Integration of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA)

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As leader of the Jones & Stokes environmental education program, Mr. Bogdan organizes and presents workshops on NEPA, wetlands regulation, and endangered species issues for clients and several campuses of universities in the western United States. He developed the BLM National Training Center's week-long NEPA and Planning "Nuts and Bolts" course. He managed the preparation of environmental compliance handbooks for the CALFED Bay-Delta Program and U.S. Fish and Wildlife Service's Anadromous Fish Restoration Program.

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Overview of the CEQA Process					
CEQA Process Begins					
Phase 1	Preliminary Review				
Phase 2	Initial Study				
Phase 3	EIR or ND				
CEQA Process Complete					











CEQA/NEPA Terminology						
CEQA Term	Correlated NEPA Term					
Lead Agency	Lead Agency					
Responsible Agency	Cooperating Agency					
Categorical Exemption	Categorical Exclusion					
Initial Study	Environmental Assessment					
Negative Declaration	Finding of No Significant Impact					
Mitigated ND	Finding of No Significant Impact					
Environmental Impact Report	Environmental Impact Statement					
Notice of Preparation	Notice of Intent					
Findings	Record of Decision					



	(Cont.)						
CEQA Term	Correlated NEPA Term						
Proposed Project	Proposal for Action						
Exceptions to Categorical Exemptions	Extraordinary Circumstances limiting use of CatEx						
Project Objectives	Project Purpose and Need						
No-Project Alternative	No-Action Alternative						
Environmental Setting	Affected Environment						
Significant Impact	Impact						
Considerable Contribution to a Cumulative Impact	Cumulative Impact						
Mitigation	Environmental Commitments						
Program EIR	Programmatic EIS						





Joint Document Recommendation: The Translation Chapter

- Premise: the basic outlines of EIRs and EISs are similar
 - · Content of joint document shares common elements
 - Differences bear explanation
- Practical Advice: Create EIR/EIS chapter describing CEQA compliance vs. NEPA compliance
 - Location of mandated CEQA vs. NEPA discussions
 - Key to terminology
 - Selected standards of significance
 - Significant impacts under CEQA standard
 - Mitigation measures under CEQA standard
 - CEQA alternatives, if necessary
- Fills in any holes in the NEPA analysis to comply with CEQA





















- CEQA requires scope of analysis to address expansive definition of proposed project, covering "whole of the action"
- NEPA allows limiting scope of analysis to address action related only to federal authority: small federal handle



CEQA/NEPA Differences: Baseline

- CEQA requires the baseline for determining environmental impacts as "normally" being existing conditions at time of NOP (or start of environmental review)
- NEPA allows future noaction condition to be point of comparison for determining federal agency mitigation requirements

CEQA/NEPA Differences: Alternatives

- CEQA does not require IS to discuss alternatives
- CEQA does not require EIR to discuss alternatives in equal level of detail
- NEPA requires EA to discuss alternatives where there are "unresolved resource conflicts" (some courts say all the time)
- NEPA requires EIS to devote "substantial treatment" to each alternative



CEQA/NEPA Comparisons: Special Topics

- For certain large projects, CEQA requires a water supply assessment
- Economics analysis only required where economic effect could cause physical effect on environment (e.g., big box retail)
- NEPA does not necessarily require any special water supply analysis
- Economic analysis can be included in EIS where interrelated with effects to human environment
- Social effects are required as part of Environmental Justice analysis (EO 12898)

CEQA/NEPA Differences: Mitigation CEQA requires agencies NEPA requires such to avoid or mitigate mitigation for FONSIs significant impacts when only feasible EISs need only full and CEQA requires as part complete discussion of of MND or EIR mitigation (however most federal agencies require adoption of feasible mitigation)







Appendix A. Selected Slides Regarding the CEQA Process



Determining the Lead Agency

- Public projects: A public agency is the Lead Agency for its own projects, even if the project will be located within the jurisdiction of another agency
- Private projects requiring governmental approval
 - An agency with general governmental powers (e.g., city, county) prevails over an agency with single or limited purpose
 - The city rezoning an area prior to annexation will be the Lead Agency rather than the Local Agency Formation Commission (LAFCO)

CEQA Guidelines sec. 15051

Determining the Lead Agency (Cont.)

- When criteria are equal, the agency that acts first is the Lead Agency
- Mutual Agreement: Agencies may designate a Lead Agency by mutual agreement

CEQA Guidelines sec. 15051

Responsible Agency

- All state or local agencies other than Lead Agency with discretionary approval power over a project
- Agency proposing to carry out or approve a project for which a Lead Agency is preparing the CEQA document

CEQA Guidelines sec. 15381



Summa	ry of CEQA and PSA Time Limits
Environmental	30 days from application's acceptance as complete— Lead Agency must decide to prepare Negative Declaration or EIR
Time Limits	45 days from decision to prepare Negative Declaration or EIR—Lead Agency must execute consultant contract
	 180 days from application's acceptance as complete—
	Lead Agency must adopt Negative Declaration
	1 year from application's acceptance as complete—Lead Agency must certify EIR
Lead Agency Project Approval	 60 days from exemption decision or Negative Declaration adoption
Time Limits	 6 months from date of EIR certification
Responsible Agency Project Approval	180 days after Responsible Agency accepts application as complete or after Lead Agency action, whichever is later
Time Limits	
CEQA Gui	delines Secs. 15102, 15107, and 15108; Gov. Code Sec. 65950

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Definition of a Project

An activity undertaken by a public agency, including

- Activities directly undertaken by public agency
 Construction projects
 - General plan and ordinance adoption
- Activities supported through public agency contracts, grants, subsidies, loans, or other assistance
- Activities involving public agency issuance of a lease, permit, license, certificate, or other entitlement

CEQA Guidelines Sec. 15378

Defining the Project

The Whole of the Action construction, operation, etc.

- Activity B is a reasonably foreseeable consequence of Activity A, or
- Activity B is a significant future expansion of Activity A, or
- Activity B provides essential public services needed to implement Activity A, or
- Activity A and Activity B are integral parts of the same project



Defining the Project (Cont.)

Evaluation of action may be deferred to the future if:

- Meaningful information about Activity B is unavailable when Activity A is being evaluated
- Information about Activity B is not needed to decide on Activity A
- Activities A and B will be evaluated in separately tiered EIRs
- Activity A does not commit implementation of Activity B
- Activity B is independent and not a part of Activity A, or
- Activity A and B are road segments with logical termini and independent utility

CEQA Exemptions

- Common Statutory Exemptions:
 - Ministerial projects
 - · Emergency projects
- Categorical Exemptions
 - 33 classes created by the CEQA Guidelines
 - Watch for Section 15300.2 exceptions
 - When in doubt, document
 - · There are no "mitigated" exemptions
 - Notice of Exemption
 - Optional filing begins 35-day SOL

Common Statutory Exemptions

- Ministerial projects
- Emergency projects
- Rejected or disapproved projects
- Setting of certain rates or charges
- Feasibility or planning studies

CEQA Guidelines Sec. 15260, et seq.



When Does a Categorical Exemption Not Apply?

- A reasonable possibility exists that the activity may have a significant environmental impact because of unusual circumstances
 - "unusual" = circumstances that are not typical
- Cumulative impacts would be significant
- A project within certain categories of exemption occur in certain specified sensitive environments
- Mitigation measures must be applied to avoid an impact (SPAWN v. County of Marin [2005] 125 Cal.App.4th 1098)

CEQA Guidelines Sec. 15300.2

When Does a Categorical Exemption Not Apply? (Cont.)

- A project affects scenic resources within official state scenic highways
- A project is located on a listed hazardous waste site maintained by the California Environmental Protection Agency
- A project causes substantial adverse changes in significant historic resources

CEQA Guidelines Sec. 15300.2

When Do You Prepare an Initial Study?

When:

- The activity is a "project"
- · The activity is not exempt
- Even if the project will have no significant effect, an initial study is needed if the project is not exempt
- If the Lead Agency has determined that it will prepare an EIR for a project, then it need not prepare an initial study



Purposes of Initial Study

- Facilitate early environmental assessment
- Decide whether to prepare ND, MND, or EIR
- Avoid unnecessary EIRs through mitigation
- Focus an EIR on significant effects
- Foster reuse of EIRs
- Identify whether a program EIR, tiering, or similar process can be used

CEQA Guidelines Sec. 15063





- Project description (planning, implementation, operation)
- Description of environmental setting (baseline conditions)
- Potential environmental impacts—may use checklist such as example in Guidelines Appendix G
- Mitigation measures for any significant impacts
- Consistency with plans and policies
- Names of preparers

CEQA Guidelines Sec. 15063



What Topics Are Covered? Per Appendix G Sample Checklist....

- Aesthetics
- Agricultural resources
- Air quality
- Biological resources
- Cultural resources
- Geology and soils
- Hazards and hazardous materials
- Hydrology and water quality

- Land Use/planning
- Mineral resources
- Noise
- Population and housing
- Public services
- Recreation
- Transportation and traffic
- Utilities and service systems

Significance criteria established by quality management or air pollutio control district may be relied upon he project:	v air D Would Would N N N N N N N N N N N N N	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or implementation applicable air qu plan?	obstruct of the Jality			
b) Violate any air q standard or con substantially to existing or proje quality violation	uality tribute an D scted air ?	•		
 c) Result in cumul considerable ne increase in any pollutant for wh project region is nonattainment? 	atively t criteria ich the s	•		•
d) Expose sensitiv receptors to sub pollutant concentrations?	e ostantial o		•	•
e) Create objection odors affecting substantial num people?	nable a berof 🛛		•	0

Threshold for Preparing EIRs: Fair Argument Standard

An EIR must be prepared when it can be:

- fairly argued,
- based on substantial evidence,
- in light of the whole record,
- that a project may have a significant environmental effect.

CEQA Guidelines Sec. 15064 (f)







Mandatory Findings of Significance

Project has the potential to:

- + substantially degrade the quality of the environment
- · substantially reduce fish or wildlife habitat
- cause fish or wildlife populations to drop below selfsustaining levels
- threaten to eliminate a plant or animal community
- substantially reduce the number or restrict the range of a special status species
- eliminate important examples of California history or prehistory

CEQA Guidelines Sec. 15065



Mandatory Findings of Significance (Cont.)

