NEPA's Site-specificity Requirement

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We previously wrote a paper on Programmatic NEPA.[1] In that paper we briefly induced the concept of site-specificity of environmental effects, but never clearly defined the term in the context of program-level analyses, nor its use with reference to project-level analyses.[2] This paper is an attempt to more clearly define "site-specificity" in reference to both project and program-level analyses.

National Environmental Policy Act (NEPA) practitioners commonly use the terms "site-specificity" and "site-specific" interchangeably in connection with project-level and programmatic NEPA documents. These terms are used as if they are intuitively well understood, which of course they are not, because there is no clearly established standard for what these terms mean. As an example, practitioners consistently use the terms small, moderate, substantial, minimal, etc. in describing the intensity and extent of environmental effects without ever defining the quantitative interpretation of these terms. Why, because they cannot quantify the effects, but still want to express relative comparisons among alternatives. Is the use of such terms acceptable under the concept of "site-specificity?" This depends on a number of factors discussed below.

Adding to practitioner confusion are the varying and vague interpretations by the courts to what "site-specific" and "site-specificity" mean. District and circuit courts have given conflicting opinions of these terms in context of both large-scale programmatic analyses and project-level analyses without discriminating different and specific expectations.

The standard for adequacy, routinely cited by the courts -- the amorphous "rule of reason," the "arbitrary and capricious," or even the "hard look" standard — provide only conceptual context for structuring the environmental effects discussions in an environmental assessment (EA) or environmental impact statement (EIS). As noted by the Ninth Circuit, the "rule of reason" requires a "pragmatic judgment whether the EIS's form, content, and preparation foster both informed decision-making and informed public participation." (*California v. Block*, 690 F.2d 753, 761, 9th Cir. 1982).

The Ninth Circuit also noted:

> *"NEPA does not require [that we] decide whether an [environmental impact statement] is based on the best scientific methodology available, nor does NEPA require us to resolve disagreements among various scientists as to methodology. . .* ***an agency must have discretion to rely on the reasonable opinions of its***

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[1] *Program-Level Documents and Effects*. 2014. B. Supulski and R. Solomon. The Shipley News Article (Vol 102).

[2] In the *The Program-level Documents and Effect*, we stated, "They [program-level documents] still need to meet all of NEPA's requirements for site-specificity, cause-effect relationships, the Hard Look Doctrine. The site-specificity will usually be on a national or affected region-level, and not on a local project-level. The analysis is more qualitative than quantitative."

> ***own qualified experts even if . . . a court might find contrary views more persuasive**." (Salmon River Concerned Citizens v. Robertson, 32 F.3d 1346; 9th Cir. 1994). [emphasis added]*

As we discuss the court cases and guidance from the Council on Environmental Quality (CEQ) below, two consistent themes underpin all the discussions pertaining to the specificity and disclosure of environmental effects: 1) Show your work, and 2) Tell me why it's so.

Specificity Themes

Show your work!

Tell me why it's so!

This paper explores the following topics:

- **How do the National Environmental Policy Act (NEPA) and the Council on Environmental Quality regulations define site-specificity?**
- **Have the courts established general standards for site-specificity?**
- **Are there some aspects where clarity of site-specificity standards is especially lacking?**
- **Are these site-specificity standards well accepted?**
- **How do I know I've met the site-specificity requirement?**

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How do the National Environmental Policy Act (NEPA) and the Council on Environmental Quality regulations define site-specificity?

NEPA does not use the terms "site-specific" or "site-specificity".

The Council on Environmental Quality's implementing regulations (40 CFR 1500-1508) uses a mixture of terms when discussing the scale of the federal action.[3]

- Such a scoping meeting will often be appropriate when the impacts of a particular action are confined to **specific sites**. [§1501.7(b)(4) Scoping]
- Whenever a broad environmental impact statement has been prepared (such as a program or policy statement) and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or policy (such as **a site specific action**) the subsequent statement or environmental

[3] For brevity, these sections of the CEQ regulations have been abbreviated. Bold was added by the authors for emphasis. Readers are encouraged to read the full sections.

assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action. (§1502.20 Tiering)

- Legislative approval is sought for federal, or federally assisted, construction or other projects which the agency recommends be located **at specific geographic locations**. [§1506.8(b)(2)(iii) Proposals for legislation]
- Approval of **specific projects**, such as construction or management activities **located in a defined geographic area**. [§1508.18(b)(4) Major federal action]
- *Context.* This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of **a site-specific action**, significance would usually depend upon the effects in the locale rather than in the world as a whole. [§1508.27(a) Significantly]
- "Tiering" refers to the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basin wide program statements or ultimately **site-specific statements**).... Tiering is appropriate when the sequence of statements or analyses is: (a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to **a site-specific statement** or analysis. (§1508.28 Tiering)

In all the above examples, the Council uses the word "specific" for comparison of scales from programs, plans, or policy analyses. However, most importantly, NEPA's Section 102(2) action-forcing provisions do not distinguish between programmatic and site-specific actions.

