Working Group Meeting # 4

Cumulative Impacts from Air Toxics for CEQA Projects

Tuesday, June 6, 2023

10:00 a.m. (PST)
South Coast Air Quality Management District

REMOTE MEETING INFORMATION

Join Zoom Webinar Link:
https://scaqmd.zoom.us/j/94556369595

Webinar ID: 945 5636 9595
Dial In: (669) 900 6833

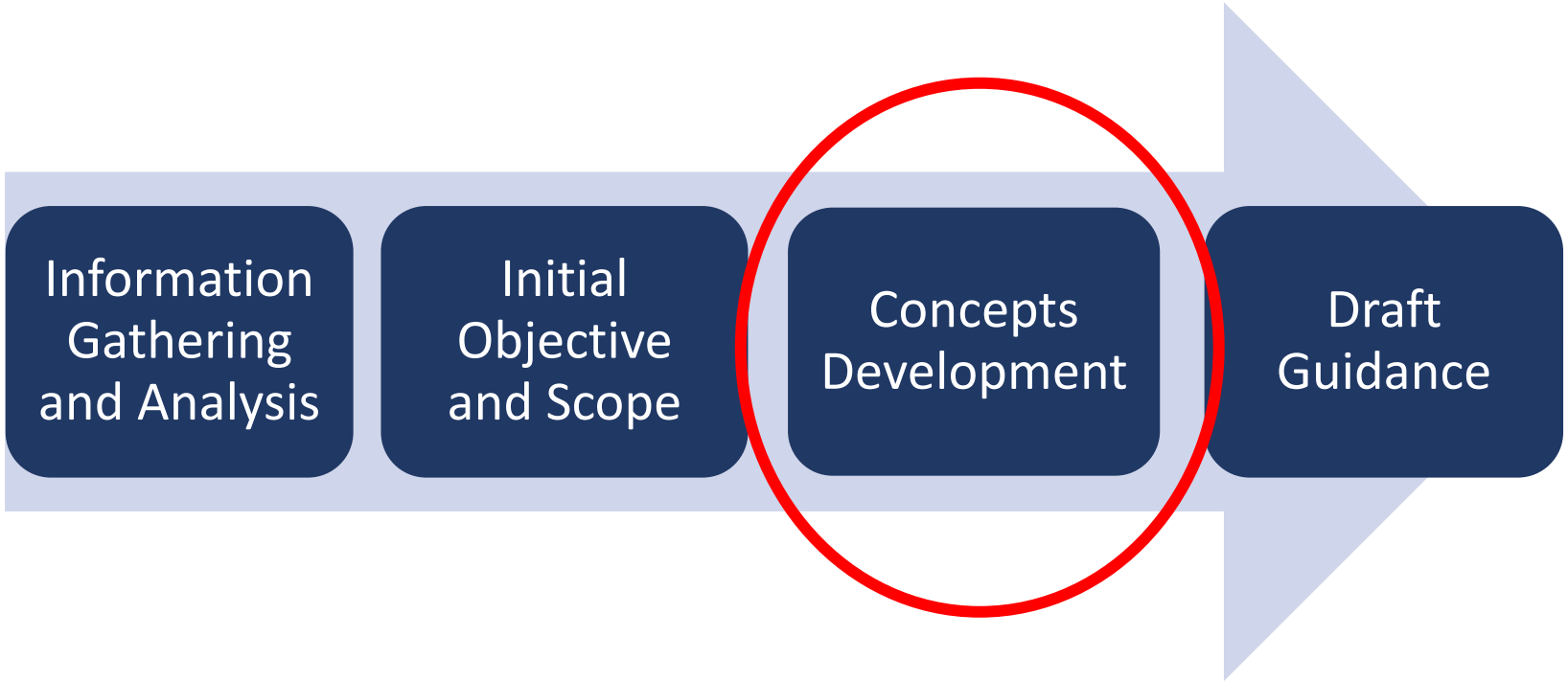
Agenda

I. Overview and Objective
II. Recap of Previous Working Group Meetings
III. Updates from Other Agencies and Stakeholders
IV. Process Steps for Analyzing Cumulative Impacts
V. Feedback and Questions
VI. Staff Contacts

Overview and Objective of Working Group Meeting (WGM) #4

Overview: Discuss proposed concepts and process steps for conducting a cumulative impact analysis for air toxics

Objective: Seek feedback on proposed analysis that will be shared today

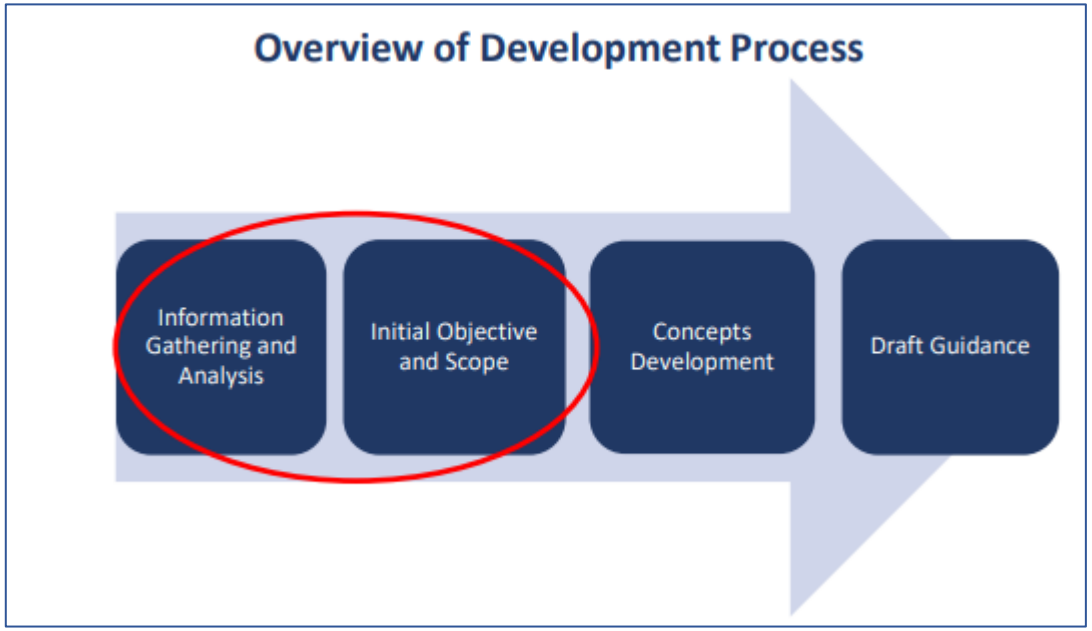


Recap of Previous Working Group Meetings

WGM #1:

Gathered information and shared the initial objective:

- ✓ Identified the importance of conducting cumulative impact analysis
- ✓ Recognized the necessity for further guidance on analyzing cumulative impacts of air toxics
- ✓ Initiated a public process to develop a phased qualitative and quantitative approach



WGM #2:

Shared valuable feedback from stakeholders

Based on the stakeholders' feedback, staff presented:

- ✓ Various mapping tools
- ✓ Concept of using a range of distances to define geographic scope
- ✓ Ideas for developing a cumulative significance threshold

Recap of Previous Working Group Meetings

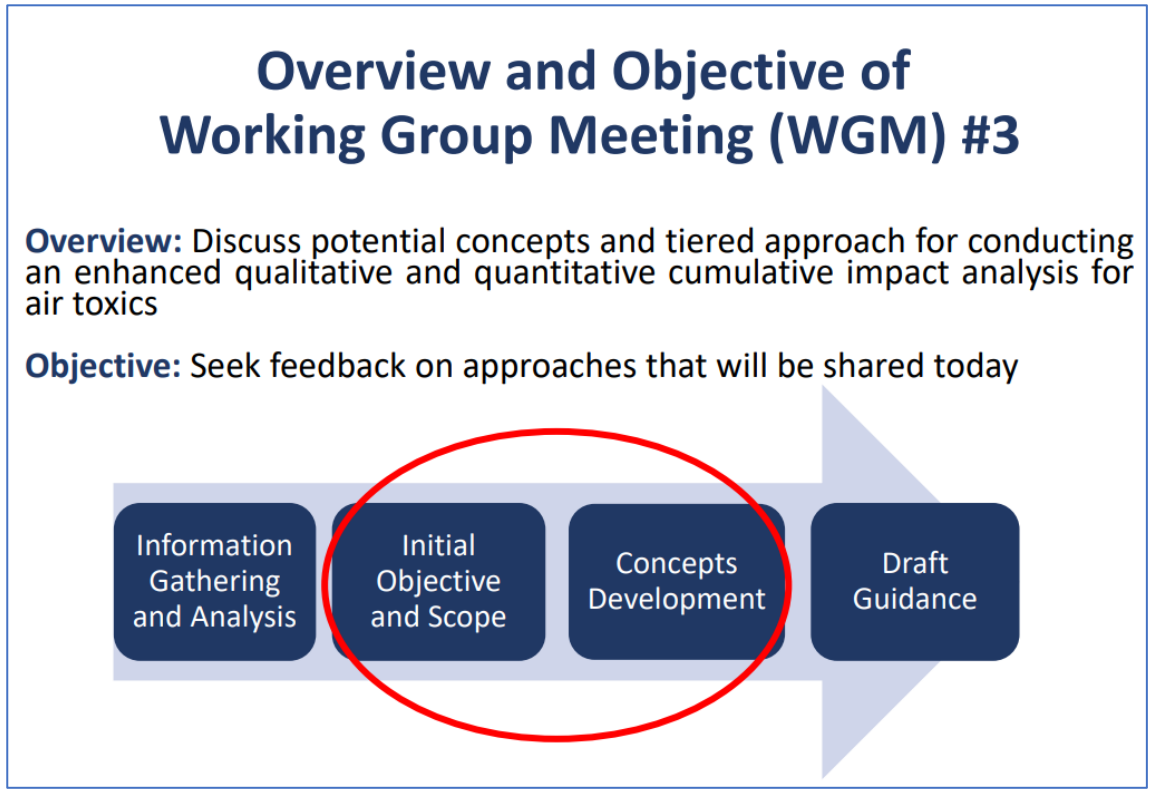
WGM #3:

Summarized stakeholder feedback and comments about how to:

- ✓ Define significance threshold for any project with cumulatively considerable impacts
- ✓ Evaluate incremental project impacts qualitatively and quantitatively
- ✓ Combine background and incremental impacts

Considerations for Cumulative Toxic Air Contaminants (TAC) Impacts Analyses:

- ✓ Objective and Scope
- ✓ Policy Concepts and Strategy
- ✓ Cancer Risk (CR) Impacts
- ✓ Developing Process Steps and Tiered Approach



Considerations When Developing Policy for Analyzing Cumulative Impacts from Air Toxics

Needs and Reasons

- ✓ Community concerns about high health risk impacts
- ✓ CEQA case law by California Department of Justice (CA DOJ*)
- ✓ Limitations on current CEQA guidance may result in an inadequate analysis
- ✓ Enhance existing thresholds from 2003

Policy Goals

Provide streamlined guidance and resources that:

- ✓ Lead agencies can rely upon for informed decision-making
- ✓ Address CA DOJ concerns
- ✓ Address community concerns and provide useful information
- ✓ Promote equity

Policy NOT Intended To

- ✓ Delay or stop proposed projects
- ✓ Require EIRs for all proposed projects

* People of the State of California v. City of Fontana, San Bernardino Superior Court, Case No. CIVSB2121829

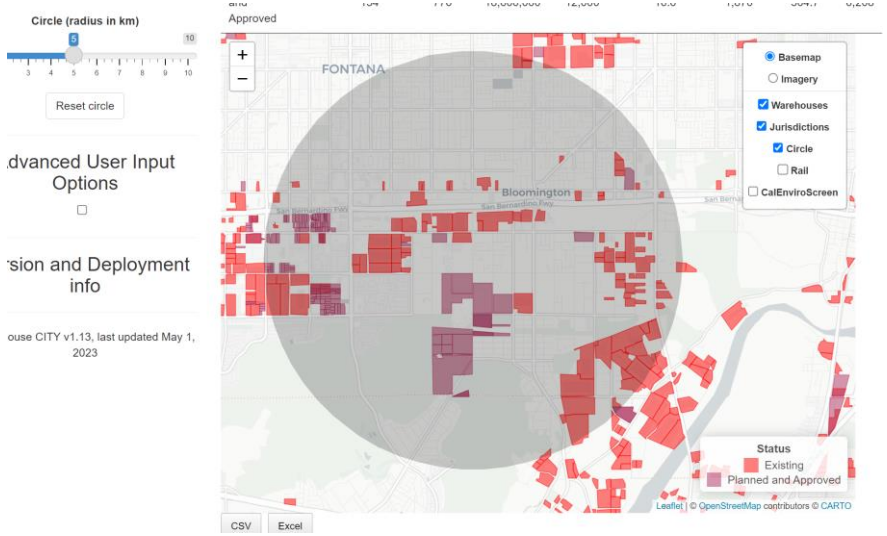
Updates From Other Agencies and Stakeholders - Existing or Proposed Guidance for Cumulative Impacts

U.S. EPA

- **September 2022: Cumulative Impacts Research Final Report**
  - ✓ A brief background on the history of cumulative impact assessment
  - ✓ Gaps and barriers
  - ✓ Recommendations for developing science
- **January 2023: U.S. EPA Legal Tools to Advance Environmental Justice - Cumulative Impacts Addendum**

Bay Area AQMD

- Minor updates in April 2023: Project and Plan levels for GHG analysis



Radical Research LLC

- **Warehouse CITY v1.13** (https://radicalresearch.shinyapps.io/WarehouseCITY/)
  - ✓ Visualize and quantify the warehouse footprint and environmental impact in Southern California

CARB, DTSC, Office of Environmental Health Hazard Assessment (OEHHA), and Other Air Districts

- As of April 2023, no further updates.

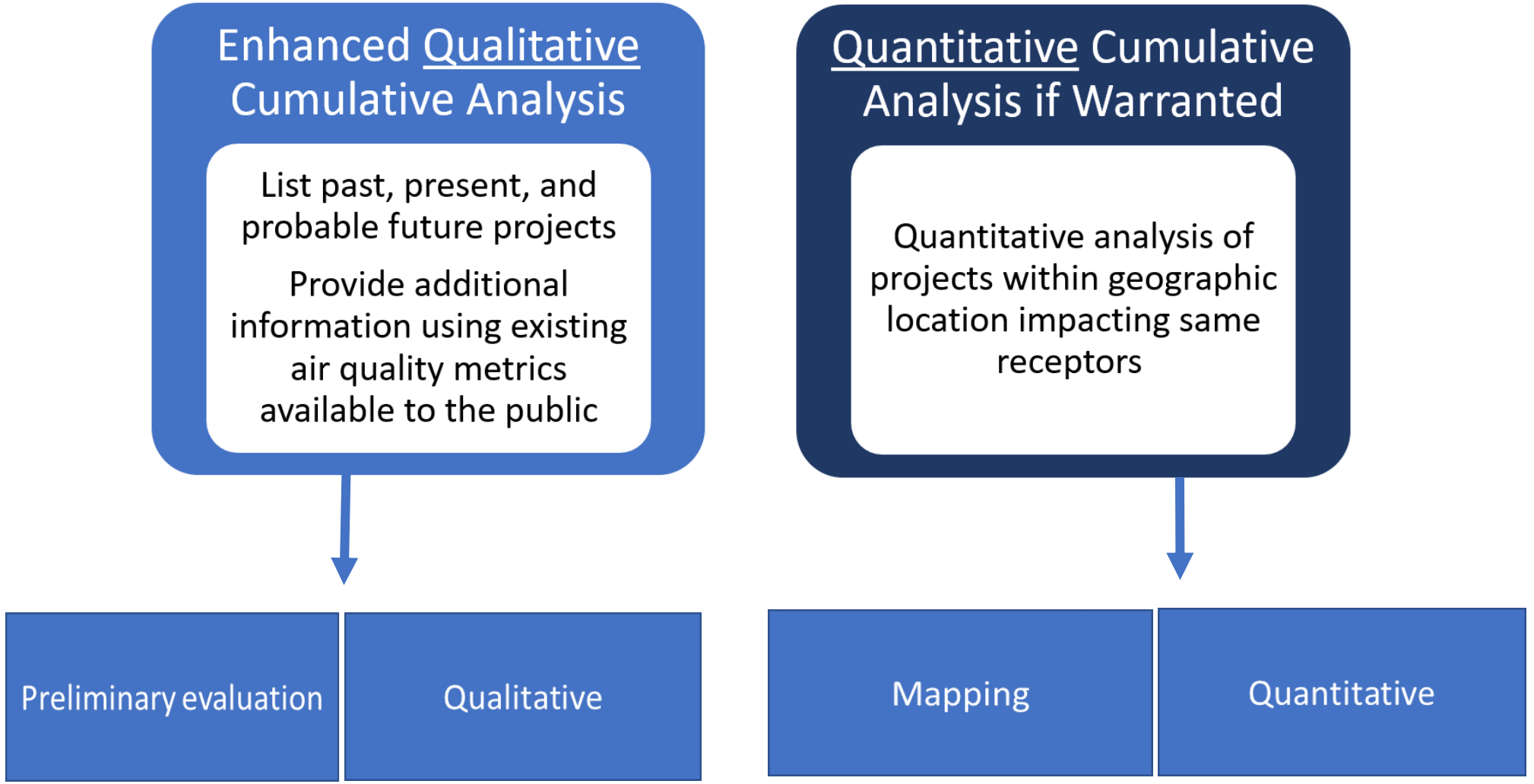
Concept Development

Cumulative TAC Impacts Analysis - Consideration of Cancer Risk By Land Use

- ✓ CEQA Requirement – **CR** during project operation (point and non-point sources)
- ✓ Potential **CR** impacts for projects vary by land use type and size

Low CR impacts	Medium CR impacts	High CR impacts
• Residential (apartment, condo, mobile home, single family home development project) • Commercial (office, bank, government, pharmacy) • Recreational (park, restaurant, golf course, health club, hotel, theater) • Educational (daycare, school, college, library, church/temple) • Retail (auto care, market, mall, shopping store, supermarket)	• Truck yard (enclosed, parking lot, structure, asphalt/non-asphalt) • Retail (gas station) • Certain small industrial projects • Linear (bridge, road, freeway, new or improvement)	• Industrial (warehouse, light, heavy, manufacturing, industrial park) • Major transportation projects (airport, port, railyard, bus/train station) • Major planning projects (Master Plan, General Plan, Specific Plan)