- Project would achieve short-term environmental goals to detriment of long-term goals
- Project has possible cumulative impacts
- Project would cause substantial adverse effects on humans

CEQA Guidelines Sec. 15065

CEQA Guidelines

- No mandatory finding is triggered when:
 - Prior to preliminary review the proponent agrees to mitigation measures/project modifications that avoid any significant effect, and
 - · Clearly no significant effect would occur
- No mandatory finding for a project that could substantially reduce the number or range of a special status species when:
 - Proponent must implement mitigation in HCP or NCCP
 - The HCP or NCCP was subject to an EIS or EIR
 - The mitigation will avoid net reduction or loss, or preserve, restore or enhance sufficient habitat

Negative Declaration

- Basis for "Neg Dec":
- No substantial evidence that project may result in a significant effect
 - Initial Study
 - Supporting studies
 - Other evidence in the record
- Neg Dec is the agency's finding; the initial study documents that finding



Negative Declarations—Two Kinds

- Negative Declaration—project is subject to CEQA but would have no significant impacts
- Mitigated Negative Declaration—any potentially significant impacts can be mitigated to less than significant level
 - Revisions in project plans agreed to by applicant before
 public review
 - No substantial evidence in record of a significant effect of revised project

Basis for MND

Initial Study shows potentially significant impacts, but:

- Revisions in project plans agreed to by applicant before public review would mitigate to below level of significance
- No substantial evidence in record of a significant effect of revised project
 - No substantial evidence that mitigation will be inadequate

CEQA Guidelines Sec. 15070

Negative Declaration Contents

- Project description and name
- Project location
- Name of project proponent
- Proposed finding of no significant effect (Notice of Intent to Adopt ND/MND)
- Copy of Initial Study justifying finding
- For MNDs, mitigation measures included in the project to avoid significant effects—note that mitigation <u>may</u> <u>not be deferred</u> in an MND

CEQA Guidelines Sec. 15071



Process Steps

- Complete Initial Study
- Release proposed ND/IS for review
- Adopt ND or MND
- Approve Project
- Adopt mitigation monitoring program
- File Notice of Determination

Phase 3: The ND/MND Process

Negative Declaration	Time Limitation	
Initial Study prepared	 30 days 	
Mitigation measures identified and agreed upon by project proponent		
Negative Declaration prepared		
Proposed Negative Declaration issued for public notice and review	 20–30 day minimum 	
Comments considered		
Negative Declaration adopted	 180 days 	
Mitigation reporting and monitoring program adopted		
Lead Agency takes action on project	60 days from ND adoption	
Notice of Determination filed	5 days from project approval	
Notice of Determination posted	• 24 working hours from filing	
Responsible agency makes decision on project	180 days from Lead Agency	

Gov. Code Sec. 65950, CEQA Guidelines Sec. 15107

Public Review Period

- The proposed Negative Declaration must be made available for review by agencies and the public
- Local Projects:
 - + 20-day minimum review period
- Projects submitted to the State Clearinghouse
 - 30-day minimum review period
 These include:
 - These include.
 - state agency projects,
 - projects with state responsible or trustee agencies Projects of statewide, regional, or areawide significance
 - olghinoarioo


Recirculation of an ND

- ND must be recirculated if substantially revised such that:
 - A new, avoidable significant effect is identified and mitigation must be added to reduce effect to a less than significant level, or
 - The proposed mitigation measures will not reduce potential effects to less than significant, and new measures are required

CEQA Guidelines Sec. 15073.5

Recirculation of an ND (Cont.)

- Recirculation is not required if:
 - Mitigation measures are replaced with equal or more effective measures
 - New project revisions are added that do not cause new avoidable significant effects
 - New information is added that merely clarifies, amplifies, or makes insignificant modifications to ND

CEQA Guidelines Sec. 15073.5

Notice of Determination for an ND

A Notice of Determination must:

- Identify project and its location
- Describe project
- Indicate date of project approval
- State that project will have no significant environmental effect, or
- State that an MND has been prepared to avoid significant effects



Heads Up—CDFG Environmental Review Fees

- \$1,800 for ND or MND, \$2,500 for EIR
- No fee for NOE filing
- Payment to county clerk or OPR (for state agencies) when NOD is filed (county clerk will request a filing fee)
- Without filing fee or no effect finding, NOD is not accepted and is returned to Lead Agency
- No project is operative, vested, or final until required filing fee is paid
- New State Clearinghouse memo on DFG fees and no effect finding
 - Filing without fees requires justification of no effect
 - Fish and Game Code Sec. 711.4

EIR

- When required: Project may have a significant impact on the environment
- EIR must disclose:
 - project description
 - environmental setting
 - · impacts and mitigations
 - + direct, indirect, cumulative, growth-inducing
 - no-project and other alternatives
- Legal standard: Good-faith effort at full disclosure; perfection not required

Purposes of an EIR

- Inform decision makers and public about a project's significant environmental effects and ways to reduce them
- Demonstrate to public that environment is being protected
- Ensure political accountability by disclosing to citizens environmental values held by elected and appointed officials
- Demonstrate to citizenry that the agency has considered the ecological implications of its action



Who May Prepare a Draft EIR?

- Lead Agency staff
- Another public or private entity
- Environmental consultant under contract to Lead Agency
- Project applicant or project applicant's consultant



CEQA Guidelines Sec. 15084

Activity	
Activity	
Specific Project	Project EIR Joint EIR/EIS (federal agency involvemen Focused EIR (when tiered off Master EIR) Staged EIR
Plan, Policy, or Program	Tiered EIR Program EIR Master EIR General Plan EIR
EIR Already Certified	Supplemental EIR Subsequent EIR Addendum to EIR

Project EIR

- EIR prepared for individual project
 usually means a development project
- Concentrates of impacts of that project
 and cumulative effects of other projects
- Contrasts with Program EIR in that it's not intended to cover larger program or plan



	Tier Study Area	Document	Focus of Document
Tiering	Gotham	General Plan or Program EIR	Jurisdiction-wide setting (MEA/database) Jurisdiction-wide impacts (cumulative) Jurisdiction-wide mitigation measures (policies and programs)
	Tier 2	Community or Specific Plan EIR	Plan area setting Plan area impacts Plan area mitigation guidelines
	Tier 3	Development Project or Infrastructure EIR	Project site setting Project site impacts Project site mitigation guidelines
	CEQA Guide	elines Sec. 15152	









Tiering: Parameters for Later Analysis

- Level of detail in first tier need not be greater than that of program, plan, policy, or ordinance being analyzed
- Analysis may be deferred when sufficient information is lacking at time of first-tier EIR
- Analysis of foreseeable significant effects of future tiers must not be deferred
- Project must be consistent with general plan and zoning
- An ND may be tiered from certified first-tier EIR

CEQA Guidelines Sec. 15152

Program EIRs

May be used for activities that are:

- Linked geographically;
- Parts of chain of planned events;
- Rules, regulations, or plans; or
- Under same agency approval authority, and have similar impacts and mitigation requirements

CEQA Guidelines Sec. 15166

Program EIRs: Process for Subsequent Activities

If subsequent activity is within Program EIR scope

- No new CEQA document required
- Checklist should be used to document determination
- Feasible mitigation measures must be incorporated into activity
- Notice of later activity must indicate reliance on Program EIR
- Later activity must be part of same project analyzed in Program EIR



Program EIRs: Process for Subsequent Activities (Cont.)

If subsequent activity is not within Program EIR scope

- New Initial Study is required
- Either EIR, ND, or MND is prepared



CEQA Guidelines Sec. 15168

PEIR and "Tiering"

- PEIR is foundation for later analysis
- No additional EIR when within scope/same project
- Need for subsequent EIR based on substantial evidence
- Tiered EIR is the later analysis
 The EIR for activities outside the scope
- Need for tiered EIR based on fair argument standard





E	nvironmental Impact Report		Time Limitation
۶	Notice of Preparation sent to responsible and trustee agencies		
	Responses to Notice of Preparation sent to Lead Agency	•	30 days
	Contract for EIR preparation executed	•	45 days from decision to prepare EIR
۶	Preliminary Draft EIR prepared		
۶	Independent review by Lead Agency		
٨	Draft EIR completed and submitted for review		
۶	Notice of Completion filed		
	Public notice and review of Draft EIR	•	30- or 45-day minimum
۶	Public hearing on Draft EIR (optional)		



Phase 3: The EIR Proces	ss under CEQA
Environmental Impact Report	Time Limitation
Written comments received	
Responses to comments prepared	
 Responses sent to commenting agencies (Public Resources Code sec. 21092.5) 	 10 days before decision
 Final EIR certified by Lead Agency (CEQA Guidelines Code sec. 15108) 	 1 year from acceptance
 Lead Agency makes decision on project (Gov. Code sec. 6590) 	6 mo. from Final EIR certification
Findings written and adopted	
Mitigation reporting and monitoring program adopted	
 Notice of Determination filed (Gov. Code sec. 15094) 	 5 days from approval
 Notice of Determination posted (Gov. Code sec. 15094) 	 24 hours from filing
Responsible Agency makes decision on project (Gov. Code sec. 65950)	 180 days from lead agency decision

The Parts of the Process

- Initial Study
- Notice of Preparation
- Scoping
- Draft EIR Review
- Responses to comments
- Recirculation
- Certifying the Final EIR
- Findings



Notice of Preparation (NOP)

- Notifies public agencies of intent to prepare EIR
- Sent to all responsible, trustee, and agencies with jurisdiction by law
- Sent to water providers for certain large projects
- Copy sent to State Clearinghouse for circulation
- Sent to individual or group asking for notice
- May attach Initial Study

NOP Contents

- Minimum contents
 - project description
 - project location and map
 - probable environmental effects
 - contact person at lead agency
 - review period
- May include copy of Initial Study

Scoping Meeting

- Scoping meeting required in addition to NOP when:
 requested by Caltrans, or
 - · project is of statewide, areawide, or regional significance
- Must notify responsible, trustee, agencies with jurisdiction by law
- Must notify individuals or groups filing written request for notice

Public Resources Code Section 21083.9



Draft EIR

- Public Draft EIR must represent "independent judgment" of agency
 - · review admin draft prepared by consultants
 - make changes if necessary
- Draft EIR—a good faith effort at disclosure of environmental impacts

Lead Agency Response to Comments

- Must respond in Final EIR to comments received during DEIR public review period and extensions
- Must make good faith, reasoned responses, not unsupported conclusory statements
- Must consider and may respond to late comments
- Must provide detailed explanation supporting position of significant disputed issues
- Must consider, but not required to respond in writing to late comments

CEQA Guidelines Sec. 15088

Recirculation of a Draft EIR

Required when new information discloses any of the following:

- Significant new impact
- Substantial increase in severity of an impact—unless mitigated
- New feasible alternative or mitigation measure that lessens significant impact but that project proponent declines to adopt
- Draft EIR so fundamentally and basically inadequate and conclusory that meaningful public review and comment were precluded

CEQA Guidelines Sec. 15088.5



Recirculation of a Draft EIR: Response to Comments

- When entire EIR is recirculated:
 - May require reviewers to submit new comments
 - Need not respond to previous comments
 - Must advise reviewers to that effect
 - Must send notice to all previous commenters

Recirculation of a Draft EIR: Response to Comments (Cont.)

- When only a part is recirculated:
 - May request that reviewers comment on revised part
 only
 - Need only respond to comments on:
 - Unrevised portions submitted prior to recirculation Revised portions submitted after recirculation
 - Must send notice to all previous commenters
- Summary required
 - Revised EIR or part must summarize revisions
 - Summary may be attached separately

CEQA Guidelines Sec. 15088.5(f) and (g)

EIR Certification

A Lead Agency must certify that:

- Final EIR has been completed in compliance with CEQA
- Final EIR was presented to decision-making body and reviewed and considered by decision-making body prior to approving project
- Final EIR reflects Lead Agency's independent judgement and analysis





EIR's Role in Decision-Making

 Provide decision makers with meaningful information that will influence project program and design

- · Environmental setting of project
- Impacts, alternatives, and mitigation measures
- Agency and public views on environmental impacts
- Basis for approval or denial of projects
 - Remember: CEQA gives agency no new powers

CEQA Guidelines Sec. 15004

Statement of Overriding Considerations

- Used when approving a project with unavoidable significant impacts
- Includes specific, written statement of reasons supporting approval—economic, legal, social, technological, or other benefits
- Must be supported by substantial evidence in the record
- Should be mentioned in Notice of Determination





- Responsible agency must consult and use Lead Agency CEQA document for decision
- If Responsible Agency finds CEQA document inadequate, it may
 - Sue Lead Agency
 - · Be deemed to have waived objection to adequacy
 - Prepare subsequent EIR if permissible per 15162
 - Can assume Lead Agency role *if* there was no consultation

CEQA Guidelines Sec. 15096



When Is a Subsequent EIR or Supplement to an EIR Required?

- An EIR has been certified for project
- An agency has additional discretionary authority over the project
- One of the following circumstances occur
 - Substantial changes in project would result in new or worsened significant environmental impacts,
 - Substantial changes in circumstances would result in new worsened significant impacts, or

CEQA Guidelines Secs. 15162 and 15163



When Is a Subsequent EIR or Supplement to an EIR Required? (Cont.)