Nor does the Council's implementing regulations distinguish between requirements for programmatic actions and site-specific actions. There is no separation of the requirements for Purpose & Need (§1502.13), Alternatives (§1502.14), Affected Environment (§1502.15), and Environmental Consequences (§1502.16). Because of these common core requirements, we Shipley instructors recognize all statements under NEPA from local actions to programmatic actions must meet site-specificity requirements.

The Council did issue additional guidance instructing agencies to identify all of the known indirect effects of a proposed action, as well as make a good faith effort to explain the effects that are "reasonably foreseeable."[4]

Have the courts established general standards for site-specificity?

The courts have established some general standards for specificity and for specificity in the level of analysis and data requirements.

> *A conclusionary statement unsupported by **empirical or experimental data, scientific authorities, or explanatory information** of any kind not only fails to crystallize issues, but affords no basis for a comparison of the problems involved*

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[4] (*See NEPA's Forty Most Asked Questions*, Question No. 18,Council on Environmental Quality). *"While an agency is not required to engage in speculation or contemplation about future plans in the face of total uncertainty, the agency does have a responsibility to make an informed judgment, and to estimate future impacts on that basis, especially if trends are ascertainable.....**the agency cannot ignore uncertain, but probable effects of its decisions**." [emphasis added]*

with the proposed project and the difficulties involved in the alternatives. (Silva v. Lynn, 482 F.2d 1282, 1285 (1st Cir. 1973) [emphasis added]

*In order for the agency to consider effects**, some quantified or detailed information is required**, since, without it, neither the courts nor the public, in reviewing the Forest Service's decisions, can be assured that the Forest Service provided the hard look that it is required to provide.* **General statements about 'possible' effects and 'some risk' do not constitute a 'hard look'** absent a justification regarding why more definitive information could not be provided. *(Neighbors of Cuddy Mountain v. United States Forest Service, 137 F.3d 1372, 1379, 9th Cir. 1998) [emphasis added]*

*An agency cannot rely on the conclusions and opinions of its employees **without providing hard data and analysis** for both the public and the court to review*. (*Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1150. 9th Cir. 1998). *) [emphasis added]*

In the landmark Supreme Court case*, Marsh v. Oregon Natural Resources Council* (490 U.S. 360, 377, S.C. 1989), the court ratified a number of standards to be used by courts to establish expectations for the effects analysis.

*Because analysis of scientific data requires a high level of technical expertise, courts must defer to the informed discretion of the responsible federal agency.... **When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts** even if, as an original matter, a court might find contrary views more persuasive. [emphasis added]*

When courts give deference to agencies, it is not without some level of expectation. This expectation can be satisfied by the agency explaining how they used technical information, the scientific literature relied upon, assumptions made, and any models employed upon in making judgments.

The Court must defer to the Forest Service decisions that are made at a "high level of technical expertise." Marsh, 490 U.S. at 377-78. Here, the selection of criteria to measure habitat is a technical one, requiring knowledge of the scientific literature in the field. The Court's review above shows that the Forest Service's decision has support in the literature and hence is entitled to deference. (Western Watershed Project v. USFS, Dist. Idaho. 2011).

Program versus project level analysis

Distinctions of what should be disclosed in a program level analysis versus a project level has not been defined by the courts with a bright line test. In N. Alaska Envtl. Ctr. v. Lujan, 961 F.2d 886, 890–91 (9th Cir. 1992), the court stated;

An EIS for a programmatic plan . . . must provide 'sufficient detail to foster informed decision-making,' but 'site-specific impacts need not be fully evaluated until a critical decision has been made to act on site development.'

The 9th Circuit expanded further in Kern v. U.S. Bureau of Land Management, 284 F.3d 1062 (9th Cir. 2002) by saying:

Regardless of whether a programmatic or site-specific plan is at issue, NEPA requires that an EIS analyze environmental consequences of a proposed plan as soon as it is "reasonably possible" to do so. Once an agency has an obligation to prepare an EIS, the scope of its analysis of environmental consequences in that EIS must be appropriate to the action in question. NEPA is not designed to postpone analysis of an environmental consequence to the last possible moment. Rather, it is designed to require such analysis as soon as it can reasonably be done. If it is reasonably possible to analyze the environmental consequences in an EIS for [a Resource Management Plan], the agency is required to perform that analysis.[5]

Specificity Theme
Professional Judgment unsupported by logic and scientific evidence is guesswork.

Show your work!
Tell me why it's so!

Are there some aspects where clarity of site-specificity standards is especially lacking?

There are three areas which agencies tend to find troublesome in deciding the depth, breadth, specificity of the effects analysis; 1) indirect growth induced effects, 2) effects emanating from mitigation, and 3) cumulative effects. Cumulative effects are covered in Shipley's *NEPA Cumulative Effects Analysis and Documentation* Workshop[6] and will not be addressed here. However, the principles discussed in this paper equality apply to cumulative effects.