Initially Examined Phased Approach for Analyzing Cumulative TAC Impacts



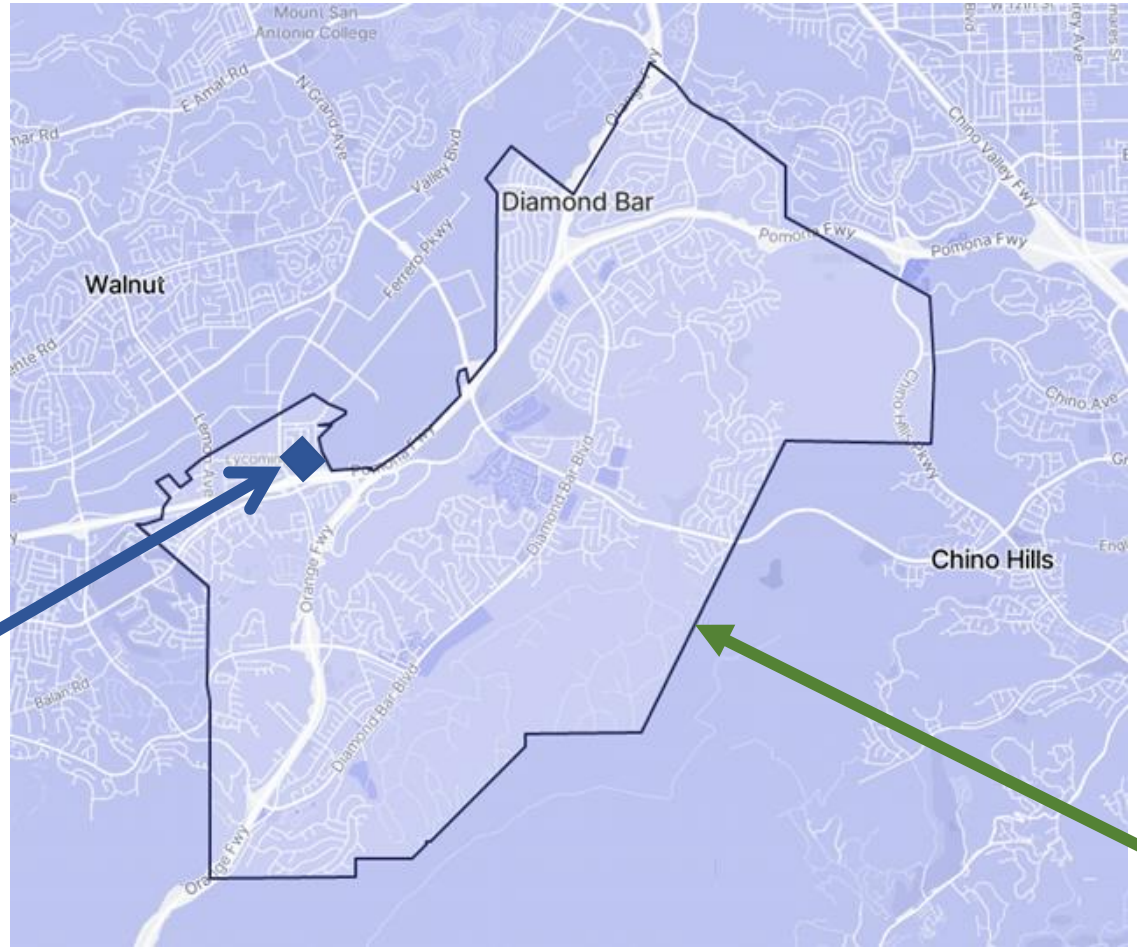
Project-Level vs. Regional Plan CEQA Document

Project-Level CEQA Document

Focuses on environmental changes caused by a site-specific, individual land-use development, including construction and operation.

Example:

- ✓ Mitigated Negative Declaration (MND) for Business Park Project



Regional Plan CEQA Document

Long-term framework and large area development plan by local, regional, or state government.

- Regional Plan
- Master Plan
- General Plan
- Specific Plan
- Community Plan

Example:

- ✓ Environmental Impact Report (EIR) for Draft General Plan 2040

Concept – Applicability and Definition

Applicability and definitions will include:

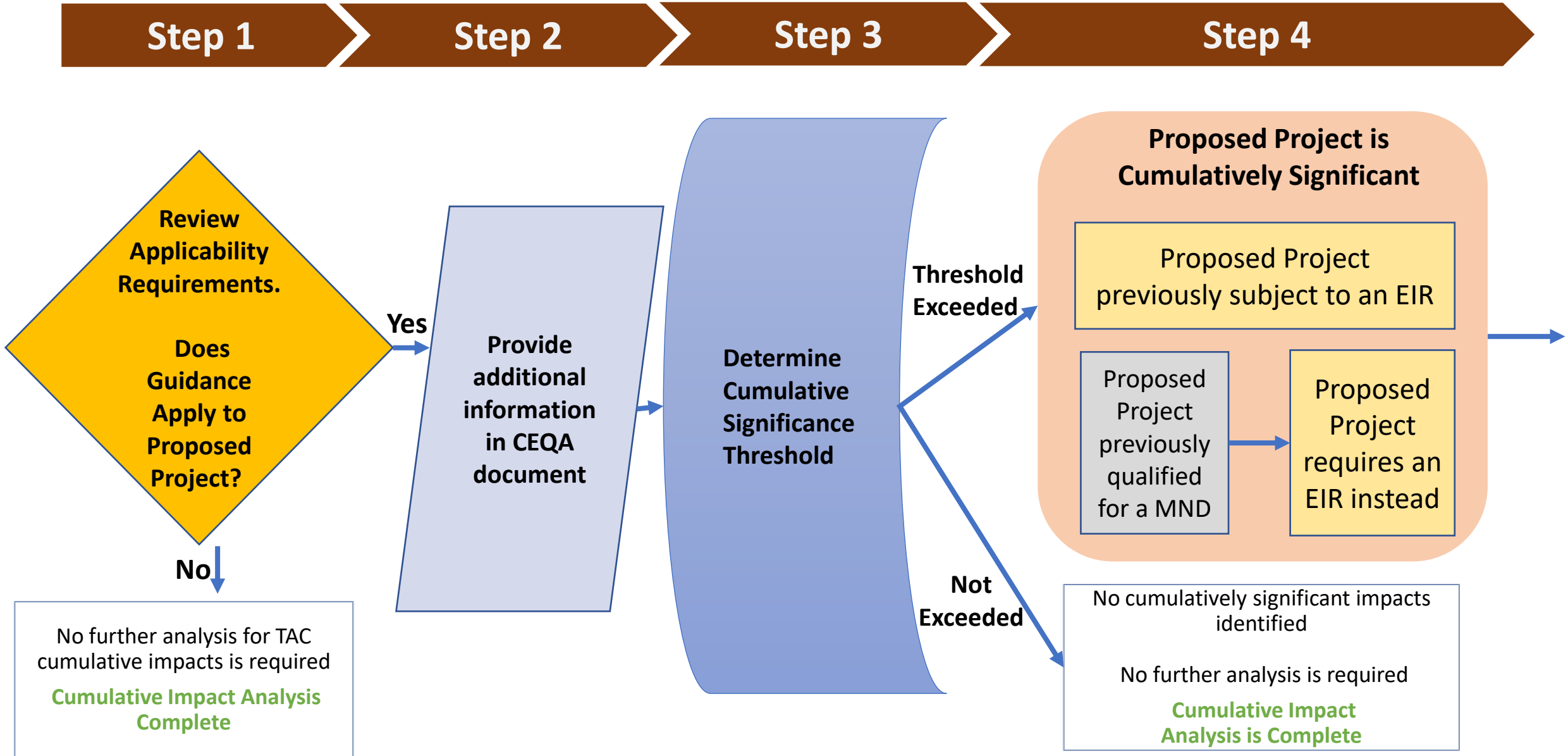
- ✓ Lead agencies and jurisdiction
- ✓ Applicable CEQA document type
- ✓ Exempt and screen-out projects and type of CEQA document
- ✓ Health risk – cancer
- ✓ Project operation and long-term construction
- ✓ Regional plans vs. project-level
- ✓ Geographical impact radius
- ✓ Trucks routes
- ✓ Sensitive receptors and distance to the sources
- ✓ More…

Consider a Combined Approach for Analyzing Cumulative TAC Impacts

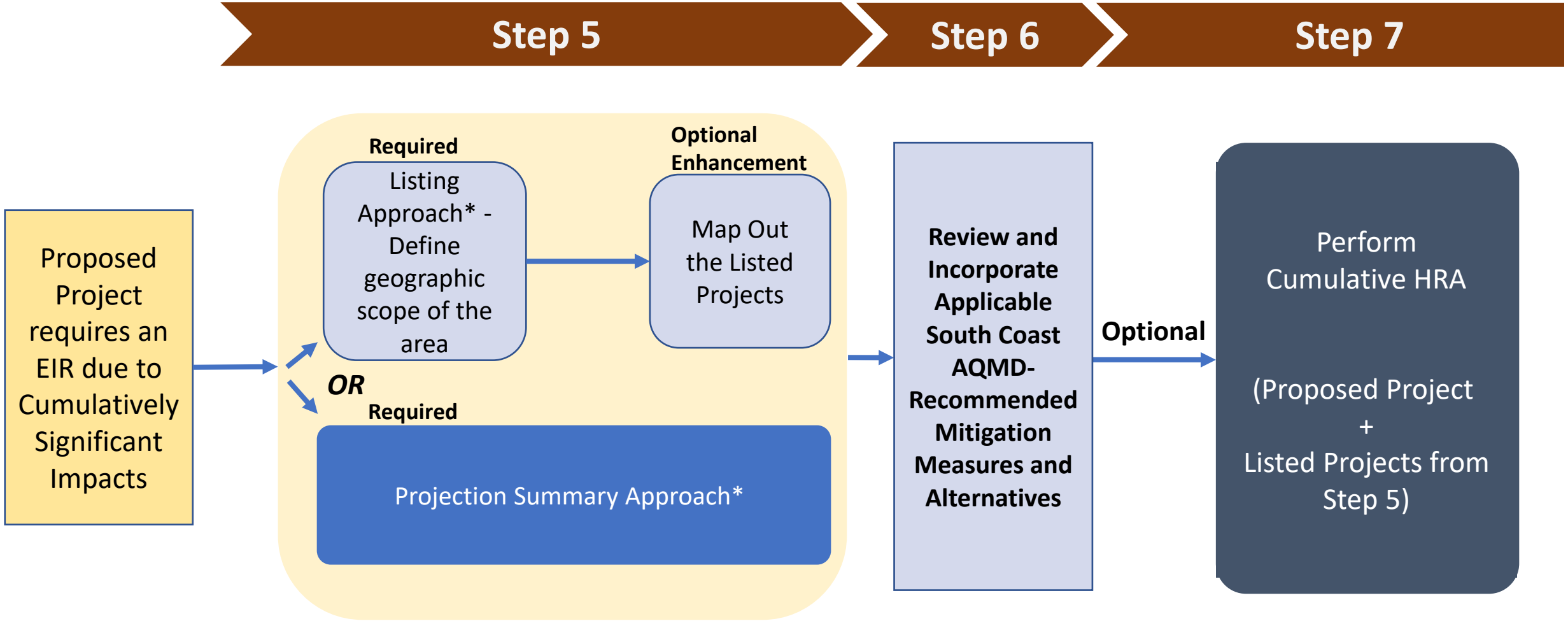
Methods	Description	Strengths	Weaknesses	Incorporated into Proposed Concepts?
Brightline	Clearly defined threshold or standard composed of objective factors	Easy to use/verify	Not flexible	**Yes**
Listing and Projection Summaries	List past/present/future projects producing related impacts OR summarize projections contained in a plan	Informational, logical	May not be sufficient	**Yes, required** (CEQA Guidelines Section 15130(b))
Modeling	Powerful mathematical tool for quantifying cause-and-effect relationship	Science-based, integrate time/space	Need data, can be costly	**Yes, optional for Regional Plans**
Mapping	Overlay mapping from list of projects to help identify geographic impacted areas	Visually address proximity impacts	Difficult to address magnitude of impact	**Yes, optional**
Questionnaires /checklist	Gather wide range of information on multiple actions and resources needed to identify impacts	Flexible, can deal with subjective information	Not quantifiable	**Yes**
Trend Analyses	Assess status of projects in the communities over time	Address accumulation over time	Need a lot of data, difficult to determine threshold	No