 New information of substantial importance shows the project will have new or worsened significant effects mitigation measures or alternatives previously

infeasible are now feasible, but project proponent declines to adopt them

CEQA Guidelines Secs. 15162 and 15163

EIR Standards of Adequacy

- All required contents must be included
- Objective, good-faith effort at full disclosure
- Perfection not required
- Exhaustive treatment of issues not required
- Minor technical defects not necessarily fatal
- Disagreement among experts acceptable

CEQA Guidelines Sec. 15151

Anatomy of an EIR

- Project description
- Description of existing environmental conditions ("Environmental Setting")
- Impacts—direct and indirect
 - Project-specific (incremental)
 - Growth inducing
 - Cumulative
- Alternatives
- Mitigation measures



What's in the Project Description?

- Statement of project <u>goals and objectives</u>—explains project, also frames alternatives screening and analysis
- Project location
 - Regional map
 - Detailed local map
 - Site boundaries
 - · Listed toxic sites from California EPA

Project Description (Cont.)

- Project characteristics—Specifics depend on nature of project, but in general...
 - Narrative explanation of project concept
 - Proposed structures, infrastructure
 - · Activities and equipment needed to construct
 - Proposed operation, uses, maintenance, etc.
 - Any supporting public services
 - Supported by diagrams/conceptual drawings/plans
- Reasonably foreseeable future phases
 - The description must include the "whole of the action"

CEQA Guidelines Sec. 15124

Project Description (Cont.)

- "Required approvals"
 - · Regulations that apply to project
 - · Permits required
 - Related environmental review and consultation requirements
 - Agencies that will use EIR
 - Helps public understand project as it fits into larger regulatory context—who has oversight? What's the regulatory "safety net?"



What About Alternatives?

- EIR must analyze a <u>reasonable range</u> of <u>feasible</u> <u>alternatives</u> to the project
- Project alternatives should
 - Achieve most of the project goals and objectives
 Avoid or substantially any significant impacts of proposed project
- Project alternatives may include alternative approaches, alternative project sites, or both

CEQA Guidelines Sec. 15126, 15126.6

What About Alternatives? (Cont.)

- EIR must also analyze the <u>No Project Alternative</u>
- Alternatives may be analyzed at lesser detail than project BUT
 - + EIR must identify significant effects and mitigation
 - EIR must compare relative effects of alternatives and proposed project

CEQA Guidelines Sec. 15126, 15126.6

Developing Project Alternatives in an EIR

- Describe project objectives
- Assess project's potential environmental impacts
- Identify a reasonable range of alternatives that:
 - Meet project objectives
 - Substantially lessen one or more significant environmental impacts
 - Are feasible

CEQA Guidelines Sec. 15126.6



Treatment of Alternatives in an EIR ("Alternatives Analysis")

- Explain rationale for selecting alternatives analyzed
- Briefly discuss alternatives that were eliminated from evaluation, and explain why
- Provide a meaningful evaluation, analysis, and comparison of alternatives' impacts to those of proposed project—matrix format recommended
- Evaluate alternative project locations, if necessary (more detail coming up
- Evaluate No Project Alternative (more detail coming up)
- Identify environmentally superior alternative—can't be the proposed project!

CEQA Guidelines Sec. 15126.6

Evaluating the No Project Alternative

- Should include existing and reasonable foreseeable future conditions without project
 - Based on current plans

Consistent with available infrastructure and community services

- Compares impacts of approving proposed project with impacts of not approving it—provides a basis for decision making
- NOTE: No Project Alternative is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to existing environmental setting CEA Guidelines Sec. 15126.5(e)

No Project Heads-Up

 If the No Project Alternative is the environmentally superior alternative,

 EIR must also identify an environmentally superior project alternative

CEQA Guidelines Sec. 15126.6(e)



Environmental Setting

- Existing physical conditions at time of notice of preparation, or time environmental analysis commences, including:
 - Project site description
 - Project vicinity description
 - Regional description
 - · Policy and planning context
- The setting will normally constitute the baseline physical conditions that Lead Agency uses to determine impact significance

CEQA Guidelines Sec. 15125

Environmental Impacts

- EIR must analyze several kinds of effects:
 - Direct effects
 - Reasonably foreseeable indirect effects
 - Growth-inducing effects
 - Cumulative effects

CEQA Guidelines Secs. 15126 and 15130

EIR Must Identify the Following ...

- Proposed project's significant impacts
- Proposed project's significant and unavoidable impacts
- Significant irreversible environmental changes involved in/resulting from project
- Separate discussion is preferred, or a table identifying location of discussions is required



Direct Impacts

- Caused by the project
- Occur at same time and place as project

Examples:

- · loss of habitat due to development
- construction noise impacts
- additional traffic on adjoining streets
- noise/odor/light from operations

CEQA Guidelines Secs. 15064(d), 15358

Indirect Impacts

- Caused by the project
- Occur later in time or removed in distance, but are still reasonably foreseeable
- May include growth inducement and some contributions to cumulative impacts

Examples:

- decline in population of Peregrine Falcon as a result of development in nesting habitat (SoCal)
- population growth as a result of roadway/utilities extension
- increased area traffic congestion as as result of development adding vehicle trips in one area

CEQA Guidelines Secs. 15064(d), 15358

Focusing Impact Analysis

- EIR is to focus on significant environmental effects
 Emphasis in proportion to severity and probability of
 - occurrence
 - Effects that are insignificant and unlikely to occur may be discussed briefly and dismissed
- EIR may minimize discussion of speculative impacts, but must note reasons for finding impact speculative

CEQA Guidelines Secs. 15143 and 15145



Growth-Inducing Impact Analysis

Levels of Inquiry

- How much growth will result from the project?
- Where and when will it occur?
- How do we evaluate secondary impacts of growth?
 Qualitatively?
 - Quantitatively?
- Are impacts significant?
- Can impacts be mitigated?

Growth-Inducing Impact Analysis (Cont.)

Terminology

- Induce vs. accommodate
- Contribute to vs. cause
- Is a project growth-inducing if it accommodates planned growth?
 - + It may be -- if it removes obstacles to growth.

When Is A Project Growth-Inducing?

If project will directly or indirectly:

- Foster economic or population growth of additional housing
- Remove obstacles to growth
- Tax community service facilities requiring new ones, or
- Encourage or facilitate other activities that cause significant environmental effects

CEQA Guidelines Sec. 15126.2(d)



Cumulative Impact Analysis Requirements under CEQA

An EIR must:

- Discuss cumulative impacts when project's incremental contribution is *cumulatively considerable*, as defined in Section 15065(c)
- Reflect severity of impacts and their likelihood
- Focus on cumulative impact to which other projects contribute rather than those projects' non-contributing aspects

CEQA Guidelines Sec. 15130

Cumulative Impact Analysis Requirements under CEQA (Cont.)

- Identify related, contributing projects through list or projection approach
- Summarize effects of related contributing projects
- Reasonably analyze cumulative impacts, recommend feasible mitigation measures for significant cumulative impact
- Results of Communities for a Better Environment:
 "De minimis" is dead! And, avoid ratio approach to determining "considerableness"

CEQA Guidelines Sec. 15130

Cumulatively Considerable Contribution

- Does a cumulative impact exist?
- Does the project contribute more than "1 molecule"?
- The contribution may be rendered less than significant through mitigation (15064(i)(2))
- Contribution isn't considerable if project complies with approved plan or mitigation program (15064(i)(3))
- Contribution isn't considerable when project implements or funds its fair share of cumulative mitigation (15130(a)(3))



Mitigating Cumulative Impacts

- The Great Question how can individual project impacts be mitigated cumulatively?
- CEQA envisions adopting "ordinances and regulations" where possible
- Citywide/areawide approaches
 - Traffic impact fees
 - Stormwater quality regulations
 - Air quality regulations
- Constraints on solutions
 - Jurisdictional boundaries
 - Cost/practicality

Cumulative Impacts: List Approach

- List of past, present, and probable future projects producing related impacts, including those outside control of Lead Agency
- Factors to consider
 - Locations of other projects
 - Jurisdictions of other projects
 - Types of other projects
 - Sizes of other projects





Significance Considerations for Cumulative Impacts

- <u>Remember</u>—a less than significant project impact may be a cumulatively considerable contribution!
- EIR may determine that mitigation measures would render a project's contribution to a cumulative effect "less than cumulatively considerable" (i.e., not significant). EIR must give facts and analysis supporting this conclusion.
- Project's contribution is less than cumulatively considerable if project is required to implement or fund its fair share of mitigation designed to avoid the cumulative impact.

CEQA Guidelines Sec. 15130

Requirements for Mitigation Measure Discussion in EIRs

For each significant impact, Lead Agency must:

- Discuss whether measure avoids or substantially reduces significant environmental effect
- Distinguish measures proposed by project proponents
- Identify responsibility for implementation
- Discuss basis for selecting particular measure
- Discuss significant side effects associated with implementation of each mitigation measure

CEQA Guidelines Sec. 15126.4

What Is a Mitigation Measure under CEQA?

Avoid	Avoid the impact altogether by not taking certain action or parts of an action
Minimize	Minimize impacts by limiting the degree or magnitude of the action and its implementation
Rectify	Rectify the impact by repairing, rehabilitating, or restoring the affected environment
Reduce or Eliminate	Reduce or eliminate the impact over time by preservation and maintenance during the life of the action
Compensate	Compensate for the impact by replacing or providing substitute resources or environments



Five Questions	s for Effective	Mitigation	Measures
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WHY	State the objective of the mitigation measure and why it is recommended
WHAT	Explain the specifics of the mitigation measure and how it will be designed and implemented Identify measurable performance standards by which the success of the mitigation can be determined Provide for contingent mitigation if monitoring reveals that the success standards are not satisfied
WHO	Identify the agency, organization, or individual responsible for implementing the measure
WHERE	Identify the specific location of the mitigation measure
WHEN	Develop a schedule for implementation

Deferring Mitigation Measures

- MND must not defer mitigation
 - Defining mitigation after a future study is not allowed
 - MND must describe mitigation specifically
 - Deferred mitigation can trigger fair argument
- EIR may defer the *specifics* of mitigation measures, but
 - The lead agency must commit to mitigation
 - The mitigation measure must establish performance standards
 - The mitigation measure may provide alternative approaches

Feasibility and "Fit" of Mitigation

- Mitigation must be feasible!
- Feasibility considers legal, economic, environmental, social, and technological factors
- Feasibility also means mitigation measures must be fully enforceable through permit terms or other agreements
- Mitigation must have a nexus to a legitimate government interest
- Mitigation must be roughly proportional to project impacts
- Specific conditions exist for
 - Historical resource impacts
 - School impacts
 - Housing density

CEQA Guidelines Sec. 15126.4







Limits on Mitigation

- Mitigation must be within agencies' powers to impose
 CEQA gives agencies no new powers
- Mitigation must be feasible and "fully enforceable"
- Mitigation is subject to Constitutional limits
 - There must be a nexus between project impacts and the mitigation being imposed
 - Project's share of mitigation must be "roughly proportional" to the project's impact
- There is no mitigation for destruction of a historic building

Mitigation Monitoring and Reporting Requirements under CEQA

Trigger	 Agency adopts a Mitigated Negative Declaration
	 Agency makes findings after preparing an EIR
CEQA Requirement	 Agency must adopt a reporting or monitoring program for any mitigation measures made condition of approval
Provisions for Mitigation Measures	 Certain agencies must provide Lead Agency with performance standards or monitoring programs for impacts they identify
	 Mitigation measure must be made a condition of project approval
	CEQA Guidelines Sec. 15097





Non-CEQA Topics

- SB 18 (Burton)
 - 2004 bill requires cities and counties to involve Native American tribes in planning efforts and to protect cultural sites
 - As originally introduced in 2003, would have amended CEQA; as signed in 2004, does not
- Environmental Justice
 - Required of NEPA analyses under EO 12898
 - Not required under CEQA
- Economic Analysis
 - Unless necessary to consider link between project's economic effects and physical impacts, not required
 - Bakersfield Citizens case describes when it's needed



Appendix B. Addressing Climate Change in NEPA & CEQA Documents



Addressing Climate Change in NEPA and CEQA Documents

Updated August 2007



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Executive Summary

While climate change has been the subject of scientific study, international treaty, and growing public interest and advocacy for over a decade, it has only recently become a subject of mounting attention in environmental impact assessment practice. In addition to a changing level of public awareness, legislative and court action has heightened the need to develop environmental compliance practice in order to fulfill the mandate of federal and state environmental assessment requirements.

