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Reader-Friendly Environmental Documents: Opportunity or Oxymoron?

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I. Is There a Problem?

National Environmental Policy Act (NEPA)[1] environmental documents have gotten a reputation for poor quality of late, and there is general consensus that this reputation is largely deserved. The public, agencies, and NEPA practitioners agree that most documents are difficult to understand and hard to use. Here is some of the evidence:

In a survey conducted jointly by the American Association of State Highway and Transportation Officials (AASHTO) and the American Council of Engineering Companies (ACEC), 78% of respondents said there was a problem with the overall quality of environmental documents.[2] Common problems cited included excessive length, disjointed organization, failure to reach conclusions, and poor writing.

In another study, the Council on Environmental Quality (CEQ) reported on NEPA's achievements and problems after a quarter century. The report found that "[w]hat is often lacking in [environmental impact statements (EISs)] is not raw data, but meaning—i.e., a comparison of the potential impacts . . . expressed in clear, concise language. NEPA is about making choices, not endlessly collecting raw data."[3] The report succinctly stated that "[m]ore rigor in the analysis does not mean more weight in the document."[4] The 25-year report also cited clear evidence of how environmental documents grow longer year by year.

Researchers at the University of Illinois studied how well environmental documents improved laypeople's understanding of a project. The results, in the authors' words, were "atrocious": on two measures of understanding, over 70% of readers scored no better than chance.[5] Higher reading ability improved the results only slightly.[6]

It's not just that NEPA practitioners are frustrated with poorly written documents; there is also case law[7] on the subject. In *Oregon Environmental Council v. Kunzman*,[8] the court found, "An EIS must translate technical data into terms that render it an effective disclosure of the environmental impacts of a proposed project to *all* of its intended readership."[9] In *Klamath-Siskiyou Wildlands v. BLM*,[10] the U.S. Court of Appeals for the Ninth Circuit found that "the documents are unacceptable if they are indecipherable to the public."[11] In a rather direct statement, the court in *National Wildlife Federation v. Norton*[12] said "if the Corps' analysis really suggests that the [project will have the described effect], the Corps needs to explain that conclusion in plain English."[13]

So, there is a problem with the readability of environmental documents. The irony is that this is not what was intended for NEPA. The basic regulations are replete with such directions as EISs "shall be written in plain language and may use appropriate graphics so that decisionmakers and the public can readily understand them,"[14] EISs "shall be analytic rather than encyclopedic,"[15] and EISs "shall be concise, clear, and to the point."[16] There is much more. Any casual read-

1. 42 U.S.C.A. §§4321-4370f, ELR Stat. NEPA §§2-209 (2009).
2. American Association of State Highway and Transportation Officials (AASHTO) and American Council of Engineering Companies (ACEC), Unpublished Survey (2005) (on file with author).
3. Council on Envtl. Quality, The National Environmental Policy Act: A Study of Its Effectiveness After Twenty-Five Years 28 (1997).
4. *Id.* at 29.
5. William C. Sullivan et al., *Assessing the Impact of Environmental Impact Statements on Citizens*, 16 Envtl. Impact Assessment Rev. 171, 171 (1996).
6. *Id.*
7. This Article cites several court findings on NEPA that are important to understanding current practices. I am not an attorney, and this paper should not be considered as legal review or analysis.
8. 614 F. Supp. 657, 15 ELR 20499 (D. Or. 1985).
9. *Id.* at 665.
10. 387 F.3d 989, 34 ELR 20127 (9th Cir. 2004).
11. *Id.* at 996.
12. 332 F. Supp. 2d 170 (D.D.C. 2004).
13. *Id.* at 183-84.
14. 40 C.F.R. §1502.8 (2008).
15. *Id.* §1502.2(a).
16. *Id.* §1500.2(b).

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ing of the regulations governing NEPA shows environmental documents are intended to be short, clear, and to the point.

So, why are environmental documents so unreadable? In brief, I believe the answer is twofold: some direction in the NEPA regulations that can be construed in a contradictory manner, reinforced by case law; and natural reaction of technical analysts in the face of schedule pressures and the usual review process. Examining these causes helps point to some solutions.

NEPA regulations can be read as contradictory in that while they call for concise, readable documents, they also direct that the studies be exhaustive and rigorous. Some examples include: "Rigorously explore and objectively evaluate all reasonable alternatives,"[17] and "[d]evote substantial treatment to each alternative . . . so that reviewers may evaluate their comparative merits."[18] Other direction is for documents to be comprehensive: "Environmental impact statements shall be prepared using an inter-disciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts."[19] Case law reinforces this direction and is very influential. For example, the oft-cited *Robertson v. Methow Valley Citizens Council*[20] decision includes in its findings: "a Federal agency contemplating a major action . . . will carefully consider, detailed information concerning significant environmental impacts."[21] The U.S. Supreme Court also noted that "[t]he sweeping policy goals announced in §101 of NEPA . . . require that agencies take a '"hard look" at environmental consequences.'"[22] This can easily be interpreted as direction to fill the environmental document with pages of data and laborious explanation.