Process for Project-Level Analysis

Process for Project-Level Analysis



Process for Project-Level Analysis



*CEQA Guidelines Section 15130(b)

Process for Conducting a Project-Level Analysis

Project-Level Analysis: Step 1 of 7
Determine Applicability

Screen out projects with Low CR impacts

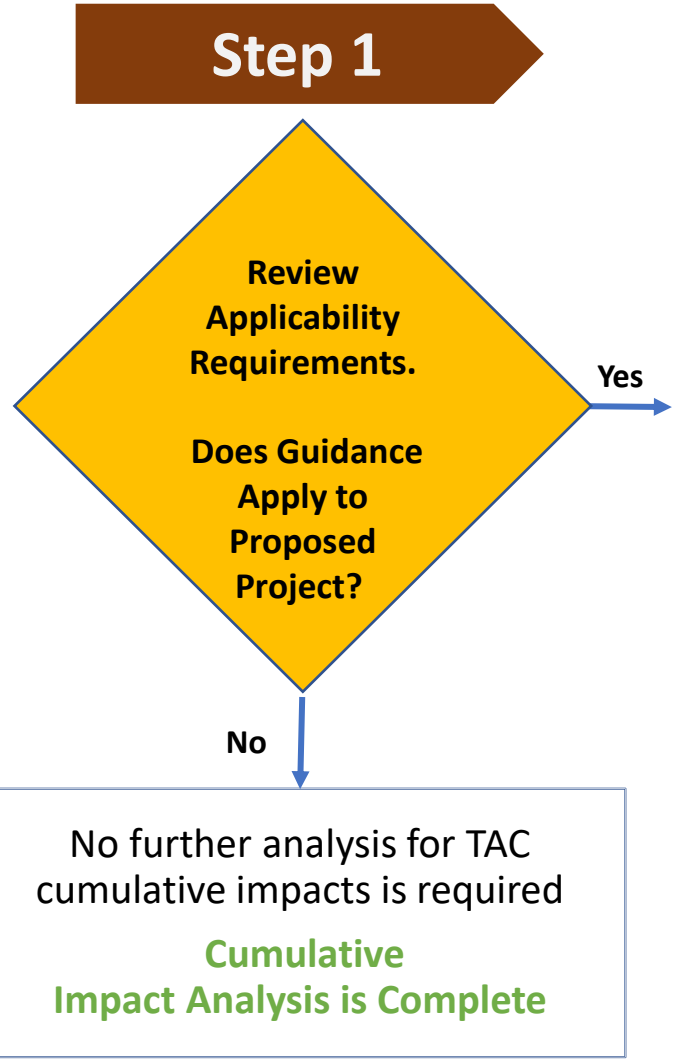
- Residential (apartment, condo, mobile home, single family home development project)
- Commercial (office, bank, government, pharmacy)
- Recreational (park, restaurant, golf course, health club, hotel, theater, etc.)
- Educational (daycare, school, college, library, church)
- Retail (auto care, market, mall, shopping store, supermarket)

Cumulative Impact Analysis for TACs is not required if the Proposed Project:

✓ Has no or minimal/negligible TAC emissions

✓ Is exempt from CEQA (except for categorically exempt projects with TAC emissions such as DPM*)

Include categorically exempt projects with DPM emissions



*CEQA Guidelines Section 15300.2

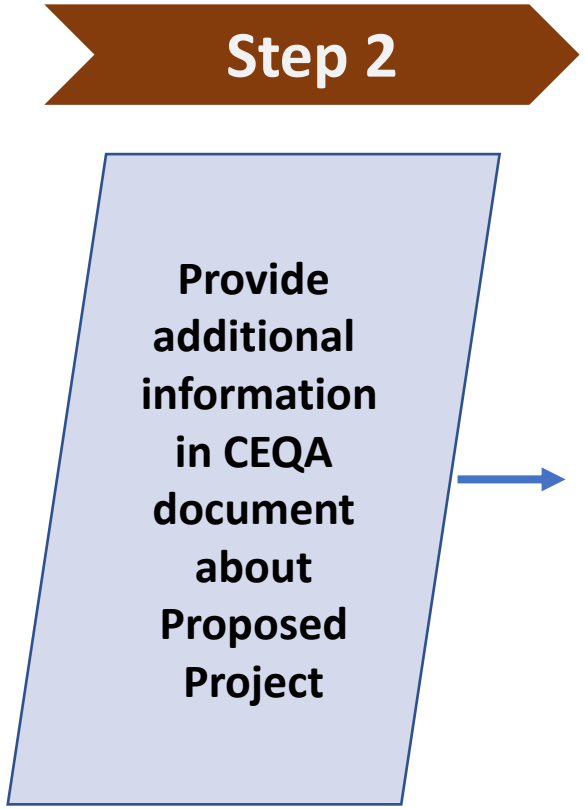
Project-Level Analysis: Step 2 of 7
Provide Additional Information

Provide additional information in the CEQA document about the Proposed Project's effects on the environment, health risks, socioeconomic, and environmental justice community using the following tools:

- ✓ MATES V or the most current version of MATES available
- ✓ AB 617 Community
- ✓ CalEnviroScreen (OEHHA)

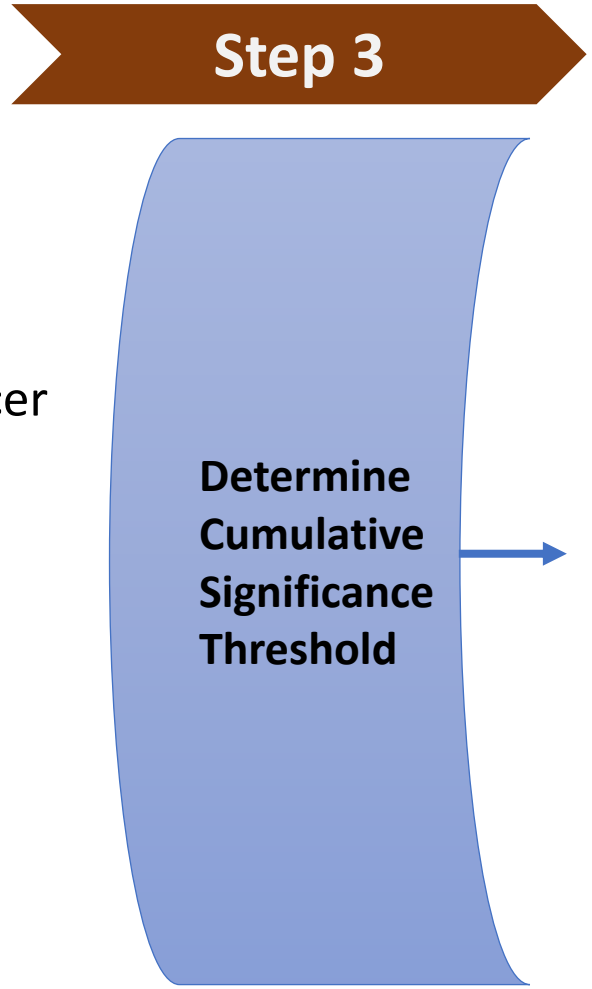
Other indicators

- ✓ AirToxScreen (U.S. EPA)
- ✓ EJScreen (U.S. EPA)
- ✓ EJI (Centers for Disease Control and Prevention - CDC)



Project-Level Analysis: Step 3 of 7
Determine Cumulative Significance Threshold

Cumulative Significance Threshold is tailored to the Proposed Project's features and can be determined as follows:



Cumulative Significance Threshold = Initial Threshold + Adjustments in Stringency Based on Additional Criteria

- ✓ ***Initial Threshold*** *is based on project-level background* determined via MATES cancer risk (CR)

- ✓ ***Additional Criteria***
  - ***Criterion 1****: High volume diesel-fueled mobile sources*
  - ***Criterion 2****: Post-2018 projects with high volume diesel-fueled trucks*
  - ***Criterion 3****: Sensitive receptor areas*
  - ***Criterion 4****: Other considerations (seeking suggestions)*

  These additional criteria are intended to overlay the initial threshold. For every additional criterion that applies, the final cumulative significance threshold becomes more stringent.