Two landmark actions highlight the changing context for environmental compliance.

- On September 27, 2006, the State of California passed into law the Global Warming Solutions Act of 2006, commonly referred to as Assembly Bill 32. This landmark legislation requires the State of California to reduce its carbon emissions by approximately 25% by the year 2020. The Act states that global warming poses a serious threat to the environment of California, and most observers feel that this legislation effectively ends the debate in California as to whether global warming is simply scientific speculation.
- On April 2, 2007, the U.S. Supreme Court, in Massachusetts vs. Environmental Protection Agency, determined that the plaintiffs (a collection of states, cities, and environmental advocacy groups) had standing to sue based on potential harm due to climate change from an increase in greenhouse gas emissions, that greenhouse gas emissions fit within the Clean Air Act definition of a pollutant, and that the Environmental Protection Agency reasons for not regulating these emissions were insufficiently grounded in the Clean Air Act.

The National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require most projects under federal or California agency authority to evaluate their impacts on the environment and present feasible ways to offset their impacts. With growing public concern regarding climate change, with the Supreme Court determination that greenhouse gas emissions fit the definition of a pollutant under the federal Clean Air Act, and with the passage of Assembly Bill 32 in California (along with other court decisions and agency actions), there is a compelling argument that climate change must be evaluated within the context of federal and California environmental impact analysis.

The purpose of this paper is to explore how climate change can be addressed in NEPA and CEQA analyses and to present background on federal and California environmental compliance processes. Regarding the scope of the analysis, climate change impact analyses should address two basic questions:

- How will the project *affect* climate change?
- How will the project *be affected by* climate change?

Various approaches to address these questions are discussed herein, identifying some of the key issues in preparing analyses to address climate change in both NEPA and CEQA documents.

This paper will focus on NEPA and CEQA, although there are other state actions (such as in Massachusetts) that are being taken to require analysis of climate change in state-level

environmental compliance. The approaches presented herein may also be applicable to these other state processes as well. This paper does not focus on the science of climate change, for which the reader is directed to the extensive peer-reviewed reports of the Intergovernmental Panel on Climate Change at http://www.ipcc.ch.

The authors do not intend to claim that NEPA and CEQA are the only or best venues within which to address climate change. Rather, in light of current interest about the proper role of NEPA and CEQA, we offer some suggestions for addressing climate change in NEPA and CEQA analyses.

Introduction

There is broad scientific consensus that humans are changing the chemical composition of our atmosphere. Activities such as fossil fuel combustion, deforestation, and other changes in land use are resulting in the accumulation of trace greenhouse gases (GHGs) such as carbon dioxide (CO_2) in our atmosphere. An increase in GHG emissions is said to result in an increase in the earth's average surface temperature, which is commonly referred to as *global warming*. Global warming is expected, in turn, to affect weather patterns, average sea level, ocean acidification, chemical reaction rates, precipitation rates, etc., which is commonly referred to as *climate change*. The Intergovernmental Panel on Climate Change (IPCC) best estimates are that the average global temperature rise between 2000 and 2100 could range from 0.6° C (with no increase in GHG emissions). Large increases in global temperatures could have massive deleterious impacts on the natural and human environments.¹

To date, there have been no significant environmental regulations enacted in the United States at the national level specifically designed to address climate change. In April 2007, the U.S. Supreme Court determined that the U.S. Environmental Protection Agency (EPA) has the regulatory authority to list GHGs as pollutants under the federal Clean Air Act (CAA) but the EPA has not yet proposed nor adopted any regulations of GHGs to date. Numerous proposals are being considered in the U.S. Congress to regulate GHGs but no legislation has been adopted. Although GHG emissions are currently not addressed in federal regulation, certain state and local governments are passing legislation and adopting action plans to reduce GHG emissions. For example, the State of California recently passed into law the Global Warming Solutions Act of 2006, commonly referred to as Assembly Bill 32 (AB 32), which is designed to significantly reduce GHG emissions generated by California in the short- and long-term. Other states and cities are also adopting action plans to reduce GHG emissions.

Projects that fall under the jurisdiction of the National Environmental Policy Act (NEPA) and/or the California Environmental Quality Act (CEQA) are facing increasing pressure to identify and address climate change within the scope of analysis for proposed projects, possibly requiring projects that contribute to climate change to provide a detailed analysis in Environmental Impact Statements (EIS) and Environmental Assessments (EAs) under NEPA and Environmental Impact Reports (EIRs) and Initial Study/Mitigated Negative Declarations (IS/MNDs) under CEQA. Particularly with regard to CEQA, the number of recent legal challenges based on allegedly inadequate climate change analyses points out that failure to discuss this issue at some level may be an invitation to litigation. Addressing climate change within the scope of the NEPA and CEQA analyses is made difficult by the paucity of explicit regulatory guidance on how to meaningfully apply existing NEPA and CEQA regulations to this evolving and important topic. The purpose of this paper is to discuss climate change from a regulatory framework with a special emphasis on NEPA and CEQA compliance. This paper includes a summary of the landmark California AB 32 legislation, an overview of NEPA and CEQA, possible frameworks for addressing climate change from within NEPA and CEQA, and a summary of relevant decided and pending court cases.

Regulatory Overview

National Environmental Policy Act

For a detailed review of NEPA, readers are referred to *The NEPA Book: A step-by-step guide on* how to comply with the National Environmental Policy Act.⁴ As a courtesy to the reader, a summary of NEPA appearing in Environmental Protection is included below.⁵

A concise piece of federal legislation, enacted in 1970 and referred to as the nation's environmental charter, is the National Environmental Policy Act (NEPA) (42 United States Code 4321 et. seq.). This law established a national environmental policy with goals to protect, maintain and enhance the physical and natural environment and the relationship of people with that environment. NEPA provides federal agencies with a roadmap to environmental decision-making and also influences environmental decision-making on a variety of private sector projects.

NEPA created a staff of personal environmental advisors to the president known as the Council on Environmental Quality (CEQ). The CEQ conducts studies, gathers information and produces annual reports relative to our nation's environmental quality. The CEQ oversees the U.S. Environmental Protection Agency's (EPA) planning and policymaking. The CEQ also oversees compliance with NEPA's environmental impact statement requirements.

Before a major federal action can be approved, it must first assess potential environmental impacts. Major federal actions include new or revised federal agency rules, regulations, policies, plans and procedures. Major federal actions also include permitting of such projects as hydroelectric plants, nuclear reactors and interstate pipelines. Even private sector projects using federal funds or located on federal land must engage in the environmental impact evaluation process.

Basically, when a federal agency is determining whether to approve a proposed action, it should first determine if the action is categorically excluded under NEPA regulations. Categorical exclusions are categories of actions determined by the federal agency as exempt actions because they do not individually or cumulatively have a significant effect on the environment, as long as there are no "extraordinary circumstances" that create the potential for significant effects on the human environment.⁵

Proposed federal actions that may have a significant environmental effect must prepare a concise public document providing sufficient evidence and analysis for determining whether to prepare an EIS or a finding of no significant impact (FONSI). The concise public document is the environmental assessment (EA). The EA serves as a pretest for an EIS or FONSI.⁵

The NEPA Council on Environmental Quality (CEQ) regulations define the term *significantly* in terms of context and intensity (40 CFR 1508.27). Context relates to the particular geography

where the action would take place and if the impact would have a significant effect on the human environment in a local, regional, or broader context. The CEQ regulations list criteria related to the intensity of the action, including the following.

- The degree to which the proposed action affects public health or safety.
- The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
- Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.

If the proposed activity's EA reveals significant environmental effects, an EIS will have to be prepared. The EIS process requires public notice, public comment, and a record of decision on:

- the environmental impact of the proposed activity;
- any adverse environmental effects which cannot be avoided should the proposed activity be implemented;
- alternatives to the proposed activity;
- the relationship between local and short term uses of the environment and the maintenance and enhancement of long term productivity; and
- any irreversible and irretrievable commitments of resources which would be involved in the proposed activity should it be implemented.

The NEPA process is implemented by federal agencies for the projects they undertake, fund, or approve. Most, if not all, federal agencies have adopted specific procedures for implementing NEPA. The CEQ also promulgates guidance on NEPA Implementation.

In an October 8, 1997 memorandum, the CEQ issued draft guidelines on how global climate change should be treated in NEPA documents. The CEQ draft guidance called on federal agencies to consider in NEPA documents both how major federal actions could affect sources and sinks of greenhouse gases and how climate change could potentially influence such actions. The CEQ draft guidance recommended that such analysis be done for programmatic EISs for long-range federal programs, rather than project-level analysis, which the guidance finds "would not find meaningful information in most instances." The 1997 draft guidance was apparently never finalized and is not presently available on the CEQ's website.

Also in 1997, the CEQ released guidance on the assessment of cumulative effects ("Considering Cumulative Effects Under the National Environmental Policy Act, Council on Environmental Quality January 1997"), which mentions global climate change and greenhouse gas emissions

briefly as an example of a cumulative effect. This guidance is available on the CEQ's website at: <<u>http://www.nepa.gov/nepa/ccenepa.htm</u>>.

As described below, despite the lack of explicit NEPA guidance on climate change, several federal courts have ruled in recent years that climate change should be addressed in NEPA documents.

California Environmental Quality Act

For a detailed review of CEQA, readers are referred to *CEQA Desktop: A step-by-step guide on* how to comply with the California Environmental Quality Act.⁶ As a courtesy to the reader, an augmented summary of CEQA prepared by the California Resources Agency is presented below.⁷

The basic goal of the California Environmental Quality Act (CEQA) (Pub. Res. Code §21000 et seq.) is to develop and maintain a high-quality environment now and in the future, while the specific goals of CEQA are for California's public agencies to:

- 1. identify the significant environmental effects of their actions; and, either
- 2. avoid those significant environmental effects, where feasible; or
- 3. mitigate those significant environmental effects, where feasible.

CEQA applies to projects proposed to be undertaken or requiring approval by State and local government agencies subject to the jurisdiction of California. Projects are discretionary activities which have the potential to have a physical impact on the environment and may include the enactment of zoning ordinances, the issuance of conditional use permits and the approval of tentative subdivision maps.

Where a project requires approvals from more than one public agency, CEQA requires one of these public agencies to serve as the lead agency. A lead agency must complete the environmental review process required by CEQA. The most basic steps of the environmental review process are:

- Determine if the activity is a project subject to CEQA;
- Determine if the project is exempt from CEQA, and whether there are any "exceptions" to the exemptions creating the potential for a significant environmental impact;
- Perform an Initial Study to identify the potential environmental impacts of the project and determine whether the identified impacts are significant.

Based on its findings of significance, the lead agency prepares one of the following environmental review documents:

- Negative Declaration if it finds no significant impacts;
- Mitigated Negative Declaration if it finds significant impacts but revises the project to avoid or mitigate those significant impacts;
- Environmental Impact Report (EIR) if it finds significant impacts.

The purpose of an EIR is to provide State and local agencies and the general public with detailed information on the potentially significant environmental effects which a proposed project is likely to have and to list ways which the significant environmental effects may be minimized and indicate alternatives to the project.

CEQA defines a *significant effect* on the environment as a substantial or potentially substantial adverse change in the physical environment. The determination of significance is facilitated by public agencies that develop "thresholds of significance" that are identifiable quantitative or qualitative metrics to determine if an action will have a significant effect on the environment. For example, in its *Guide to Air Quality Assessment in Sacramento County*⁸, the Sacramento Air Quality Management District indicates that if a project results in less than 65 pounds per day of nitrogen oxides (NO_X) emitted into the atmosphere, those NO_X emissions are typically deemed by a lead agency as "less than significant."

