitioners to properly assess cumulative impacts, and how to incorporate cumulative impact analyses from previously approved land use documents.
- **Section 15300.2** – An exception to use of a categorical exemption exists when a cumulative impact could occur.
- **Section 15355** – Defines the term “cumulative impacts” as used within CEQA.
Sources

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