Indirect growth induced effects

Neither the CEQ Regulations nor the existing case law on the topic of "indirect growth induced

[5] Citation to the N. Alaska Envtl. Ctr. v. Lujan and the Kern v. U.S. Bureau of Land Management cases on program versus project level requirements was made in the recent BOEM case address incomplete and unavailable information, see *Native Village of Point Hope v. Jewell*. Citation: 44 ELR 20016. No. 12-35287, (9th Cir., 01/22/2014).

[6] Readers are invited to learn more about the cumulative effects workshop at http://www.shipleygroup.com/courses.html

effects"[7] set forth clear tests or criteria to determine when and to what extent an agency must consider the indirect growth induced effects of a proposed action (i.e., "build it and they will come"). Rather, most courts tend to base their determination on whether the potential indirect growth induced effects of the proposed action are "reasonably foreseeable" and thus require consideration, or are "too remote or speculative" to require agency consideration.

These indirect growth induced effects have proven most troubling for agencies, especially with regard to the specificity of the effects resulting from the causative actions and their distance both in time and space from the resultant effects.[8]

While not providing any clear principles or criteria, these cases do provide some side-boards as to when an agency must consider the indirect induced growth effects of a proposed action. If a proposed action is ***intended*** to stimulate growth, courts are likely to find that the agency must consider this growth in the effects analysis. And, if there are **relatively detailed or precise plans** for development in the vicinity of a proposed action or if an **agency identifies or quantifies an action's** indirect induced growth effects in an EA or EIS, courts appear much less likely to permit an agency to dismiss full consideration of these effects by characterizing them as too remote or speculative.

Generally, courts expect discussion of indirect induced growth effects when 1) the proposed action is intended to stimulate the induced growth action (i.e., as a component of the NEPA purpose and need), such as community growth, 2) if there are relatively detailed plans for development in the vicinity of a proposed action for which the proposed action will encourage, or 3) if an agency identifies as an issue an action's growth-inducing effects.

Courts have upheld agency more limited discussion of indirect induced growth effects where these effects are: 1) within the control of the Federal, state, or local governments, and 2) already planned for in land-use planning documents. Moreover, some court decisions suggest consideration of indirect induced growth effects may be appropriately limited to the induced growth in the confined vicinity of the proposed project, and need not consider the more distant growth that may ultimately be served by the resource provided by the project.[9]

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[7] The term "indirect induced growth effects" are contrasted from "indirect effects" as being effects that emanate from actions of others and may include federal, state, local or private parties. Indirect induced growth effects are often addressed in the context of cumulative effects, but are not actions totally independent of the federal action being taken and therefore are not "cumulative actions," they are "induced actions." An early leading case on an agency's obligation to discuss indirect induced growth effects in its NEPA analysis is *Davis v. Coleman*, 521 F.2d 661 (9th Cir. 1975). In that case, the City of Davis challenged the Federal Highway Administration's (FHA) negative declaration of environmental impact (a finding comparable to a FONSI). The FHA, in cooperation with state and local agencies, proposed to construct an interchange in a rural area outside of Davis, CA. The City of Davis argued the FHA was required to consider the significant growth-inducing effects of the interchange. The court held the FHA must undertake an EIS and consider the indirect induced growth effects of the interchange project. In so holding, the court reasoned: "the growth-inducing effects of the Kidwell Interchange project are its raison d' etre, and with growth will come growth's problems: increased population, increased traffic, increased pollution, and increased demand for services such as utilities, education, police and fire protection, and recreational facilities."

[8] *See, e.g., Sierra Club v. Marsh*, 769 F.2d 868 (1st Cir. 1985); *Western Land Exchange Project v. U.S. Bureau of Land Mgmt.,* 315 F.Supp.2d 1068 (D. Nev. 2004); *Hoosier Environmental Council, Inc. v. U.S. Army Corps of Engineers*, 105 F.Supp.2d 953 (S.D. Ind. 2000); *Carmel-by-the-Sea v. U.S. Dep't of Transp.*, 123 F.3d 1142 (9th Cir. 1997), *Georgia River Network v. U.S. Army Corps of Engineers,* 334 F.Supp.2d 1329 (N.D. Ga. 2004).

[9] This topic is explored in some detail by D. Mandelcker. 2013. *Growth-Induced Land Development Caused by Highway and Other Projects as an Indirect Effect Under NEPA*. Environmental Law Review. 12-2013; PP. 1168-78; and Leah Kukowski, *Indirect Effects: An Agency's Obligation to Consider Growth Inducing Effects*, National Environmental Policy Act CLE-International Conference (January 2006).

As project scope expands, particularly with energy and transportation development projects (e.g. Keystone Project, Alaska Pipeline Project, and Monument Butte Project), the need to examine growth induced impacts are likely to become a focus of lawsuits. However, given the inability to tie these induced effects directly to the proposed project, it is unpredictable how courts will respond to future lawsuits based on indirect growth induced effects.