CEQA's "fair argument" standard for determining when to prepare an EIR also plays a role in determining when a project may have a significant effect. Fair argument is intended to trigger an EIR in the face of any uncertainty over the significance of a project's impact.

Although several local trial courts have ruled on CEQA cases concerning climate change, and a number of CEQA lawsuits have been filed by appellants including the California Attorney General, to date there are no California appellate or Supreme Court decisions governing the character or extent of climate change analysis required under CEQA. The CEQA Guidelines have not been updated to provide guidance as it relates to climate change.

California Assembly Bill 32

AB 32 was co-authored by Assembly Member Fran Pavley and Assembly Speaker Fabian Nunez and signed into law by Governor Arnold Schwarzenegger on September 27, 2006. The bill is 13 pages in length, focuses on GHG emission reduction goals, and specifies which California agencies are responsible for meeting these goals. There are no new prescriptive air quality regulations in the bill requiring emissions reductions by sector or application. Rather, AB 32 is California's roadmap to GHG emission reduction by listing goals and timelines and giving new authority to existing agencies to meet these goals.

AB 32 begins with the following statement:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

This statement is meant to effectively end the scientific debate in California over the existence and consequences of global warming. The bill recognizes that GHG reduction in California will require similar reductions by other states and countries in order to be meaningful. As such, California's prospective emission reductions specified in AB 32 are an attempt to establish a global leadership role on climate change abatement and to act as a blueprint for other states and nations to reduce their respective GHG emissions. The heart of the bill is the requirement that statewide GHG emissions must be reduced to 1990 levels by the year 2020. The bill requires the California Air Resources Board (CARB) to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions, as specified. The following are the key milestones of AB 32.

- June 30, 2007—Identification of "discrete early action greenhouse gas emissions reduction measures"
- January 1, 2008—Identification of the 1990 baseline GHG emissions level and approval of a statewide limit equivalent to that level. Adoption of reporting and verification requirements concerning GHG emissions
- January 1, 2009—Adoption of a scoping plan for achieving GHG emission reductions
- January 1, 2010—Adoption and enforcement of regulations to implement the "discrete" actions
- January 1, 2011—Adoption of GHG emission limits and reduction measures by regulation
- January 1, 2012—GHG emission limits and reduction measurers adopted in 2011 become enforceable

The bill authorizes the use of market-based compliance mechanisms, which are also known as cap and trade programs. Market-based approaches to GHG emission reduction are currently in use in Europe and have been used in the United States to address acid rain precursors; a GHG cap and trade program is also being implemented in the Northeastern and Mid-Atlantic states as part of the Regional Greenhouse Gas Initiative. There is also specific language to support the use of AB 32 to abate other air quality issues, such as ozone, particulate matter, and toxic air contaminant exposures "to the extent feasible and in furtherance of achieving the statewide GHG emissions limit."

Until CARB finalizes the 1990 emission inventory, most policy makers are using the Climate Action Team Report submitted to the California Governor and Legislature in March 2006 for GHG inventory estimates.² The draft GHG budget was recently presented by CARB on January 22, 2007, and is reproduced here as Figures 1 through 3.³ As shown in Figure 1, California needs to reduce GHG emissions by approximately 25% by the year 2020 to achieve the goals specified in AB 32. As shown in Figure 2, CO₂ represents approximately 83% of California's GHG emissions. Lastly, as shown in Figure 3, the transportation sector is responsible for roughly 40% of GHG emissions, and electric power and industrial processing contribute approximately 20% each.

Considerations in NEPA and CEQA Analysis

Addressing GHG emission in NEPA and CEQA documentation requires familiarity with three key concepts: 1) cumulative impacts, 2) *de minimis* arguments, and 3) constitutional limitations of CEQA (which also apply to NEPA).

A *cumulative impact* refers to an action that, on its own, may not appreciably impact the environment but when viewed in conjunction with other "reasonably foreseeable" actions is significant. For example, the emissions from a single vehicle may not be seen as leading to an
appreciable increase in ambient ozone concentrations, but on the whole, vehicle fleets are a primary source of ozone precursors. CEQA basically requires the agency to assess whether there is a cumulative impact based on past, present, and reasonably foreseeable probable future projects and then determine if the proposed project's contribution to that cumulative impact is *considerable*. Although not as detailed, NEPA's directive is consistent with CEQA's.

Particularly as it relates to CEQA, one should avoid making a "*de minimis* argument" that the proposed project's contribution is not considerable based on the size of the contribution in relation to the size of the cumulative problem. The *de minimis* argument essentially states that if an individual project contributes a relatively small amount relative to an existing environmental problem, the new project should be deemed as not being a considerable contribution to the cumulative impact and, therefore, is less than significant. For example, if a factory only emits 0.0001% of the total NO_x emissions in an airshed, one could argue that the factory is a trivial contribution to the environmental problem and should thus be deemed less than significant. CEQA case law has invalidated the *de minimis* argument, finding that it is contrary to the concept of a cumulative impact (see *Communities for a Better Environment v. California Resources Agency* [2002] 103 Cal.App.4th 98). However, the courts have stopped short of declaring that "the addition of one additional molecule to an existing problem" constitutes a cumulative impact. It should be noted that CEQA case law is not binding for interpretation of NEPA cumulative effects analysis.

The U.S. Constitution, as interpreted by the seminal U.S. Supreme Court cases *Nollan (Nollan v. California Coastal Commission* 483 U.S. 825 [1987]) and *Dolan (Dolan v. City of Tigard* 512 U.S. 374 [1994]), limits the ability of an agency to require mitigation measures through the governmental police powers, including NEPA and CEQA, beyond where there is a direct nexus to the impact and in relation to the size of the impact resulting from that project. This limitation is important when addressing GHG emissions in NEPA and CEQA because it, in effect, states that a mitigation measure cannot require a project to reduce GHG emissions or otherwise address climate change impacts in excess of the emissions created by the project itself. As a result, requiring a project to be carbon-neutral is the most stringent mitigation possible in compliance with constitutional limits, and it is not legal to require that a project remove more GHG emissions than it creates.

Framework for Addressing Climate Change within NEPA and CEQA Environmental Analysis

Overview

At the federal level, there has been no major legislation or regulatory action that clearly states that global warming poses a significant threat to the environment. However, as described below, the U.S. Supreme Court ruling in *Massachusetts vs. Environmental Protection Agency* and other federal court action would support such an argument. Further, CEQ guidance indicates that GHG emissions and climate change should be considered cumulative effects, though the guidance provides no clear direction as to how analysis of climate change should actually be conducted in NEPA document. At this time of transition in NEPA practice, a cautious approach for federal agencies and NEPA practitioners would be to address climate change within NEPA documents and disclose the federal action's relation to GHG emissions and climate change explicitly.

CEQA is not explicitly addressed within AB 32. However, because the bill indicates that "global warming poses a serious threat to ... the environment of California," climate change, and the need to address and mitigate it, immediately leaves the domain of scientific speculation and becomes more of a political and regulatory reality, at least in California. Because a key objective of CEQA is public disclosure of the reasons for agency approval of projects with significant environment effects, it is now difficult to argue that one should not, at a minimum, disclose the contribution to climate change in CEQA documents.

When addressing climate change in NEPA or CEQA documents, one has to address three fundamental questions:

- How will the project *affect* climate change?
- How will the project *be affected* by climate change?
- If the project contributions to climate change are considered a significant impact on the environment, what constitutes feasible "Fair Share" mitigation?

In the most general sense, one can determine whether a project *affects* climate change by determining if the project will alter the earth's radiative budget. Examples of activities that could be considered as changing the earth's radiative budget include, but are not limited to those below.

- Direct emissions of GHG. This is the most straightforward way that a project will affect climate change and the one that most people immediately will think of when addressing global warming. Examples include the construction of a new factory or power plant that emits GHGs. Possibly included would be lifecycle and construction emissions associated with materials used and transported to the construction site as well as direct emissions from the construction equipment.
- Indirect emissions of GHG. This refers to a project that does not directly emit GHGs but is expected to result in increased GHGs as a result of the project. For example, above and beyond the GHG emissions associated with the building of a freeway or the emissions associated with mining and transporting materials to the site, the creation of a new interstate freeway may result in increased vehicles miles traveled (VMT) in the region, which in turn will result in increased emissions of GHGs. Energy use also results in indirect GHG emissions since most power plants emit GHG during energy production and transmission.
- Alteration of sinks of GHG. This refers to the alteration or removal of processes or land uses that uptake or sequester GHGs. For example, because trees sequester atmospheric carbon, clear cutting a forest will remove a GHG sink and thereby accelerate global warming. Another example would be the decision to change a land's use from one type of crop for another with a lower sequestration rate.
- Changes in land albedo (reflectivity). Projects that change the average albedo of land will affect the earth's radiative balance and could affect global warming. Changes in earth's average albedo by the melting of the polar ice caps are expected to have an enormous impact on climate change. To a lesser extent, a project that changes a land parcel's albedo will also affect climate change. For example, a project that requires paving of a large area of land that is primarily ice would accelerate global warming. This is perhaps the most subtle way that a project can affect the radiative budget and will likely be considered a secondary concern to three items listed above since it does not involve changes in GHG emissions or sinks.

The assessment of how a project could contribute to the future GHG emissions is somewhat complicated. An impact analysis under CEQA (and typically also for NEPA) relies on the concept of setting an environmental baseline from which the lead agency determines how a project's proposed environmental effects would impact the environment. For cumulative analysis, the lead agency typically sets a future baseline and determines the cumulative impacts including an analysis of how the project contributes to that impact. However, it may be difficult for the lead agency to set the future baseline for determining a project's contribution to GHG (and global climate change). An example might be where a project is proposed to add housing to an area. These houses would accommodate people who would otherwise live somewhere else, were it not for the project. It may be difficult to attribute the cumulative impact to the project where that future population increase was part of the future cumulative baseline, without the project. Some analysis may be necessary to show if there is a net increase or decrease in the GHG emissions related to locating the population at the project location as compared to somewhere else.

In addition to the determination of how a project will contribute to climate change, one may also have to address how a project will be *affected* by potential changes in climate. Because an analysis of the no-project baseline is required in many EIRs/EISs, one must consider the possibility that the future will be affected by climate change. Examples of expected changes due to the global warming include:

- Change in water availability and quality.
- Increase in the frequency and severity of extreme weather events such as storms, heat waves, and flooding.
- Changes in cloud cover and rainfall patterns.
- Increases frequency and severity of ozone exceedances due in part to changes in photochemistry.
- Sea level rise.
- Increased intrusion of seawater into estuaries due to sea level rise.
- Other effects.

For example, if an endangered species nests in a coastal area, development of land near the coastal area may have to account for anticipated rises in sea level that would effectively push the hypothetical nesting area inland. Determining how climate change may affect a project may be inherently difficult given the speculative nature of many potential effects when applied to a geographically specific area.

Nuts and Bolts—What to Put in Your NEPA and CEQA Documents

Projects that Affect Climate Change

In California, there are no statewide significance criteria or approved mitigation methods concerning GHG emissions. In the absence of regulatory guidance, and prior to the resolution on various lawsuits germane to this topic, CEQA documents will address GHG emissions on a case-by-case basis using ad-hoc methods and individual agency judgment.

On the federal level, there is a similar lack of adopted threshold criteria or approved mitigation methods. Although several federal court decisions support the argument that climate change must be discussed in NEPA documents, there is no guidance on what levels of impact would result in a determination that a project has a significant effect on the environment overall. In this interim, NEPA documents will address GHG emissions and climate change on a case-by-case basis using individual agency judgment.

The remainder of this section explores the various methodologies that could be used to address climate change in the absence of regulatory guidance and/or legal precedent. Options are presented in order of increasing level of effort to implement. These approaches are discussed in the context of a program or project that does contribute GHG emissions.