Project-Level Analysis: Step 3 of 7 (continued) – Determine Cumulative Significance Threshold

Initial Threshold

Project's Background MATES* Cancer Risk	Proposed Initial Threshold Based on Cancer Risk [cases per million]
Most stringent	A (e.g., 1)
> 90th percentile	B (e.g., 3)
90th to 50th percentile	C (e.g., 5)
50th to 30th percentile	D (e.g., 7)
< 30th percentile	E (e.g., 10)

+

Additional Criteria to Adjust Stringency

	Additional Criteria
#1	**High Volume Diesel-fueled Mobile Sources** Trucks, trains, etc., at or near the Proposed Project site based on certain distance to sensitive receptors
#2	**Post-2018 Projects with High Volume Diesel –fueled Trucks** Along Proposed Project's truck route†
#3	**Sensitive Receptor Population** Either within AB 617 area or > 80th percentile CalEnviroScreen 4.0 (See next slide)
#4	**Other Considerations** Seeking suggestions

=

Step 3

Cumulative Significance Threshold

→

* MATES V is based on 2018 data

† Truck route is from the Proposed Project site to major freeway, within certain distance to sensitive receptors, add all diesel-fueled trucks from post-2018 projects.

- ✓ If one or more additional criterion apply, the initial threshold will be adjusted to the next, more stringent level. For example, the least stringent initial threshold is "E" (10 in one million). If Criterion #1 applies, then the cumulative threshold will adjust to "D" (7 in one million). If Criterion #2 also applies, then the cumulative threshold will adjust to "C" (5 in one million).
- ✓ Staff will perform analyses to calculate truck volume and distance to sensitive receptors

Project-Level Analysis: Step 3 of 7 (concluded)
Determine Significance Threshold - Criterion #3

Pollution Burden

Average of Exposures and Environmental Effects

×

Population Characteristics

Average of Sensitive Populations and Socioeconomic Factors

=

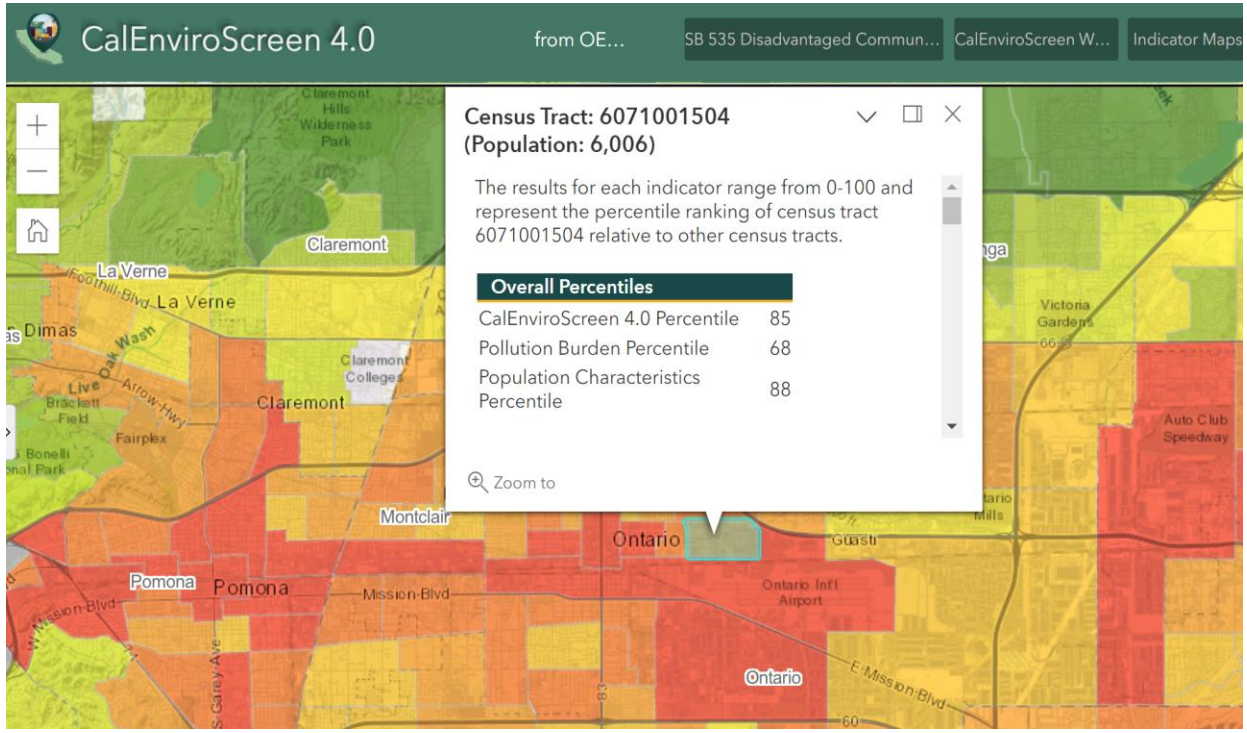
Overall score

CalEnviroScreen Score

Sensitive Population Indicators

+

Socioeconomic Factor Indicators



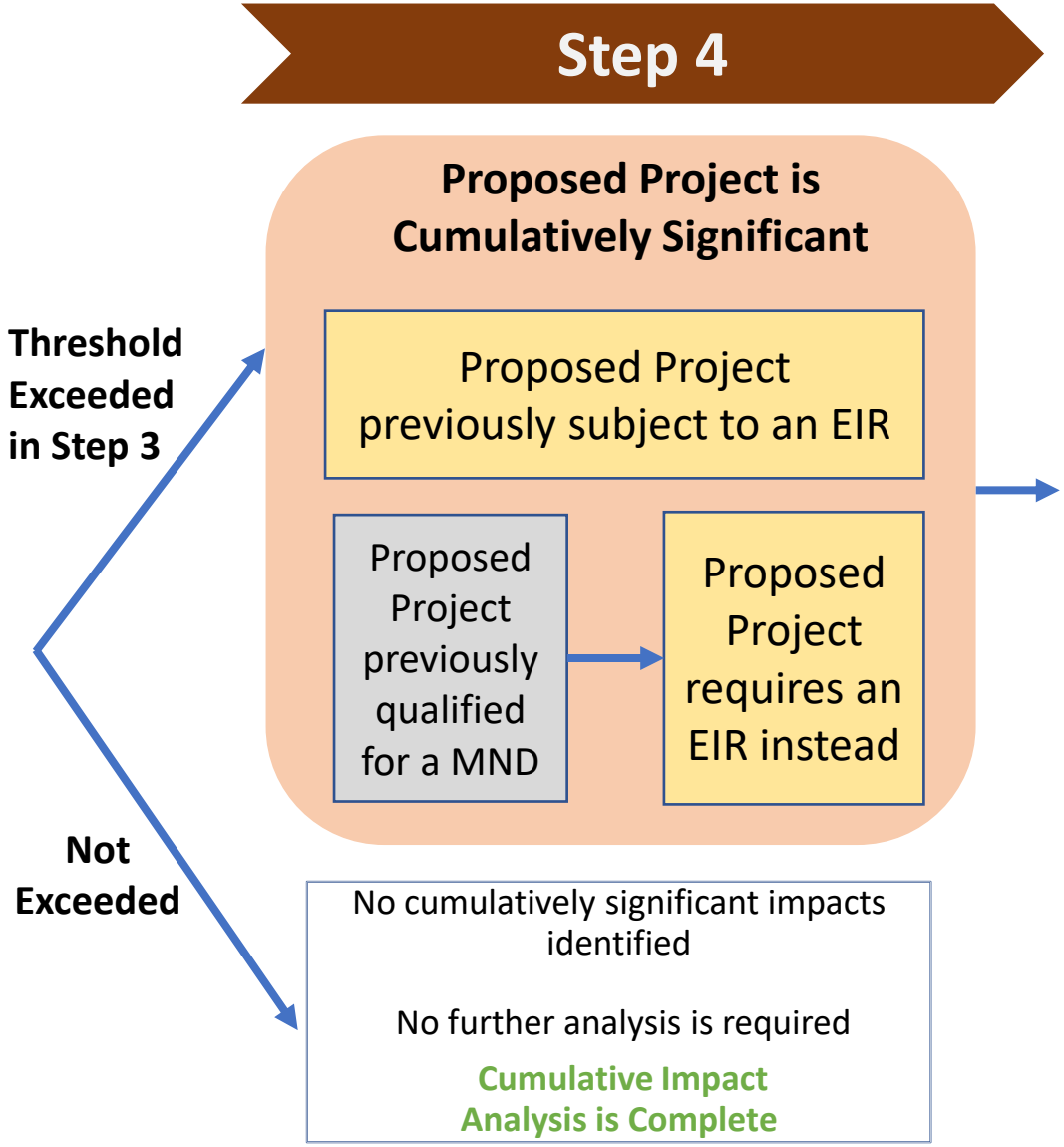
OEHHA
California Office of Environmental Health Hazard Assessment

Project-Level Analysis: Step 4 of 7
Determine if Proposed Project is Cumulatively Significant

Determine if Proposed Project's TAC impacts exceed cumulative significance threshold (determined in Step 3)

- If exceeded, and the Proposed Project's TAC impacts required the preparation of a(n):
  - ✓ EIR: update analysis to conclude cumulatively significant impacts for TACs
  - ✓ MND: update analysis and prepare an EIR instead to address significant impacts

- If not exceeded, no further analysis is required.