At the program-level, lawsuits based on indirect growth induced effects become more problematic than at the project-level. These indirect induced growth effects can be discussed in general terms, but the specificity of the qualitative discussions will be at larger geographical scales with limited discussions of quantitative effects. Further, agencies frequently argue subsequent tiered project-level NEPA documents is the more appropriate place to consider and disclose indirect growth induced effects, because they can be more meaningfully quantified and locally specific thus less speculative.

Mitigation effects

Once mitigation measures are proposed, specialists who prescribe these mitigation measures commonly omit discussion of the additional environmental impacts emanating from these measures. This is especially true when agencies rely on mitigation to avoid preparation of an EIS through the use of a "*mitigated FONSI*." CEQ and the courts have determined when mitigation is important or relied upon to substantially reduce environmental impacts, the agency has an obligation to discuss the relative effectiveness of this mitigation in reducing the impacts.[10] The 5th Circuit held the Army Corps' reliance on a Finding of No Significant Impact (FONSI) was arbitrary and capricious because it relied upon an EA that failed to articulate how the mitigation measures would render the adverse effects insignificant.[11]

Are these site-specificity standards well accepted?

The Pacific Rivers case (*Pacific Rivers Council v. U.S. Forest Service*, 2012, 9th Cir.,) in contrast to Lands Council I (*Lands Council v. Powell*, 379 F.3d 738, 9th Cir. 2004, *amended by* 395 F.3d 1019; 2005) and Lands Council II (*Lands Council v. McNair*, 537 F.3d 981, 9th Cir. 2008) show how conflicting court decisions can confuse rather than clarify standards for the specificity of the environmental effects analysis.

Lands Council I

In Lands Council I, the plaintiffs contested a decision of the United States Forest Service to proceed with harvesting of 1,408 acres within the Idaho Pandhandle National Forest. The selected alternative would also build 0.2 miles of new road, 2 miles of temporary road, and

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[10] Memorandum for Heads of Federal Departments and Agencies re: "Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact," dated January 14, 2011 ("Final Guidance").

[11] *The EA before us lists the potentially significant adverse impacts, and describes, in broad terms, the types of mitigation measures that will be employed. As is evident from our above review of the Corp's treatment of each individual potential impact, however, the* ***EA provides only cursory detail as to what those measures are and how they serve to reduce those impacts to a less -than-significant level.*** *Because the feasibility of the mitigation measures is not self-evident, we agree with the district court that the EA does not provide a rational basis for determining that the Corps has adequately complied with NEPA...The record before us, however, is simply not sufficient to determine whether the mitigated FONSI relies on '. . . mitigation measures which . . .compensate for any adverse environmental impacts stemming from the original proposal' that, unmitigated, would be significant. (O'Reilly v. United States Army Corps of Engineers , No. 04-31026, 5th Cir. 2007).*

reconstruct 29 miles of already existing roads. The 9th Circuit explored a number of technical issues that relate to the specificity of analysis as well as data. The court's ruling required the specificity of data must be “up to date” and the court will judge the quality of that data. The court went on to judge the scientific adequacy of the agency's models used and the need for ground truthing data.[12]

What might we conclude from the Lands Council I case?

1) Disclose the shortcomings of all models and analytic methods.
2) Discuss the credible scientific evidence to support analyses and models -- cite references and prove they are valid.
3) Discuss contrary evidence and how it was disposed of.
4) Explain the relative confidence of predictions.
5) Disclose the sensitivity of models to changes in key input variables.
6) Show how methodologies have been validated, if possible locally.
7) Make sure you explain why your data is not stale.

In contrast to Lands Council I, in *San Juan Citizens Alliance v. Stiles* , 654 F.3d 1038 (10th Cir. 2011) the 10th Circuit held that aerial photographs rather than on-ground surveys would suffice for evaluation of important old-growth impacts. [13] In accepting the use of aerial photographs, the 10th Circuit affirmed the agency's methodology, confidence of predictions, and data.

Lands Council II

In Lands Council II (*Lands Council v. McNair* 537 F.3d 981, 9th Cir., 2008) plaintiffs appealed the district court’s denial of their motion for a preliminary injunction to halt the Mission Brush Project which allowed logging of 3,829 acres in the Idaho Panhandle National Forests. The circuit court concluded that on-the-ground analysis was not required as it was for Lands Council I.[14] The court rejected a previous decision (*Ecology Center, Inc. v. Austin* 430 F.3d 1057, 9th Cir. 2005) which expanded the Lands Council I requirements and overstepped expectations the court should require of agencies. The court rejected the specific analysis requirements in the Ecological Center case and attempted to redefine the court’s expectations for an adequate