Approach 1. Do Not Address GHG Emissions or Climate Change

This approach is effectively the continuation of the prior status quo wherein GHG emissions and climate change were rarely mentioned in NEPA and CEQA documents. Because it may be difficult to determine how certain projects would contribute to climate change and what the overall impacts would be based on that contribution, some lead agencies have determined it to be speculative to attempt to analyze a project's contribution to climate change and have included no analysis in their documents. Obviously, this approach requires the least amount of effort, but it is possible that the omission of a climate change discussion on a major project will result in critical remarks during the comment period if the underlying program or project can be shown to result in a net increase in GHG emissions. If legal challenge is brought, lack of consideration may affect ability of a public agency to defend itself if the administrative record is silent as to why the agency considered the impact of the program/project to be speculative as it relates to climate change. Thus, if the agency determines that project effects on climate change are speculative it must explain how it reached that conclusion in the project public record.

Approach 2. Discuss Climate Change Qualitatively, With No Significance Conclusion

Given the changing NEPA and CEQA context, most documents will likely have to address climate change in general terms. This approach would, at the minimum, meet directives related to disclosure of potential impacts but would not attempt to make significance determinations or to define appropriate mitigation for the identified impact. Lacking quantification of impact, it may be difficult to determine a project's fair share of potential mitigation, but with no significance determination, there would be no mandate (under CEQA) to adopt such mitigation. This approach would likely be based on an argument that there is currently a lack of guidance on how to perform a climate change analysis within NEPA and CEQA, and thus it is appropriate to restrict the discussion to a qualitative discussion. This approach would also cover potential climate change impacts (e.g., potential sea level rise for coastal development) on the project qualitatively, as feasible.

An example of this approach is the EIR prepared by San Bernardino County for its General Plan Update. The EIR discussed climate change and the relation of development with the General Plan Update to GHG emissions, but did not quantify those emissions nor make a significance conclusion, citing "the lack of any methodologies or significance thresholds that can be applied in determining whether the impacts of the General Plan revision will be significant in terms of greenhouse gas emissions or climate change." As described below, the California Attorney General filed suit to challenge the adequacy of this EIR.

Approach 3. Discuss Climate Change Quantitatively, With No Significance Conclusion

Similar to Approach 2, this approach would not attempt to address significance criteria or mitigation, but would attempt to quantify GHG emissions, where feasible, and would attempt to assess climate change impacts on projects through quantitative methods (again where feasible). In this approach, a quantitative analysis of how a project would increase GHG emissions would be performed and potential climate change impacts would be discussed. Where reliable predictions of climate change effects are available, such as with sea level rise, such changes would also be taken into account in the analysis of project effects. The significance of these impacts would not be addressed and no significance conclusion or mitigation be made or adopted. It is critical that one documents that there is a lack of regulatory guidance for this approach to be sound.

Approach 4. Discuss Climate Change Quantitatively, Apply a Net Zero GHG Emission Threshold, Determine Significance and Identify Mitigation

This approach would quantify effects as feasible, apply a zero threshold for GHG emissions, and identify feasible mitigation. In this approach, a quantitative analysis of project GHG emissions, as well as feasible analysis of climate change effects on the project, would be performed and discussed. These impacts would be determined significant if they result in GHG emissions on the theory that *any* increase greater than zero is significant. Feasible mitigation to reduce the project's GHG emission contribution would be discussed, but the impact would most likely be determined unavoidable unless the project's contribution could be reduced to zero. At present, it will not be feasible to mitigate most project contributions to zero based on direct mitigation. Therefore, to meet the zero threshold criteria, one must use offset mitigation in the form of GHG emission credits derived from offset projects or through "cap and trade" programs.

The Marin County General Plan Update Draft EIR used a significance threshold that stated that if GHG emissions exceeded existing levels, a significant impact would occur, which is in essence a zero threshold above baseline. The Draft EIR concluded that even with implementation of the Marin County Greenhouse Gas Reduction Plan (a plan identifying a range of actions the County could take to reduce emissions overall), it could not be concluded that GHG emissions would not still increase over current levels and thus a significant unavoidable impact could occur.

A variant on this approach has been applied by several regional transportation agencies in California. Orange County Transportation Agency found in the EIR for its long-range transportation plan that their project would reduce vehicle miles traveled compared to no project conditions and thus would lower GHG emissions, but did not quantify the actual GHG emissions. The San Joaquin Council of Governments conducted quantitative analysis of vehicle GHG emissions for their EIR associated with their regional transportation plan. The regional transportation plan included a mix of infrastructure investments and other programs over an extended period and included roadway congestion improvements, transit projects, and transportation management systems. The EIR found that vehicle GHG emissions with the implementation of the plan were less than the vehicle GHG emissions associated with the noproject conditions. GHG emissions were identified as increasing substantially compared to current levels, but the agency determined that land use decisions about growth were the causative agent for increased traffic and that the true comparison of project consequences for regional transportation plan should be between no-project and project conditions, not between baseline and project conditions. Thus, the program EIR concluded that the plan would not contribute to increased GHG emissions nor result in any associated significant impacts on the environment related to climate change.

Approach 5. Discuss Climate Change, Apply a Non-Zero Significance Criteria, and Identify Mitigation

This approach would include a quantitative analysis of project GHG emissions and a determination as to whether these changes are significant based on a quantitative threshold. If the threshold is greater than zero, the lead agency must determine the baseline for the future cumulative scenario, significance criteria, and mitigation methods for this approach. Until legal precedent, regulatory guidance, or professional consensus establishes accepted methodology and practice, this will be on an ad hoc basis.

Both qualitative and quantitative approaches to determining significance criteria can be employed.

A qualitative approach could be used when the project is in an area with some local government guidance on how to address climate change. For example, Marin County and San Francisco are two California counties that currently have a greenhouse gas action plan. These plans do not specifically mention CEQA or NEPA, but they do list various measures that the counties plans to employ to achieve GHG emissions reduction. It may be argued that projects that implement all appropriate actions listed in the jurisdictional reduction plan would not have significant impacts. This qualitative approach might obviate the need to make quantitative calculations of GHG emissions while still conforming to a jurisdiction's reduction plan.

A quantitative approach would require the determination of the GHG emissions associated with the project and various project alternatives. The project emissions would then be compared to a threshold of significance and potentially mitigated to a less-than-significant level. Although time consuming, there are adequate tools available to reasonably determine most projects' GHG emissions. The quantitative effect of some mitigation measures, such as requiring solar panels on new homes, will be relatively easy to quantify, whereas other mitigation measures, such as encouraging telecommuting, will require a more subjective analysis.

Perhaps the most challenging aspect of this approach is the determination of a significance threshold greater than zero. One might consider the AB 32 goal of reducing 2020 GHG emissions in California by approximate 25% compared to "business as usual" emissions as a model to identify a significance threshold. Using this concept, a lead agency would quantify GHG emissions for a project following (unmitigated) "business as usual" approaches and then would apply mitigation measures that would reduce emissions by 25%. However, even if all new development were to follow this approach, there would still be substantial net increases in GHG emissions compared to existing levels. When considering that climate change is a cumulative effect, this approach rests on these key premises: (1) other new development is also being required to seek similar reductions; (2) other reduction strategies are being implemented that will

reduce the emissions level of existing development; and (3) the balance of mitigated new development and less emissions from existing development will reach the overall reduction goal.

Potential Mitigation Measures

Mitigation measures to offset or reduce project emissions are likely to be project specific. Some of the project measures that could be adopted are listed below. This is a partial list, as there are myriad opportunities to reduce energy use, transportation emissions, and other direct and indirect sources of GHG emissions, though only certain mitigations strategies will likely apply to any specific project or planning effort.

- For buildings, require energy-efficient design such as that encapsulated in the Leadership in Energy and Environmental Design (LEED) Green Building Ratings. LEED standards are widely recognized benchmarks for the design, construction, and operation of energyefficient commercial and residential buildings (energy efficiency is only part of LEED; a big part of the rating is also indoor air quality).
- Require incorporation of transit into project design through considerations of siting, location, and transit linkages.
- Require vehicle-reduction measures through carpooling, public transit incentives, and linkages or electric shuttle service to public transit as well as local and regional pedestrian and bike trails.
- Require energy-efficient retrofit of existing building stock to offset increased energy demands of new buildings.
- Require purchase of energy-efficient appliances and office equipment (Energy Star compliant, etc.).
- Promote waste reduction measures and recycling (reduces cost to transport and dispose waste and energy associated with product manufacture).
- Require fleet vehicles to be low-emissions vehicles (high-mileage, hybrid, electric, etc.).
- Incorporate on-site renewable energy production (such as solar installations on building rooftops), waste heat capture (for industrial projects to provide process and/or building heat), and water reuse.
- In planning, promote mixed-use, compact, and higher-density development to reduce trip distance, promote alternatives to vehicle travel, and promote efficiency in delivery of services and goods.

Possible non-project-related mitigation could include the purchase carbon offset credits from an existing carbon trading markets (such as the Chicago Climate Exchange) or purchase credits from future market-based systems (such as what may be developed in California through implementation of AB 32).

While NEPA requires the identification of mitigation measures it does not require the adoption of mitigation measures unless agency-specific NEPA procedures require their adoption or the agency commits to implementing them in a Record of Decision.

CEQA requires the identification of mitigation measures but does not require that all significant impacts be mitigated to less-than-significant values for a project to be approved, if it can be shown that there is no feasible mitigation or alternative to the significant unavoidable impact. Lead agencies are required to adopt a statement of overriding considerations as to why the project should still be approved, notwithstanding the significant and unavoidable impact, but must make findings demonstrating that there are no feasible mitigation measure or alternatives which would reduce the impact to a less-than-significant level.

Projects Affected by Climate Change

For projects that do not *affect* climate change but are *affected by* climate change, the requirements for analysis in NEPA and CEQA documents require more complex consideration. Effects that can be reasonably identified based on available evidence, such as rises in sea level and changes in snow pack, are more amenable to analysis, but the extent to which climate change effects on a project that cannot presently be identified on a geographic basis (such as the effect on changing habitat conditions for threatened and endangered species) need to be addressed is uncertain. A number of NEPA and CEQA documents that the authors are involved in have, for example, taken into account estimates of future sea level rise (that consider the effect of global warming) when considering potential flooding and habitat effects for several coastal projects.

It is expected that federal and California agencies will, in time, canonize likely consequences of climate change that fall under its purview. For example, it is expected that the California Department of Water Resources will likely formalize a list of foreseeable water resource and water quality issues associated with varying degrees of climate change. As federal and state agencies and scientific studies identify the ability to identify climate change effects on a more specific geographic basis, they should be used to determine to what extent a project is affected by climate change. In the short term, when federal and California departments have yet to issue guidance, a lead agency must rely on its own interpretation of the ability to engage in non-speculative analysis.

One approach to addressing projects affected by climate change could be to incorporate a range of climate change predictions (including the most conservative) into the no-project baseline. Consider a project that would create a new industrial plant that discharges wastewater into a nearby lake. To determine the possible impacts of the discharge on the water body, one has to characterize the baseline future condition of the lake for the dates that the plant will be in operation. If climate change may potentially change the depth of the lake within the foreseeable future, one could consider the most conservative (e.g. shallow) lake depth for baseline analysis.

Contrasting NEPA and CEQA Climate Change Approaches

NEPA and CEQA have fundamental differences in their objectives and approaches that result in differences in how they examine climate change.