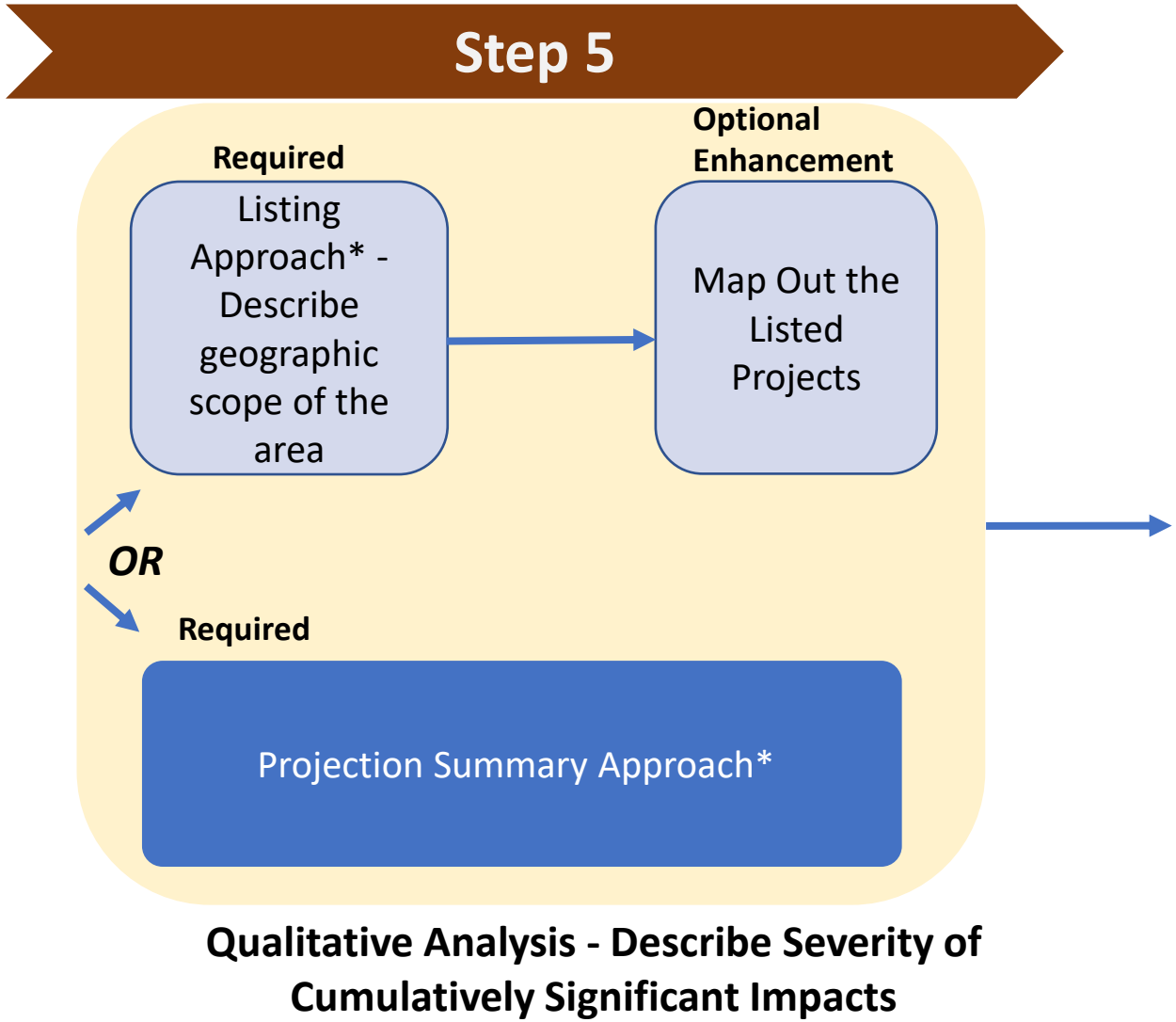
Project-Level Analysis: Step 5 of 7
Discussion of Cumulative Impacts

CEQA Guidelines Section 15130(b) requires a discussion of cumulative impacts via either:

- ✓ Listing approach (past, present, and probable future projects) producing related or cumulative impacts with the option to map out the location of listed projects

OR

- ✓ A summary of projections that describes or evaluates conditions contributing to the cumulative effect



*CEQA Guidelines Section 15130(b)

Project-Level Analysis: Step 6 of 7
Mitigation Measures and Project Alternatives

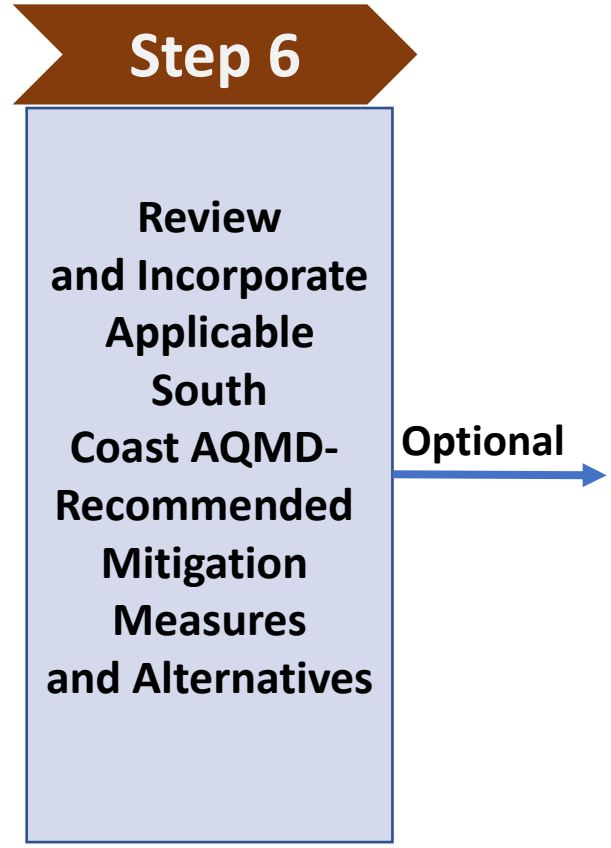
Checklist of Mitigation Measures (MMs):
To supplement the Proposed Project's MMs, the Lead Agency is recommended to apply additional MMs

To assist Lead Agencies and applicants identify additional MMs to reduce impacts, a compilation of MMs could be provided which may:

- ✓ Consist of various weblinks compiled from multiple sources (South Coast AQMD and others)
- ✓ Be maintained and updated by CEQA-IGR team
- ✓ Be organized according to category types (e.g., construction, operation, and land use)

Toolbox of Project Alternatives
To avoid cluster of TAC emissions/impacts:

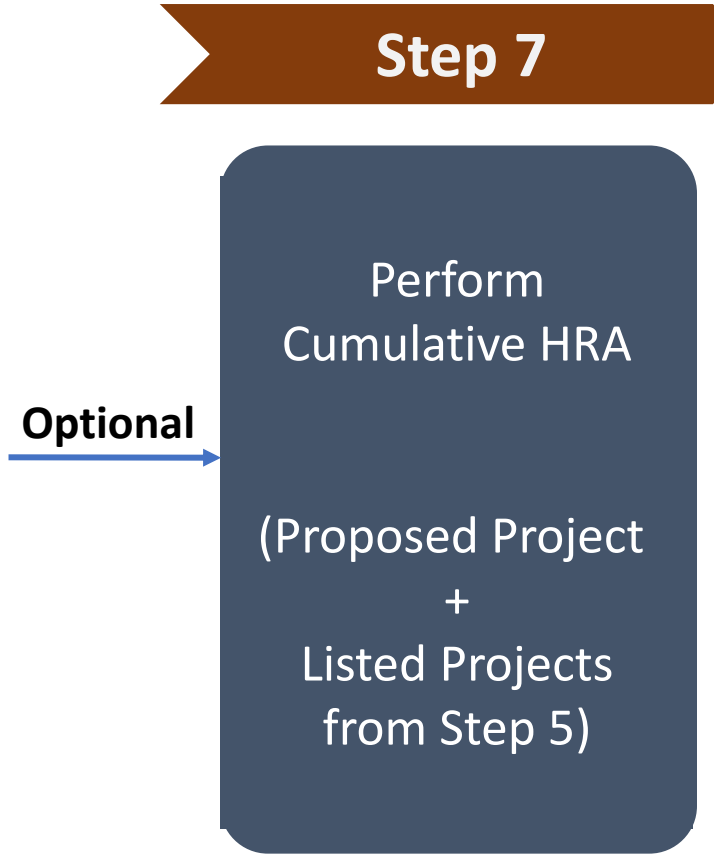
- ✓ Consider different truck routes
- ✓ Adjust design and orientation of warehouse
- ✓ Relocate sources within the project property
- ✓ Relocate project
- ✓ Reduce scale of project, etc.



Project-Level Analysis: Step 7 of 7
Optional: Perform Cumulative HRA

Optional: Lead Agency can choose to perform Cumulative HRA, including but not limited to:

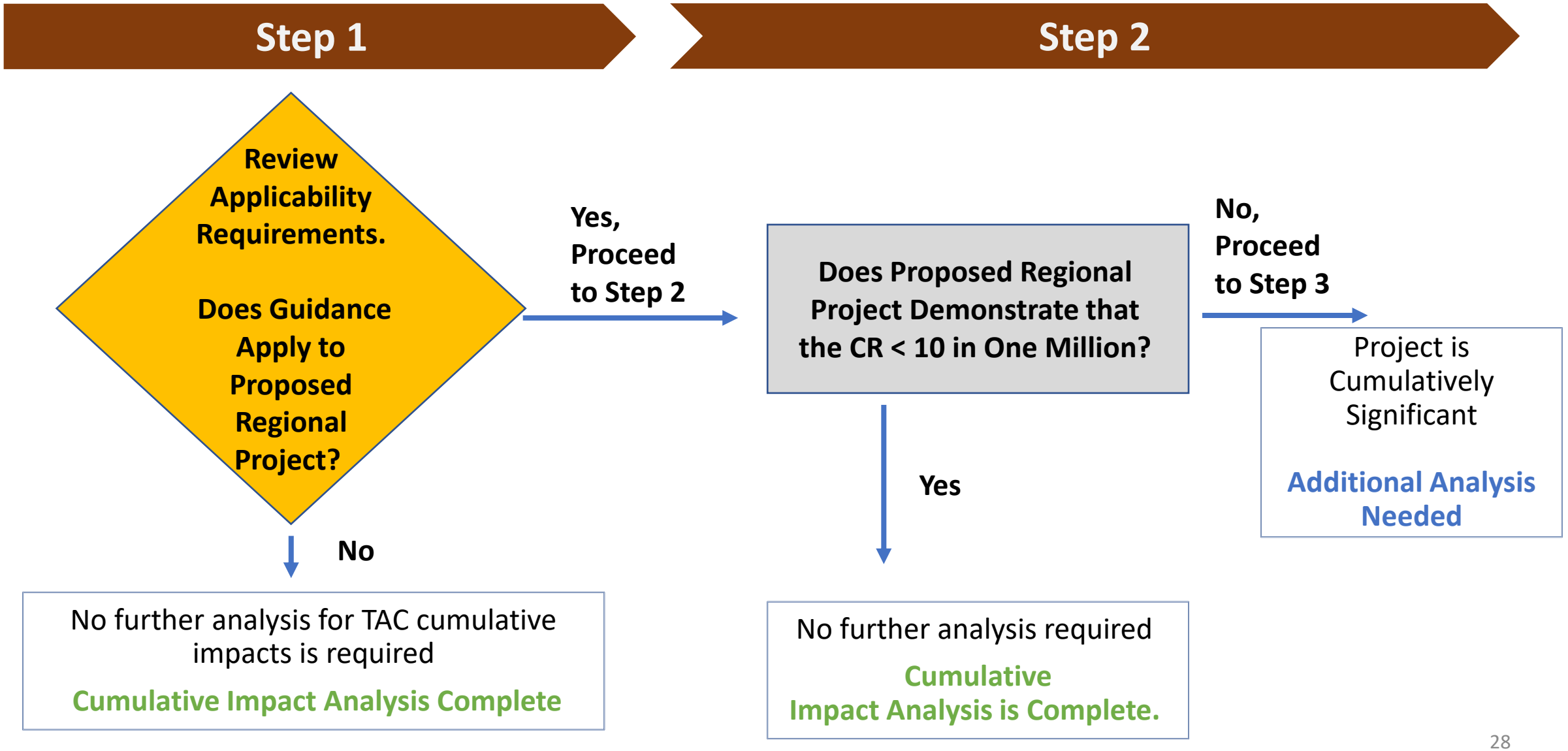
- ✓ Utilizing AERMOD/HARP
- ✓ Defining the Scope/Area of Analysis
- ✓ Including other related projects
- ✓ Identifying and including all designated truck routes
- ✓ Including all the sensitive receptors within the area of analysis