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[12] Quoting from the Lands Council I case: *The Forest Service's heavy reliance on the WATSED model in this case does not meet the regulatory requirements because there was inadequate disclosure that the model's consideration of relevant variables is incomplete. Moreover, the Forest Service knew that WATSED had shortcomings, and yet did not disclose these shortcomings until the agency's decision was challenged on the administrative appeal. . . .* ***The predictions of the model, which may be reliable across the entire Forest, were not verified with on the ground analysis****. Was the Forest Service “dead on” or “dead wrong?” The Final Environmental Impact Statement is inadequate to tell.[emphasis added]* (*Lands Council v. Powell*, 379 F.3d 738, 9th Cir. 2004, *amended by* 395 F.3d 1019; 2005)

[13] Quoting from the San Juan case; *The plaintiffs complain that the agencies’ use of computerized estimates and aerial photos rather than on-the-ground surveys of the 125,000-acre project area to identify old growth as an example of the agencies’ failure to use “readily-available information.” The methodology used is not irrational and is within the judgment and expertise of the agencies. (San Juan Citizens Alliance v. Stiles* , 654 F.3d 1038 (10th Cir. 2011)

[14]Quoting from Lands Council II: *We accept the description in Lands Council I [required the Forest Service to demonstrate the reliability of its science or the hypotheses underlying the Service’s methodology with “on the ground analysis] that it was “limited to the circumstances of [that] case,”* ***and hold that it does not impose a categorical requirement of on-the-ground analysis or observation for soil analysis.*** (Lands Council v. McNair, 537 F.3d 981, 9th Cir. 2008).

effects analysis.[15]

The 9th Circuit then established some "modified" standards for judging acceptability of methods and data used in environmental analyses. Specifically agencies:

1) must explain the conclusions it has drawn from its chosen methodology, and the reasons it considers the underlying evidence to be reliable; but

2) are not required to affirmatively present every uncertainty in its NEPA documents.

Specificity Theme

An agency must explain conclusions drawn from its methodologies, and the reasons it considers the underlying evidence to be reliable.

Show your work!
Tell me why it's so!

Pacific Rivers

After Lands Council II, one might expect the courts [the 9th Circuit in particular] to have settled on some principles for judging the level and depth of analysis for project-level documents. However, in 2012 the 9th Circuit ruling on the Pacific Rivers, a program-level analysis, provides another example to the constantly shifting landscape within this circuit.

On June 20, 2012, the 9th Circuit held, in Pacific Rivers, regardless of whether a programmatic or site-specific plan is at issue, NEPA requires analysis of the environmental consequences of a proposed plan as soon as it is "reasonably possible" to do so. Specifically, the court held the Forest Service, did not comply with NEPA in its analysis of the *Forest Plan for the Sierra Nevada Mountains* potential impacts on fish because it failed to perform a species-specific analysis and introduced yet another standard for reviewing environmental effects – "reasonably possible."[16]

Pacific Rivers was appealed to the U.S. Supreme Court, but on June 17, 2013, the Supreme Court granted a motion by Pacific Rivers Council to vacate the judgment and dismiss as moot. Thus leaving unaddressed by the Supreme Court the issues raised with this case.

It is also interesting in Pacific Rivers, the court implied had the agency provided some rationale

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[15] Quoting from Lands Council II; ***Ecology Center illustrates the consequences of failing to grant appropriate deference to an agency***. *In Ecology Center, we rejected reports establishing that soil analysis was conducted in the project area as "too few and of poor quality." See 430 F.3d at 1073 (McKeown, J., dissenting). We stated, "[t]he record provides little information that enables us to assess the reliability or significance of these reports; for example, we do not know the qualifications of the person conducting the field review, the methodology utilized, or whether the field observations confirmed or contradicted the Service's estimates. . . .* ***We disagree, and hereby overrule Ecology Center.***

[16] The 9th Circuit Courts noted in its decision that the required level of analysis in an EIS is different for programmatic and site-specific plans as outlined in *Friends of Yosemite Valley v. Norton*, 348 F.3d 789 (9th Cir. 2003). The court recognized the specificity of analysis at the program-level is different than at the project-level, but also noted that an agency must estimate effects even if subsequent project-level NEPA analysis is required and that such analysis needs to be done as soon as it can be reasonably done.

for why it did what it did, the court might have given the agency a level of deference.[17] Once again we see a central theme for environmental analysis – Show your work!

Of special interest is the need by the 9th Circuit in the majority decision to address the strong dissent by Judge Smith. [18]The court felt compelled to distinguish standards for a program-level analysis versus a site-specific project.