NEPA is concerned primarily with informing agencies and the public of the environmental consequences of a proposed project or action. NEPA requires the integration of other federal agencies' regulatory processes, and the reconciliation of environmental issues within the NEPA process. A NEPA agency will prepare an EIS when an action will have a significant adverse effect overall, but the EIS is not necessarily required to disclose the significance of the individual

effects (biology, air quality, etc.) of the project and thus some federal lead agencies may analyze climate change effects but decide not to determine the specific significance of project impacts related to climate change. NEPA does not require the EIS to include mitigation for the project's effects beyond those required by other federal agencies pursuant to other regulatory processes (such as the CAA). Prior to the U.S. Supreme Court ruling in *Massachusetts vs. Environmental Protection Agency*, the EPA did not consider GHG emissions as "pollutants" under the CAA. With the court ruling, it is possible that the EPA may regulate GHG emissions now or in the future; if it does, then mitigation may be applied in the NEPA process through the authority of the CAA. As noted above, the CEQ does not have explicit guidance on how to address climate change in NEPA, though its general guidance on cumulative effects is suggestive that climate change should be addressed in NEPA documents. In essence then, NEPA requires that a "hard look" at environmental effects be made, but not that the project's effects be mitigated unless other regulatory mandates apply.

CEQA, on the other hand, is based on the premise that a lead agency must examine the project to determine whether it may result in an adverse effect on the environment, determine the significance of that effect, and adopt feasible and fully enforceable mitigation measures whenever feasible. CEQA review centers largely on the lead agency. Although CEQA requires the review of draft documents by other agencies and the public, it does not require the integration of other agencies' permitting or review processes as part of the CEQA process or mitigation. Thus, determinations about significance, feasible mitigation, and alternatives as they relate to climate change effects ultimately rest with the lead agency. However, CEQA requires that those determinations must be founded on substantial evidence and those determination can be subject to legal challenge.

Reading the Tea Leaves: Pending Climate Change Court Cases That May Affect NEPA and CEQA

Addressing climate change within the NEPA and CEQA processes is currently in a transitional period. Until NEPA and CEQA regulations are modified to explicitly address climate change, guidance on how projects should address climate change is likely to be driven by litigation. In this section, federal and state court decisions and pending cases that may influence how climate change is to be addressed in the NEPA and CEQA processes are presented.

Federal Court Cases

Massachusetts vs. Environmental Protection Agency

Twelve U.S. states and cities (e.g., New York and California), in conjunction with several environmental organizations (e.g., Greenpeace, Sierra Club, and Natural Resources Defense Council), collectively sued to force the EPA to regulate GHGs as a pollutant pursuant to the CAA. The petitioners contended that the CAA gives the EPA the necessary authority, and the mandate, to address GHGs in light of the scientific evidence on global warming. The EPA contended that it does not have the regulatory power to address GHGs, and even if it did it would choose not to. Pivotal to this case was the exact definition of an air pollutant as stipulated in the

CAA. The petitioners claimed that CO_2 is a pollutant and therefore must be regulated by the EPA. EPA claimed that CO_2 is not a pollutant and thus it has no ability to regulate it via the CAA.

The U.S. Supreme Court ruled in April 2007 that the plaintiffs had standing to sue (based on potential harm from climate change that could be influenced by regulation of GHGs), that GHGs fit within the CAA's definition of a pollutant, and that the EPA's reasons for not regulating GHGs were thus insufficiently grounded in the language of the CAA. The court found that, "...*the harms associated with climate change are serious and well recognized.*" The court found that EPA's "... *refusal to regulate greenhouse gas emissions presents a risk of harm to Massachusetts that is both 'actual' and 'imminent...*" Moreover, the court believes that action by EPA could reduce the risk of such damage, and the court "...*attaches considerable significance to EPA's espoused belief that global climate change must be addressed.*"

Border Power Plant Working Group v. Department of Energy

Plaintiffs challenged a Department of Energy (DOE) FONSI supporting a decision to grant rightsof-way for transmission lines to connect new power plants in Mexico to the U.S., alleging that an EIS should be prepared in order to analyze the impacts of new CO_2 emissions. DOE argued that the power plants would operate without the transmission lines and thus the emissions were not foreseeable project impacts, and need not be analyzed. The U.S. District Court (Southern District of California) ruled in May 2003 that a portion of the new power plants were intended to produce power for export to the United States and would not operate without the transmission lines and so analysis of the GHG emissions from these plants is required under NEPA. Subsequent to the ruling, DOE conducted a cursory assessment (totaling three paragraphs) of the emissions and summarily dismissed them as negligible.

Friends of the Earth vs. Mosbacher

Friends of the Earth, along with the cities of Oakland, Arcata, Santa Monica, and Boulder, alleged that 32 billion dollars worth of oil and other fossil fuel projects under the purview of the Oversees Private Investment Corporation (OPIC) failed to address climate change, which they claim is required by NEPA. The U.S. District Court (Northern District of California) ruled in March 2007 regarding motions for summary judgment. Relative to climate change, the court found that "it is undisputed that these projects do emit GHGs. Further, based on the statements in their climate change reports regarding the effects of GHGs on climate change, it would be difficult for the Court to conclude that Defendants have created a genuine dispute that GHGs do not contribute to global warming." However, the court was unable to determine whether the alleged actions would have gone forward without OPIC/Export-Import Bank participation and thus did not determine if the defendants were a legally relevant cause of the alleged effects on the environment. The conclusion of this ruling would support an argument that climate change does need to be analyzed under NEPA when the federal agency is a "legally relevant" cause of increased GHG emissions.

Mayo Foundation vs. Surface Transportation Board

The plaintiffs asserted that new and upgraded rail lines would result in increased supply of coal and thus would increase pollutant emissions and degrade air quality. The Surface Transportation Board claimed that all relevant pollutants were regulated by the CAA under which rules the

emissions were found to be not significant. However, the U.S. Court of Appeals, Eighth District, disagreed in its 2003 ruling, noting that carbon dioxide is not regulated under the CAA, and the lack of analysis with respect to increased coal consumption was "irresponsible." Following the ruling, the Surface Transportation Board published a supplemental EIS that concluded that increases in coal consumption would be minor and thus that increase in emissions would not be significant. The plaintiffs appealed the supplemental EIS analysis in 2006; this suit is pending at the Eighth District.

Center for Biological Diversity vs. National Highway Traffic Administration

The plaintiffs assert that National Highway Traffic Administration violated the Energy Policy and Conservation Act and NEPA by ignoring greenhouse gas emissions and global warming when setting the fuel-economy standards for model year 2008-2011 SUVs and pickup trucks. The case was heard in May 2007 at the U.S. Court of Appeals, Ninth Circuit.

California Court Cases

The following CEQA lawsuits have been filed and/or decided in trial courts in California in the last two years. No California appellate or Supreme Court cases on climate change issues related to CEQA are pending at this time. Therefore, there are not yet any precedents from the Courts that would clarify how CEQA is to be applied to climate change.

State of California vs. San Bernardino County

In April 2007, the Attorney General of California challenged the EIR for the San Bernardino County General Plan Update, alleging that the analysis of GHG emissions and climate change was inadequate. After San Bernardino County issued its CEQA analysis for the General Plan Update, both the State and several environmental groups sued, claiming that the County violated CEQA by failing to assess how the substantial development anticipated by the plan would contribute to climate change and by failing to adopt measures to mitigate the climate change impacts of future development in the County. The State also alleged that the County failed to assess how the significant population growth predicted in the land use update and the concomitant increase in GHG emissions will impact the State's ability to meet the GHG reduction targets mandated in California's GHG emission reduction legislation, AB-32. This case is pending at the San Bernardino County Superior Court.

Center for Biological Diversity v. San Bernardino County

In March 2007, the plaintiff alleged that San Bernardino County should have assessed GHG emissions in the CEQA document associated with the permit issues for a commercial compost facility. This case is pending at the San Bernardino County Superior Court.

Center for Biological Diversity and Sierra Club v. City of Desert Hot Springs et al.

In January 2007, plaintiffs challenged the City of Desert Hot Springs' EIR for the Palmwoods Specific Plan/Project involving 2,700 new homes, commercial development, a hotel and a golf course alleging, among other aspects, that the project will contribute to global warming and that the EIR failed to analyze GHG emissions and climate change. This case is pending at the Riverside County Superior Court.

Center for Biological Diversity vs. City of Banning

In November 2006, the plaintiff challenged the City of Banning's EIR for the 1,500-home Black Bench residential development, charging that the project will contribute to global warming, air pollution, and other environmental harm and that the EIR ignored the project's GHG emissions, which plaintiff asserts would be a major new source. This case is pending at the Riverside County Superior Court.

Natural Resources Defense Council vs. Reclamation Board

The plaintiff challenged the failure of the EIR to consider the impacts of climate change on the project. The challenge related to the California Reclamation Board's approval of fill and encroachment permits for a residential development in California's Sacramento–San Joaquin Bay Delta near Lathrop. The petitioners argued that data made available after certification of the project's EIR indicated that sea-level rise due to global climate change would result in worse impacts than disclosed in the EIR.

The Sacramento Superior Court ruled in April 2007 that information about climate change was available at the time of project approval and thus the plaintiff had not shown that the potential for climate change impacts constituted significant information and thus determined that supplemental review was not needed.

American Canyon Community United for Responsible Growth et al. v. City of American Canyon et al.

Plaintiffs alleged that the passage of AB-32 constituted new significant information and that supplemental environmental review was necessary. The Napa County Superior Court ruled in May 2007 that AB 32 is not new significant information and that supplemental review was not needed.

Conclusions

We are currently in a period of transition within the federal and California regulatory community with regards to climate change and NEPA and CEQA compliance.

With the U.S. Supreme Court ruling in *Massachusetts v. Environmental Protection Agency*, the highest court in the nation has established that plaintiffs have standing in federal court based on potential harm from climate change and that greenhouse gases can be regulated under the CAA. Other federal court rulings support the argument that climate change must be analyzed within NEPA documents, but do not provide any direction as to what that analysis must consist of to satisfy NEPA requirements. The CEQ has not developed any specific guidance on climate change and NEPA. Thus, the determination of what constitutes a "hard look" at climate change in NEPA documents remains to be defined by future federal agency action, federal court decisions, and professional practice as influenced by federal agencies, professionals, and advocacy groups.

With the passage of California's AB 32, the issue of climate change has moved from scientific debate into reality, at least as far as the California legislature and the current California administration is concerned. AB 32 is essentially a roadmap and timeline of how climate change will be addressed in California. Consequently, it does not issue any new explicit regulations or guidelines for the environmental analysis of new projects under CEQA. However, AB 32 does give great credence to the argument that climate change should be addressed during the CEQA process. Exactly how climate change should be addressed, what constitutes adequate analysis, how significance is determined, what constitutes feasible mitigation, and what required findings should be under CEQA will be the debate that California agencies, environmental professionals, the courts, and advocacy groups will be engaged in for the foreseeable future.

Jones & Stokes Climate Change Focus Group

For over 35 years Jones & Stokes has been a leader in NEPA and CEQA compliance; environmental, natural resource, and transportation planning; and management consulting services. Jones & Stokes developed its Climate Change Focus Group (CCFG) to provide guidance on how to best address climate change as part of the NEPA and CEQA processes. The CCFG is a multidisciplinary team of NEPA and CEQA specialists in fields including air quality, water resources, natural resources, transportation, ports and goods movement, energy and public utilities, and land use planning. Please visit the CCFG website at

<www.climatechangefocusgroup.com> to see how Jones & Stokes can help you address climate change in your environmental documents and integrate climate change considerations into your project planning.

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Figure 1. California's GHG Emission Inventory

Note: The blue bars represent the business as usual emission inventory with no climate change regulations. To have the year 2020 emission equal those of 1990, approximately 174 Million Metric Tons of CO2 Equivalent GHG emissions will have to be reduced³.

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For more information, visit: www.climatechangefocusgroup.com

Appendix C. Organizing and Maintaining the Administrative Record



IDENTIFICATIONS Jones & Stokes NVIRONMENTAL UPDATE July 2003

An update and explanation of environmental laws

Organizing and Maintaining the Administrative Record

Introduction

The recent decision in *Protect Our Water v.* County of Merced (03 C.D.O.S. 6067 July 9, 2003, ____ Cal. App. 4th ____) highlights the importance of maintaining a well-organized administrative record for projects subject to the California Environmental Quality Act (CEQA). In that case, the Court of Appeals gave the plaintiffs a major victory, primarily because of the inadequacy of the administrative record.