Within the NEPA community, concern over the potential for litigation is not borne out by the facts but is pervasive nonetheless. Across the country only a fraction of a percent of the thousands of environmental documents issued each year are litigated, and an even smaller fraction actually fail in some meaningful way.[23] However, because of NEPA's procedural nature, the threat of litigation is an obvious and important tool for project opponents. A very common complaint is "you haven't considered . . . ," to which of course the natural reaction by the lead agency is to try and appease the critic by adding more information. While this seems appropriate, it is not actually required by NEPA. What is required is an objective, rational, clearly written explanation focused on the decision at hand and differences amongst the alternatives. Such an explanation is a lot harder than just adding what's asked for. The defensive posture assumed by many environmental documents also leads them to omit discussion of project benefits. Presumably, the project accomplishes some function that is worth the effort and cost. In many documents, lead agencies seem almost embarrassed to admit that they are trying to achieve something worthwhile.

The demand for more detail and data often comes from other agencies reviewing the document or with approval authority. Case law (such as *Friends of the Earth v. Hall*[24]) has established that NEPA lead agencies must work with other agencies, especially in their areas of expertise or authority. Simply put, the requirement is that lead agencies pay attention to those who have established responsibility and authority on a given issue. Very often the result is a document written around the commenting agency's technical demands with little, if any, thought for how much their issue really bears on the decision at hand or for the nontechnical reader.

The excess of technical jargon and data in environmental documents results from the makeup of the NEPA community. This community includes the agencies and consultants who prepare the documents and the reviewers in other agencies and in interest groups who regularly comment on and critique the documents. The NEPA process of scoping-draft-comment-and-final sets up a virtual volleyball game between these technical wonks, complete with serves, passes, and hoped-for spikes. Each learns tricks from each other, with the courts occasionally calling fouls or moving the net. Left out of this "game" are the people whose lives are affected by the pending project and the decisionmakers looking for useful information.

Another cause of poorly written, bloated documents is captured by a quip from Blaise Pascal: "I have only made this [letter] longer because I have not had the time to make it shorter."[25] Just assembling facts and figures describing a project is time-consuming and challenging. With the omnipresent pressure to push schedules and budgets, it's no wonder many NEPA practitioners fall into a trap of regurgitating data and analyses without reaching conclusions. How easy it is to believe "the facts speak for themselves" and interpret NEPA's disclosure requirement as direction to dump the data, type up the field notes, show the model outputs, and expect the reader to sort it all out. Figuring out what the data mean and how they relate to the decision at hand is much, much harder.

The final cause of turgid, disjointed, hard-to-follow documents is the process by which they are developed. Very often, such documents are the work of a team with little, if any, editorial review or attempt to achieve a common voice. Even

17. *Id.* §1502.14(a).
18. *Id.* §1502.14(b).
19. *Id.* §1502.6.
20. 490 U.S. 332, 19 ELR 20743 (1989).
21. *Id.* at 349.
22. *Id.* at 350 (quoting Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21, 6 ELR 20532 (1976)).
23. The CEQ provides some information on how many EISs are litigated each year. *See* NEPAnet CEQ Task Force, http://ceq.hss.doe.gov/nepa/nepanet.htm (last visited June 9, 2009).
24. 693 F. Supp. 904, 19 ELR 20298 (W.D. Wash. 1988).
25. Robert Andrews, The Columbia Dictionary of Quotations 264 (1993).

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more damaging is the internal review process. This usually starts with a peer review by other technical experts, followed by NEPA specialists whose career is centered on knowing and following the relevant regulations and guidance. Finally, perhaps, a lawyer will cast an eye over the draft document imagining how it could be defended in court. Making the document readable for the decisionmaker or average person is a passing and infrequent thought, if it occurs at all.

II. Is There a Solution?

Yes and no. Yes, the readability and quality of environmental documents can be greatly improved and we can do much better at meeting NEPA's clear intent. No, because NEPA is about making decisions, i.e., choices, and differences of opinion and competing interests will always create varied expectations for environmental documents that cannot be completely reconciled. In other words, you can't make everyone happy. Technical wonks in the NEPA community and average citizens and decisionmakers have different expectations and values that cannot be completely reconciled. The good news is that you don't have to.

Here's how: Build a thorough, solid technical understanding of your project then think—hard—about what is relevant to the decision at hand. This is your administrative record. Then, decide who your primary audience is and write your main document for them. For many projects, the primary audience is the general public, not the NEPA community. In these cases, which I think are what was mostly contemplated by NEPA regulations, put relatively more technical information in your appendices and write the document for the average person. Provide clear ties to supporting information in appendices or references. The technical audience may feel slighted, but all the information they want is available and part of the overall document.