> *Our dissenting colleague contends that we overruled Kern with respect to programmatic-level plans in our en banc decision in Lands Council II, 537 F.3d 981. We do not believe that Lands Council II overruled the "reasonably possible" requirement of Kern. At issue in Lands Council II was an EIS for a site-specific project. In our en banc opinion, we specifically overruled Ecology Center, Inc. v. Austin, 430 F.3d 1057 (9th Cir. 2005), cert. denied sub nom. Mineral County v. Ecology Ctr., Inc., 549 U.S. 1111 (2007). Our holding in Lands Council II was that the analysis in the site-specific EIS at issue was sufficiently supported by studies and on-the- ground analysis. Our opinion nowhere mentioned Kern, nowhere mentioned a programmatic EIS, and nowhere suggested that environmental consequences need not be analyzed in a programmatic EIS if it is "reasonably possible" to perform that analysis.*

The court implies a standard that agencies must undertake analysis of environmental effects if the analysis is "reasonably possible." However, Judge Smith in his dissent takes issue with this requirement.

> *The majority instead creates an unclear rule based on "reasonable possibility" that imposes additional procedures not required by NEPA on the Forest Service. Such a rule "leave[s] the agencies uncertain as to their procedural duties under NEPA, . . . invite[s] judicial involvement in the day-to-day decisionmaking process of the agencies, and . . . invite[s] litigation." Kleppe v. Sierra Club, 427 U.S. 390, 406 (1976). Second, the majority ignores the tiering framework created by NEPA. Because the majority ignores such framework, it fails to differentiate between a site-specific environmental impact statement ("EIS") and a programmatic EIS that focuses on high-level policy decisions. Under NEPA regulations on tiering and*

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[17] Quoting from Pacific Rivers; *There is no explanation in the 2004 EIS of why it was not reasonably possible to provide any analysis whatsoever of environmental consequence for individual species of fish, when an extensive analysis had been provided in the 2001 EIS.… if the Forest Service had explained its reasons for entirely omitting any analysis of the impact of the 2004 Framework on individual species of fish, it is conceivable that it could have convinced us that there is good reason entirely to postpone such analysis until it makes a site-specific proposal.*

[18] Note: Circuit courts usually use a panel of three judges when deciding a case. If an en banc review is granted, then all the circuit judges hear and rule on the case.

Ninth Circuit precedent, a programmatic EIS requires less detailed analysis than a site-specific EIS. Therefore, agencies are allowed to defer in-depth analysis until site-specific projects have been identified.

Adding to the conflicting opinions, in 2012, the D.C. Circuit seems to expand the expectations for project-level analyses to consider effects at relatively low levels of importance.

> *As should be clear by this point in our opinion, an agency conducting an EA generally must examine both the probability of a given harm occurring and the consequences of that harm if it does occur.* ***Only if the harm in question is so "remote and speculative" as to reduce the effective probability of its occurrence to zero*** *may the agency dispense with the consequences portion of the analysis. (State of NY v. NRC. D.C. Cir. 2012). [emphasis added]*

Indirect growth needing clarification -- greenhouse gas (GHG) emissions

In February 2010, CEQ issued draft guidance for Federal agencies on how to determine whether "analysis of the direct and indirect GHG emissions from their proposed actions may provide meaningful information to decision makers and the public."[19].

The draft guidance stated analysis of indirect emissions "must be bounded by limits of feasibility

in evaluating upstream and downstream effects of Federal agency actions." The vague nature of this guideline has left considerable uncertainty as to which indirect emissions must be considered in the NEPA analysis. The Federal energy projects, be they highway construction, coal development, natural gas, or oil field leasing pose new and unanswered questions about the depth and breadth of the required indirect effect's analysis .[20]

A recent court case suggests simple calculations of greenhouse gas emissions from larger energy development projects may not be sufficient in response to the climate change issue. Rather, the agency may have to expand its analysis to more complex and speculative costs and benefits for social, economic and environmental impacts. (*High Country Conservation Advocates v. Forest Service* Dist. of Colorado, June 2014). This case demonstrates how a court was swayed by plaintiff arguments in light of the absence of explanations by the agency in response to the issues raised during the NEPA process.

The bottom line to address these developing areas of large-scale indirect growth induced and indirect effects (such as climate change) may be through life-cycle analysis.[21] Several Federal agencies have already begun including life-cycle GHG emission analyses into their NEPA

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[19] CEQ, Draft NEPA Guidance on Consideration of the Effects of Climate change and Greenhouse Gas Emissions, (2010).

[20] See, *NEPA and Downstream Greenhouse Gas Emissions of U.S. Coal Exports*. 2013. Elizabeth Sheargold and Smita Walavalkar, Columbia Law School. Center for Climate Change Law.

[21] Life Cycle Assessment (LAC) is a "cradle-to-grave" approach for assessing industrial and natural resource systems. "Cradle-to-grave" begins with the gathering of raw materials from the earth to create the product and ends at the point when all materials are returned to the earth. LCA enables the estimation of the cumulative environmental impacts resulting from all stages in the product life cycle, often including impacts not considered in more traditional analyses (e.g., raw material extraction, material transportation, ultimate product disposal, etc.). LCA provides a comprehensive view of the environmental impacts and presents a more accurate picture of the environmental trade-offs. See, *Life Cycle Assessments: Principles and Practice*. 2006. EPA. EPA/600/R-06/060

analyses. The Bureau of Land Management, Department of Energy, Safety Transportation Board, Bureau of Ocean Energy Management, and Department of State have all done this type of analysis. Practitioners should be cautious in not expanding the analysis to consider induced effects that cannot be "tangibly" tied to the Federal action, such as induced development in other countries from the use of exported coal from the United States.