The court criticized both the County of Merced for failing to include important documents in the administrative record, and the litigants for failing to properly prepare the record for judicial review. The frustrated court literally could not locate the County's findings for the project in the administrative record. The court's anger was clearly evident by its unusual recitation of what it called the three immutable rules of appellate practice:

- 1. "Take great care to prepare a complete record."
- 2. "If it is not in the record, it did not happen."
- 3. "When in doubt, refer back to rules 1 and 2."

Why is the administrative record important?

When there is litigation pertaining to CEQA, a court's review is limited to the "whole of the record" that was before the decision-makers. The court relies on the record to reconstruct the activities and thought processes of the lead agency and to examine the evidence supporting the agency's decision.

Only in rare and unusual circumstances will a court consider evidence that is not part of the

administrative record. Therefore, a well-organized administrative record helps to guide the court to its decision. A poorly organized or incomplete record tends to obscure the decision-making basis and alienate the court. as it did in this case.

Fortunately, CEQA provides guidance on what constitutes the administrative record. Pursuant to Public Resources Code Section 21167.6. the record includes all of the following items:

(1) All project application materials.

(2) All staff reports and related documents prepared by the respondent public agency with respect to its compliance with the substantive and procedural requirements of this division and with respect to the action on the project.

(3) All staff reports and related documents prepared by the respondent public agency and written testimony or documents submitted by any person relevant to any findings or statement of overriding considerations adopted by the respondent agency pursuant to this division.

(4) Any transcript or minutes of the proceedings at which the decision-making body of the respondent public agency heard testimony on, or considered any environmental document on, the project, and any transcript or minutes of proceedings before any advisory body to the respondent public agency that were presented to the decisionmaking body prior to action on the environmental documents or on the project.

(5) All notices issued by the respondent public agency to comply with this division or with any other law governing the processing and approval of the project.

(6) All written comments received in response to, or in connection with, environmental documents prepared for the project, including responses to the notice of preparation.

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(7) All written evidence or correspondence submitted to, or transferred from, the respondent public agency with respect to compliance with this division or with respect to the project.

(8) Any proposed decisions or findings submitted to the decision-making body of the respondent public agency by its staff, or the project proponent, project opponents, or other persons.

(9) The documentation of the final public agency decision, including the final environmental impact report, mitigated negative declaration, or negative declaration, and all documents, in addition to those referenced in paragraph (3), cited or relied on in the findings or in a statement of overriding considerations adopted pursuant to this division.

(10) Any other written materials relevant to the respondent public agency's compliance with this division or to its decision on the merits of the project, including the initial study, any drafts of any environmental document, or portions thereof, that have been released for public review, and copies of studies or other documents relied upon in any environmental document prepared for the project and made available to the public during the public review period or included in the respondent public agency's files on the project, and all internal agency communications, including staff notes and memoranda related to the project or to compliance with this division.

(11) The full written record before any inferior administrative decision-making body whose decision was appealed to a superior administrative decision-making body prior to the filing of litigation. Public agencies must remember that, in addition to their own files, the administrative record may also include files maintained by their consultants and documents in the possession of responsible agencies, trustee agencies, or other agencies involved in a project.

Given that all CEQA decisions are subject to legal action, lead agencies must take the administrative record seriously, especially for controversial projects that are likely to lead to litigation. The *Protect Our Water* decision clearly illustrates what can happen when the administrative record is not well managed.

To avoid problems with an inadequate or poorly organized record, every Lead Agency should consider developing a standardized *Administrative Record Protocol* that establishes a consistent, uniform approach to this critical aspect of CEQA practice.

The court's words about why it agreed to publish the decision summarizes the importance of the case:

"We publish not because the merits of this case warrant public proclamation but because we have observed a pattern of CEQA cases with poorly prepared records making review difficult, if not impossible. We iterate to anyone who will listen: CEQA has very specific requirements regarding what findings must be in the record. Do not ignore the requirements or, like these parties, you will find yourself in the unenviable position of having your judgment reversed and being forced to start over at great public and personal expense."

Although this decision arose in a CEQA lawsuit, the message is important for public agencies involved in any type of administrative decisionmaking: throughout the field of administrative law, the administrative record is the cornerstone of judicial review.

For more information, please contact Terry Rivasplata (TRivasplata@jsanet.com) or Ken Bogdan (KBogdan@jsanet.com) in our Sacramento office at 916/737-3000.

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Appendix D. Acronyms and Abbreviations



Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACHP	Advisory Council on Historic Preservation
ADID	Advanced Identification
AEP	Association of Environmental Professionals
af	acre-foot
AFC	application for certification
APCD	air pollution control district
AQMD	air quality management district
APA	American Planning Association
APA	Administrative Procedures Act
APE	area of potential effect
ARB	California Air Resources Board
ARNI	Aquatic Resource of National Importance
BA	biological assessment
BACT	best available control technology
BATAP	best available technology and administrative practices
BAY-DELTA	San Francisco Bay/Sacramento-San Joaquin River Delta
BCDC	San Francisco Bay Conservation and Development
	Commission
BGPA	Bald and Golden Eagle Protection Act
BLM	U.S. Bureau of Land Management
BMP	best management practice
BO	biological opinion
Cal/EPA	California Environmental Protection Agency
CALFED	California Governor's Water Policy Council and Federal
	Ecosystem Directorate
CALFED	CALFED Bay-Delta Program
Caltrans	California Department of Transportation
CCA	California Coastal Act
CCAA	California Clean Air Act of 1988 or Candidate Conservation
	Agreements with Assurances
CCC	California Conservation Corps
CCC	California Coastal Commission
CCMP	California Coastal Management Program
CCR	California Code of Regulations
CDC	California Department of Conservation (see also DOC)
CDF	California Department of Forestry and Fire Protection

CDMG	California Division of Mines and Geology (now called
	California Geological Survey)
CDP	Coastal Development Permit
CDPR	California Department of Parks and Recreation
CEC	California Energy Commission
CEQ	U.S. Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CITES	Convention on International Trade in Endangered Species of
	Wild Fauna and Flora
CIWMB	California Integrated Waste Management Board
CNEL	community noise equivalent level
CNPS	California Native Plant Society
COA	coordinated operations agreement
COG	council of governments
Corps	U.S. Army Corps of Engineers (see also USACE)
CPUC	California Public Utilities Commission
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DA	Department of the Army
dB	decibel
dBA	decibels above reference noise, adjusted
DEIR	draft environmental impact report
DEIS	draft environmental impact statement
DEQ	Oregon Department of Environmental Quality
DELTA	Sacramento-San Joaquin River Delta
DFA	California Department of Food and Agriculture
DFC	desired future condition
DFG	California Department of Fish and Game
DHS	California Department of Health Services
DNR	Washington Department of Natural Resources
DOC	California Department of Conservation (see also CDC)
DOC	dissolved organic carbon
DOD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOG	Division of Oil and Gas

DOI	U.S. Department of the Interior
DOT	U.S. Department of Transportation
DPR	California Department of Parks and Recreation
DPS	distinct population segment
DSOD	California Department of Water Resources, Division of Safety
	of Dams
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
e.g.	for example
EA	environmental assessment
EBMUD	East Bay Municipal Utility District
EFH	essential fish habitat
EIR	environmental impact report
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
ESA	federal Endangered Species Act (see also FESA)
ESP	enhancement of survival permits
ESU	evolutionary significant unit
et al.	and others
et seq.	and following
FEIR	final environmental impact report
FEIS	final environmental impact statement
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FESA	federal Endangered Species Act (see also ESA)
FHWA	Federal Highway Administration
FMP	fishery management plan
FONSI	finding of no significant impact
FR	Federal Register
FTA	Federal Transit Administration
FWPCA	Federal Water Pollution Control Act
GAO	Government Accounting Office
Gov. Code	California Government Code
GP	general plan
Guidelines	State CEQA Guidelines
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HCD	California Department of Housing and Community
	Development
HCP	habitat conservation plan

HEP	habitat evaluation procedure
HMP	habitat management plan
HSI	Habitat Suitability Index
HUD	Housing and Urban Development
IA	implementation agreement
i.e.	that is
IS	initial study
ISA	initial site assessment
ISWP	Inland Surface Waters Plan
ITP	incidental take permit
J&S	Jones & Stokes
kg	kilogram
KGRA	Known Geothermal Resource Area
km	kilometer
kW	kilowatt
LAFCO	Local Agency Formation Commission
LCP	local coastal program
L _{dn}	day-night average sound level
Leq	noise level equivalent
LEDPA	least environmentally damaging practicable alternative
LESA	Land Evaluation and Site Assessment
Lmax	ambient noise levels
Lmin	ambient noise levels
LOP	letter of permission
LOS	level of service
MAD	mosquito abatement district
MBTA	Migratory Bird Treaty Act
MEA	master environmental assessment
MMPA	Marine Mammal Protection Act
MMRP	mitigation monitoring and reporting plan
MND	mitigated negative declaration
MOA	memorandum of agreement
MOU	memorandum of understanding
MSHCP	Multiple Species Habitat Conservation Plan
MSCP	Multiple Species Conservation Program
MWD	Metropolitan Water District of Southern California
NCCP	Natural Community Conservation Plan
NCCPA	California Natural Community Conservation Planning Act

ND	negative declaration
NDDB	Natural Diversity Database
Neg. Dec.	negative declaration
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOA	notice of availability
NOAA	National Oceanic and Atmospheric Administration
NOC	notice of completion
NOD	notice of determination
NOE	notice of exemption
NOI	notice of intent
NOP	notice of preparation
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NPS	National Park Service
NRCS	National Resources Conservation Service
NRDC	Natural Resources Defense Council
NRHP	National Register of Historic Places
NWP	Nationwide Permit
NWR	national wildlife refuge
	-
O&M	operation and maintenance
OCRM	Office of Ocean and Coastal Resource Management
OCS	outer continental shelf
OPR	Office of Planning and Research
PA	Programmatic Agreement
PCN	Preconstruction Notification
PDN	Predischarge Notification
PEIR	program environmental impact report
PM ₁₀	particulate matter smaller than or equal to 10 microns in
	diameter
PSA	Permit Streamlining Act
PRC	California Public Resources Code
RCD	resource conservation district
RCRA	Resource Conservation and Recovery Act
RCZ	Resource Conservation Zone
Reclamation	U.S. Bureau of Reclamation
RFP	request for proposal
RFQ	request for qualifications
ROD	record of decision
RPA	reasonable and prudent alternatives
	_

RPM	reasonable and prudent measures
RWQCB	regional water quality control board
SAMP	Special Area Management Plan
SB	Senate Bill
SCAG	Southern California Association of Governments
SCH	State Clearinghouse
SEPA	Washington State Environmental Policy Act
SHPO	State Historic Preservation Officer (Note: "SHPO" is used to
	refer only to the officer, not the office.)
SIP	State Implementation Plan
SLC	California State Lands Commission
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMUD	Sacramento Municipal Utility District
SOC	statement of overriding consideration
SOQ	statement of qualifications
SVAB	Sacramento Valley Air Basin
SWP	California State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	California State Water Resources Control Board
T&E	threatened and endangered species
TDR	transfer of development rights
TDS	total dissolved solids
TOC	total organic compounds
TOC	total organic carbon
TRPA	Tahoe Regional Planning Agency
TSCA	Toxic Substances Control Act
TSM	transportation system management
TSS	total suspended solids
USACE	U.S. Army Corps of Engineers
USC	U.S. Government Code of Regulations
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish & Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
V/C	volume to canacity ratio
VELB	volume to capacity fatto valley elderberry longborn beetle
VOC	valiey enderverry longitorin beette
VUC	volatile organic compound

Western	Western Area Power Administration
WDR	waste discharge requirement
WET	wetland evaluation technique
WQCP	Water Quality Control Plan