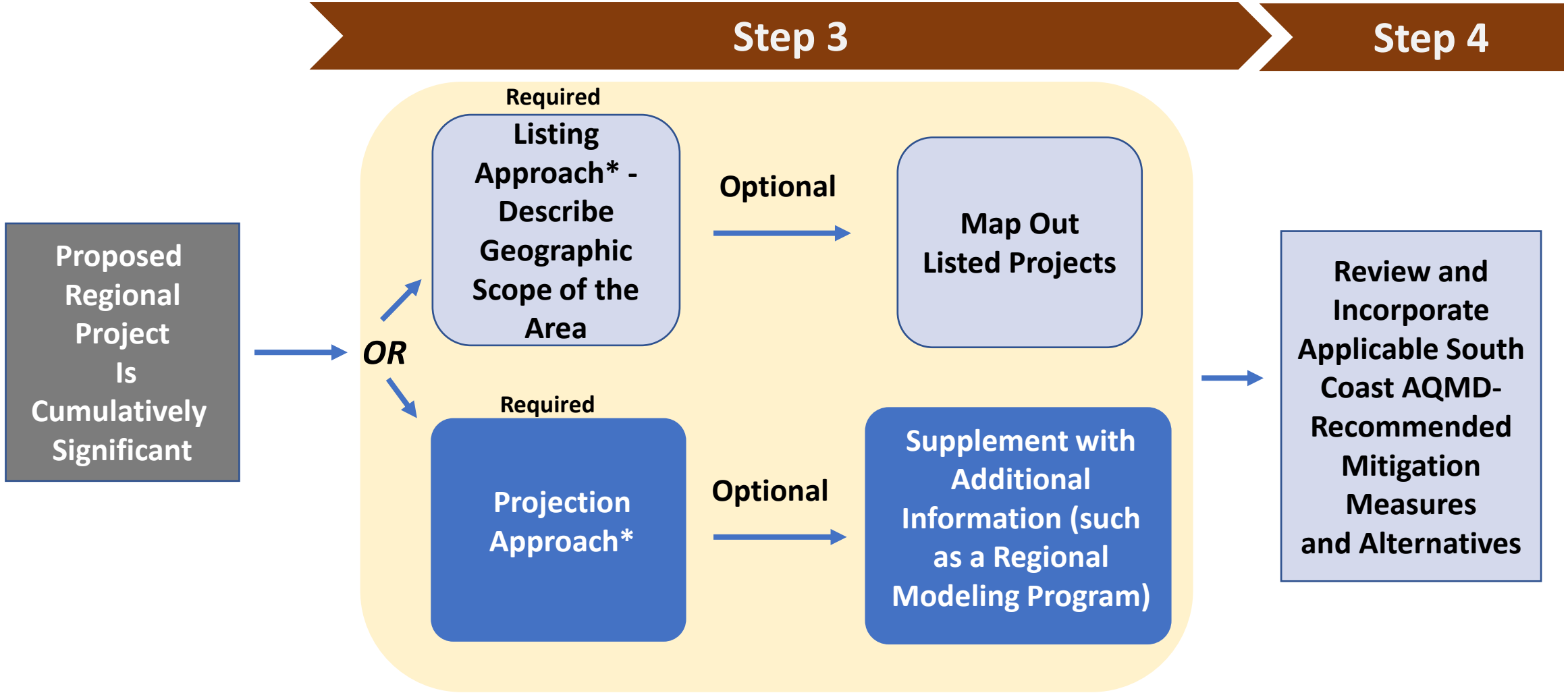
Demonstrate Severity Cumulative Impacts via **Quantitative Analysis**

Process for Analyzing Regional Projects

Process for Analyzing Regional Projects



Process for Analyzing Regional Projects

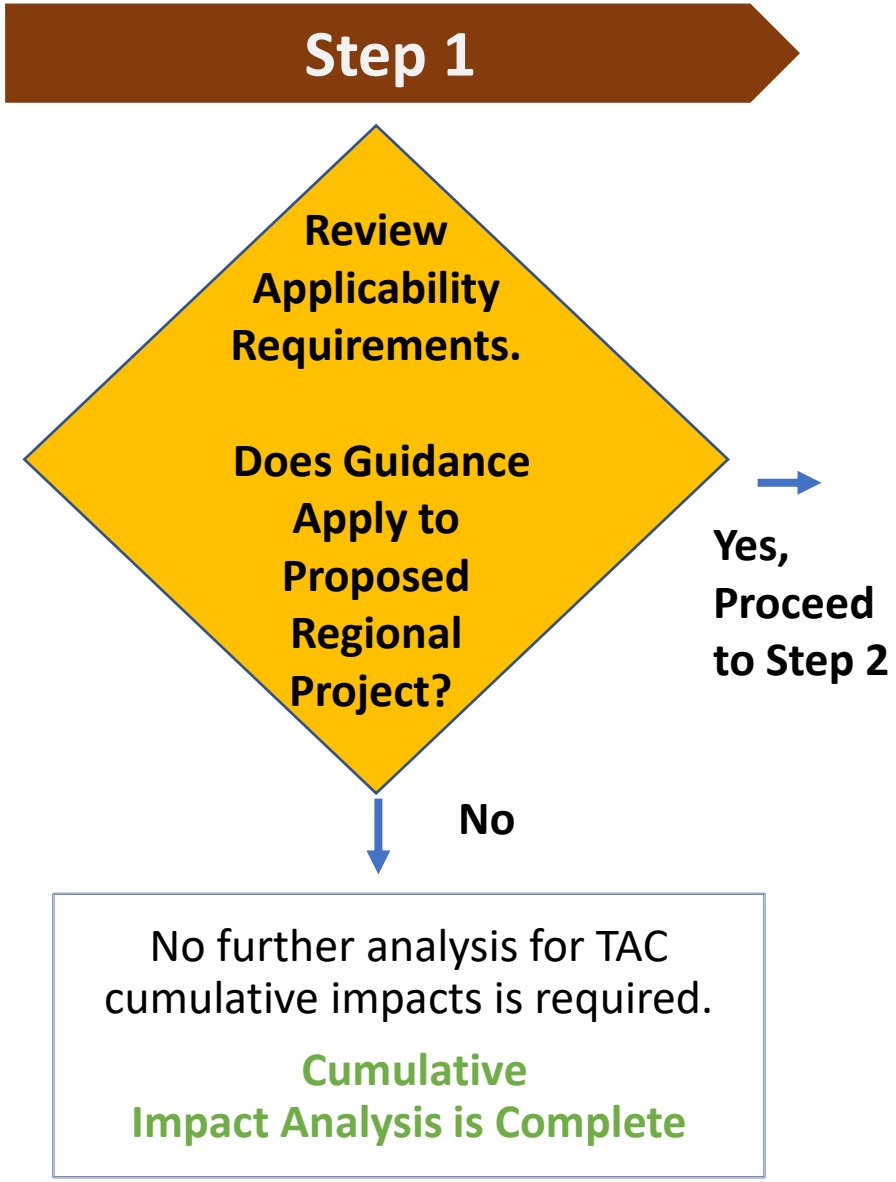


*CEQA Guidelines Section 15130(b)

Process for Analyzing Regional Projects

Regional Projects Analysis: Step 1 of 4
Determine Applicability

- Review guidance and applicability requirements
- Screen out regional projects that tend to have low CR impacts after implementing mitigation measures, such as:
  - ✓ Primarily residential developments
  - ✓ Educational facilities
- Regional projects with the following characteristics cannot be screened out:
  - X Industrial land uses and equipment
  - X Commercial and retail projects
  - X Long-term construction activities (e.g., transportation projects such as high-speed rail or highway expansion)