Specificity Theme

T*he agencies might have justifiable reasons for not using the social cost of carbon protocol. They must provide those reasons.*

Show your work!
Tell me why its so!

How do I know I've met the site-specificity requirement?

In spite of these conflicting perspectives on what is required, we can provide a number "guiding principles" one can use to provide a more adequate and defensible level of specificity at the project-level. These principles also apply to programmatic level of analyses, but with broader levels of geographical and temporal reference as outlined in the table below.

1) **Effects defined geographically and temporally**. Actions, mitigation, and effects should be geographically and temporally described.
2) **Measure change**. The five "measures" of change should be considered for each effect (i.e., magnitude, extent, direction, duration and speed).
3) **Quantify measures**. Use quantitative terms to express response to measures where possible. If not possible, explain why a qualitative measure is appropriate.
4) **Focus on what is important**. Provide greater attention to the important issues and explain why an issue is not important or addressed elsewhere at a more appropriate level.
5) **Mitigation effectiveness**. Describe why the mitigation measures will reduce environmental impact and to what level. Remember some mitigation measures also have environmental effects, make sure those effects are also disclosed.
6) **Solid Science**. Incorporate by reference the peer reviewed science and why it is relevant. Document methods including assumptions and contradictory evidence to meet the Hard Look standard.
7) **Use because.** Use cause-effect chains to explain the "because", eliminate guesswork.
8) **Get to "so what?**". Extend discussions of effects to their social endpoint[22]—"so what?"

The level at which you comply with these eight guiding principles is different depending on the type of analysis being done and the nature of the decision. See Table 1 below.

In addition to these guiding principles for the appropriate level of site-specificity, there are a number of other analytical requirements that deserve consideration. However, each of these questions deserve separate discussions in future Shipley Articles.

[22] Social endpoint is used here to describe where the discussion of the cause-effect chain of effects is most import to humans and stops. In other words an end point reflected in law (e.g. water quality standards, T&E species) or an end point having some direct impact to human health, safety, quality of life measure.

- Cause- effect chaining—to what level should they be discussed?
- To what level should my methods be discussed and disclosed?
- What is needed in order to use assumptions and "professional judgment"?
- How should I deal with disagreement in interpretation of science or use of methods?
- How do I determine I'm using the "best available science"?[23]

Level of specificity in the NEPA document.

First, depending on its type as shown in Table 1 below, material should be in the text of an EIS or EA, should be in an appendix to the document, or should be incorporated by reference in the document. In descending order of importance: (1) Discussion of significant environmental impacts must appear in the text of an EIS. 40 C.F.R. § 1502.1. (2) Material that "substantiates any analysis fundamental to the [EIS]" may appear in an appendix. *Id.* § 1502.18. (3) Material may be incorporated by reference so long as its omission from the EIS does not "imped[e] agency and public review." *Id.* § 1502.21.

Summary

Currently there is no established standard on site-specificity. Nor have the courts come to a consensus on how agencies and practitioners are to proceed to meet site-specificity. In this current state of limbo, the authors are proposing an approach similar to the Hard Look standard.

Practitioners are encouraged to use:

1) **Effects defined geographically and temporally**
2) **Measure change**
3) **Quantify measures**
4) **Focus on what is important**
5) **Mitigation effectiveness**
6) **Solid science**
7) **Use because**
8) **Get to "so what?**"

Answering these questions should help practitioners navigate their way through the troubling waters of site-specificity.

[23] See Larry Freeman. *NEPA Analysis and the "Best Science*", 2007. The Shipley News, June 2007, (Vol. 55).

Table 1. Comparison of site-specific expectations.