Regional Projects Analysis: Step 2 of 4
CR Demonstration

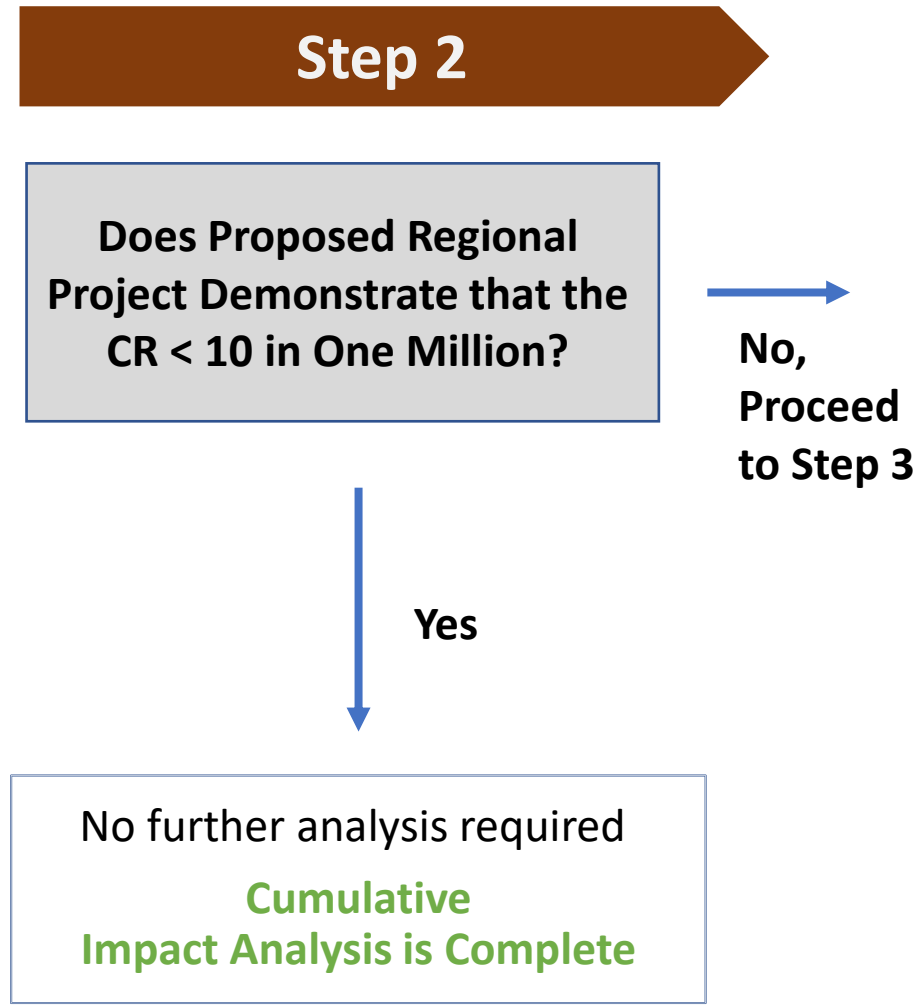
Most proposed regional projects likely require EIRs due to significant air quality impacts, which may also be cumulatively considerable

Options for demonstrating that the CR for a proposed regional project is < 10 in One Million

1. ***Quantitative* approach**
   - ✓ Perform health risk assessment (HRA)
     - Conduct regional modeling
     - Pick several hotspots for HRA
   - ✓ Quantitative Comparison

     e.g., reduced sq. ft. of an approved industrial warehouse (HRA < 10 in one million)
2. ***Qualitative* approach**

   e.g., a warehouse specific plan in the desert where a map shows the nearest sensitive receptors are miles away



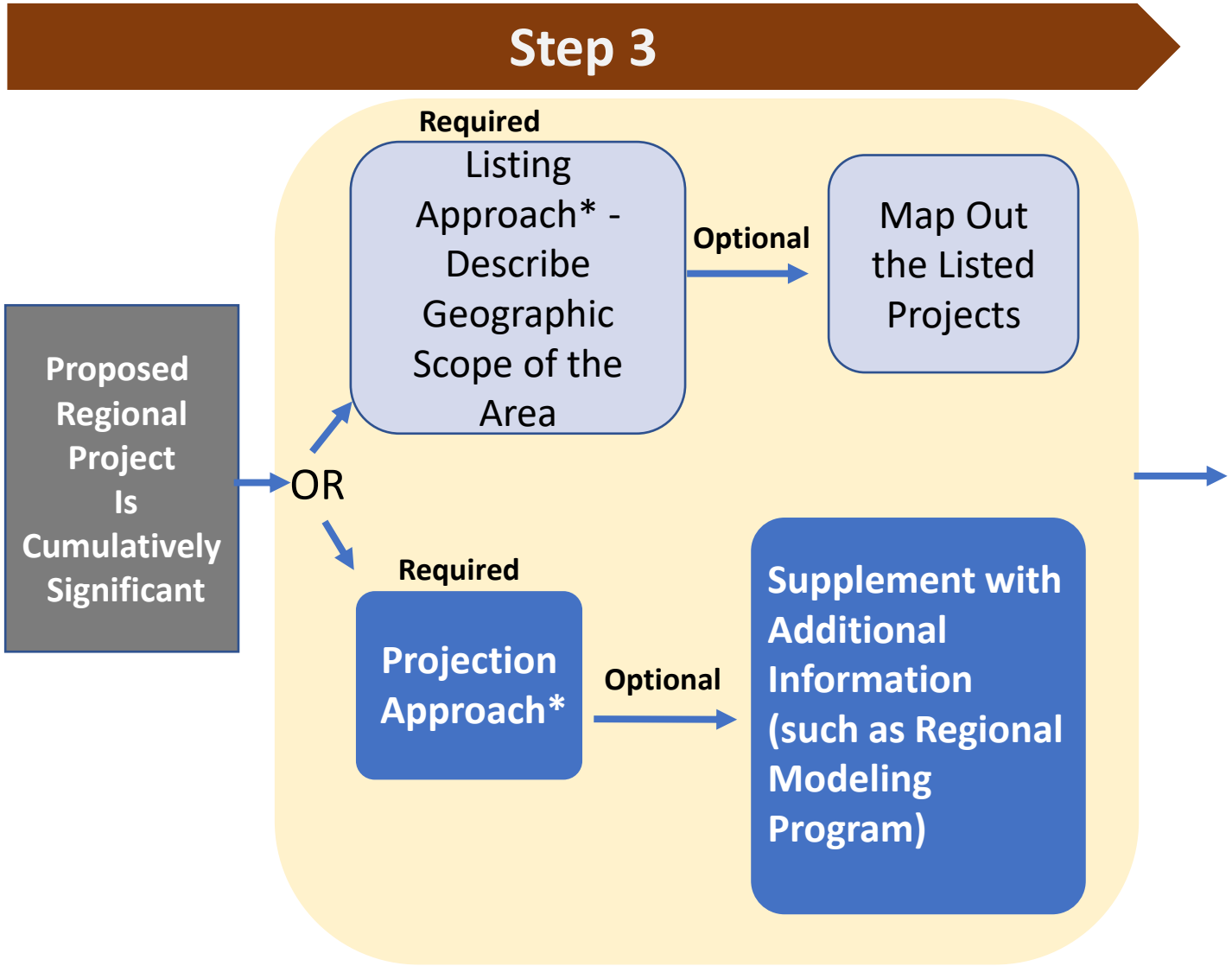
Regional Projects Analysis: Step 3 of 4
Discussion of Cumulative Impacts

When a regional project is considered cumulatively considerable, CEQA Guidelines* require the severity of the cumulatively significant impacts to be addressed via either:

- ✓ Listing Approach - Identify past, present and probable future projects
  - Optional Enhancement: Map the location of listed projects

OR

- ✓ Projection Approach – Summary of projections from adopted planning document
  - Optional Enhancement: supplemented with additional information such as a regional modeling program



*CEQA Guidelines Section 15130(b)

Regional Projects Analysis: Step 4 of 4
Mitigation Measures and Project Alternatives

Step 4

Mitigation Measures (MMs)*

In addition to the Proposed Project's MMs, a checklist (worksheet) will be provided on South Coast AQMD website as an active document, including but not limited to:

- ✓ CAPCOA Mitigation Measures
- ✓ South Coast AQMD's AQMP
- ✓ CA DOJ's Warehouse Projects: Best Practices and Mitigation Measures
- ✓ CEQA Air Quality Handbook
- ✓ South Coast AQMD's Incentive Programs
- ✓ Other Resources

Worksheet

Companion to MM Resource

- ✓ Purpose of Worksheet - Demonstrate that Lead Agency has reviewed and applied recommended MMs
- ✓ If Lead Agency does not implement a recommended MM, worksheet should explain why

→ **Review and Incorporate Applicable South Coast AQMD-Recommended Mitigation Measures and Alternatives**

*CEQA Guidelines Section 15126.4(a)

Regional Projects Analysis: Step 4 of 4 (concluded)
Mitigation Measures and Project Alternatives

Toolbox of Project Alternatives

Step 4

- South Coast AQMD will develop a list of recommended project alternatives
- Designed to assist Lead Agency determinations of how best to avoid or lessen TAC cumulative significant impacts
- Some potential recommended alternatives may involve:
  - ✓ Analyzing different truck routes
  - ✓ Modifying design and orientation of Warehouse
  - ✓ Relocating sources to avoid cluster of TAC Emissions
  - ✓ Identifying different project location
  - ✓ Reducing overall scale of project

Review and Incorporate Applicable South Coast AQMD-Recommended Mitigation Measures and Alternatives

Next Steps

Staff is seeking stakeholder feedback on:

- ✓ Proposed approaches for updating guidance
- ✓ Proposed enhanced guidance with significance thresholds
- ✓ Any other thoughts or concerns that staff should consider

Staff will:

- ✓ Conduct retrospective five-year sensitivity analysis to re-examine cumulative analyses conducted for previous projects to:
  - Consider distance from the sources to the receptors and other project data; and
  - Determine if proposed approaches are appropriate
- ✓ Prepare preliminary proposed draft of revised guidance
- ✓ Continue to meet with stakeholders
- ✓ Continue to hold WGMs
- ✓ Provide updates on CEQA Policy Development webpage

http://www.aqmd.gov/home/rules-compliance/ceqa/ceqa-policy-development-(new)

CEQA-IGR Staff Contacts

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