Criteria	Procedural Rules (rules prescribing processes to be followed)	Substantive Rules (rules containing regulatory thresholds or limits controlling subsequent actions)	Land Use Plans (allocations of land areas to different treatment options and no commitment for development)	Sequencing Plans (up front commitment for development without approval of future project action)	Project Sequencing (multiple or supplemental NEPA analyses for a project implementation)	Projects (Projects affecting natural and physical environment)
Type of Action	Agency rules governing how an agency plans and makes decisions.	Rules limiting what an agency or affected parties can do or not do.	Land Management, or Base Plan.	Oil and gas lease, wind farm leases, or range allotment management plan.	Staged decisionmaking for construction of a large dam or bridge.	Single decision local project.
Geographical and temporal scale	Nation-wide scope, perhaps some divisions by regions if the policy has differential application by geographical scale. Temporal scales are generally not important.	Generally nation-wide in scope, but can be regional Because quantitative limits may apply, geographical and temporal limits are important in describing impacts.	Regional, state, multi county in scope geographically. Typically 10-15 years temporally.	Same as land use allocations.	Same as project-level.	Effects will have specific geographical reference (e.g. stream reach, road segment, air shed, harvest unit, well pad). Time frames should be yearly or seasonally.
Measure change	Comparison of other programs and the direction of change. Magnitude will be qualitative. Extent is dependent of the rule. Duration of effects would be 5-10+ years of application.	Impacts are important and may be both program and environmental. Magnitude, direction and extent of effects. would be a mix of qualitative and quantitative. Duration of effects analysis likely 5 to 10+ years (rules are usually subject to change and revaluation every 5-10 years).	Impacts are important and may be both impacts on programs and the natural and physical environments. Magnitude, direction and extent of effects would be a mix of qualitative and quantitative. Duration, likely multi-year to decadal. Effects discussed by geographical zones.	Same as land use allocations but additional attention paid to reasonable foreseeable actions, induced effects, and cumulative effects.	Same as project-level.	Magnitude, direction, extent duration and speed should be qualitative for environmental design arts and quantitative for other biological and physical effects;. Briefly discuss minor effects.

Quantify measures	Limited if any.	May be quantitative or qualitative regionally depending on the quantitative or qualitative nature of the standards.	May be qualitative or quantitative depending on the resource. The greater the reliance on standards and guidelines, the greater the need for quantitative measures.	Same as land use allocations. Reasonable foreseeable actions and indirect induced growth effects will not be to the same level of specificity as other effects.	Same as project-level.	A range for the effect analysis (upper and lower bound) is appropriate where specific estimates cannot be made. Confidence in effects analysis disclosed. Methods of estimation should be disclosed. Where quantitative estimates cannot be made, rationale should be provided.(see 40 CFR 1502.22.
Focus	Focus on expected major outcomes. Environmental outcomes should be discussed where identified as issues. Discussion of effects qualitative.	Focus in on the goals and the quantitative or qualitative standards. Specifically address environmental implication of standards and mitigation measures where applicable.	Focus on meeting plan's goals and objectives. Cause-effect of actions leading to effects are discussed predominately with qualitative measures except for any standards being imposed that will require quantitative measures where possible.	Same as land use allocations. Greater depth of analysis for standards or mitigation imposed through subsequent tiered documents.	Same as project-level.	Focus on environmental effects and effectiveness of mitigation with quantitative measures.
Mitigation effectiveness	When a specific component of a procedure is designed to address some environmental problem, those environmental aspects must be addressed. Specific mitigation is not usually addressed in ways that can be translated to environmental effectiveness other than general terms.	Options explored with general comparison of advantages and disadvantages. Can result in quantitative cost/ benefits analyses to determine if the rule will have an effect over $100 million annually.	The specific standards and guidelines used should be discussed in quantitative terms as to the resultant benefits and costs. of each.	Same as land use allocations. But mitigation may be prescribed for reasonably foreseeable actions and induced effects. Such mitigation should be discussed in either qualitative or quantitative terms.	Some mitigation may not be completely described. Adaptive strategies may be employed to address uncertainties with future effects not clearly articulated up-front. Other mitigation should be discussed in quantitative terms where possible.	The effectiveness and cost of mitigation should be explored quantitatively. Mitigation adopted when deemed necessary. Adaptive strategies may be employed. Cost and benefits (effectiveness) of mitigation should be discussed.

Solid science	Biological and physical sciences are usually less emphasized than social science considerations. Use of science to support general principles not specific cause-effect relationships	Sound science required to establish the logic of limits or standards. Models may be required.	Sound science required to establish the logic of limits or standards. Models may be required.	Same as land use allocations.	Same as project-level.	Emphasis is on use of sound science. Any conflicting science should be explored. Cause-effect chains discussed and conclusions reached based on sound science
Use of because	Rationale in response to comments received during APA rulemaking. More dependent on logic of comparative merits than quantitative data.	Rationale in response to comments received during APA rulemaking. More dependent on logic of comparative merits than specific data except for standards that will require specific methodologies to support.	Essential. Cause-effect of future actions under the plan leading to plan goals are discussed with qualitative logic for most effects. Quantitative measures used for substantive issues where methodologies exist and can produce relative comparisons. Uncertainties of future budget levels, human behavior, and environmental responses are considered important in discussion of effects.	Same as land use allocations.	Same as project-level.	It is essential that all conclusions reached about effects be supported with the use of "because" logic, supporting sound science, and quantitative or qualitative methods for substantive issues.
Get to “so what?”	The ‘so what?’ is in meeting the desired outcomes of the procedure – no additional social end points to any cause-effect analysis.	The ‘so what?’ is in meeting the desired outcomes of the procedure –no additional social end points to any cause-effect analysis.	The 'so what?' should drive end points of specific goals and objectives for the plan as well as for specific standards and guidelines.	Same as land use allocations.	Same as project-level.	Environmental cause-effect chains should be driven to their social endpoints.