For projects that are of most interest to a technical audience, the document should include more technical information with perhaps a companion summary written for the layperson. There is no single answer, other than to think clearly about your project, asking what is important and why, then explain that to those who care. That's what NEPA asks. The result will be a reader-friendly document.

III. What Is a Reader-Friendly Document?

My flip and easy answer is "what NEPA says you should do," but that isn't helpful. A reader-friendly environmental document has come to mean one where a distinct effort is made to tailor the organization, writing, and graphics to tell a projects' story to a layperson. An essential element of a reader-friendly document is its unique character: just as every project is different, so is every reader-friendly document. However, there are common principles to the approach. For several projects in Washington State, we developed the following guiding principles:

- Tell a story
- Engage the reader
- Make it visual
- Make it brief

A brief description of each of these principles will illustrate some of the approaches to creating a reader-friendly document.

A. Tell a Story

Most EIS documents have become impersonal and vague, even though they are really stories about proposed projects in communities where we live, work, and play. Telling a story means writing in clear, simple language and explaining the problem from the reader's perspective. Here are two paragraphs, both describing congested and high-congested intersections:

Traditional document	Reader-Friendly document
Intersections that are projected to operate with especially long delays or overcapacity during the PM peak hour are identified as "congested intersections." These intersections are those that operate under level of service (LOS) F conditions (average vehicle delay of greater than 80 seconds) or intersection capacity utilization (ICU) greater than 100%. Congested intersections are further identified as "highly congested" if they exceed 110 seconds of average vehicle delay and have an ICU of great than 110%.	What are congested and highly congested intersections? Congested intersections are intersections that cause drivers considerable delay. A driver might wait between one and two minutes to get through a traffic signal at a congested intersection. At a highly congested intersection, a driver might wait two minutes or more to get through the traffic signal.

The reader-friendly approach avoids acronyms and describes what the drivers would experience.

Another facet of telling a story is organizing the document to create a narrative flow so there is a logical progression of information. In most environmental documents, the organization is dictated by outlines pulled from agency guidance, even though NEPA regulations clearly provide considerable flexibility. Here are two simplified outlines:

Traditional document	Reader-Friendly document
I. Alternative Description A. Structures B. Design Standards C. Illumination D. Pedestrian and Bicycle Facilities E. Construction II. Impacts and Mitigation A. Noise B. Visual Quality C. Land Use D. Transportation	1. What is the alternative? 2. How would it be built? 3. How would it change access? 4. How would it affect travel times and traffic flow? 5. How would pedestrians and bicycles be affected? 6. What would it look like? 7. How would noise levels change? 8. How would it change the character and land use in the project area?

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The reader-friendly organization creates a flow by first describing the project, how it would be built, how it would work and then how it would affect its surroundings. All the same subjects are covered as in a traditional environmental document, but they are arranged to build on each other.

B. Engage the Reader

We can engage our readers by rephrasing the usual required subjects to tell a story using question-and-answer headings. Normal headings are quite useful in guidance and as shorthand for NEPA practitioners, but they can be off-putting or confusing to the general public and decisionmakers. Here are some examples of traditional and reader-friendly headings:

Traditional document	**Reader-Friendly document**
Purpose and need	Why do we need the project?
Project termini and why they are logical	Where is the project located?
Social and community impacts	How will the project affect neighborhoods and the people who live there?
Transit impacts	Would the project affect bus service?

Document layout and design are also tools to engage the reader. In an effort to come somewhere close to the page limits suggested by NEPA regulations, many documents narrow their margins, shrink their fonts, and try to fill every available bit of white space. The net effect is overwhelming and reader-hostile, not reader-friendly. The field of technical communications has established principles of document design that can be used to improve readability and help readers navigate complex information. We don't need to create new techniques, just use tools and techniques that are already available.

C. Make It Visual

The old adage "a picture is worth a thousand words" often seems to be applied in environmental documents as "a picture plus a thousand words". Well-designed graphics can convey complex information much more effectively than lengthy text or tables. Relatively simple bar charts and maps can show quantitative and spatial relationships that readers can grasp intuitively.[26] For some reason, however, many environmental documents insist on a "more must be better" approach where information is provided by text, table, and graphic. Usually, this confuses the reader and takes up space. Making graphics an integral part of how information is conveyed relieves some of the burden on the writers and helps shorten a document. Also, thinking about how to portray information graphically often deepens our understanding of the project.

D. Make It Brief

Keeping an environmental document brief isn't just a reader-friendly technique; it's required by NEPA regulations. While the regulations state "impacts should be discussed in proportion to their significance," many environmental documents plod exhaustively through each element of the environment with little consideration of how they actually bear on the decision at hand. Focusing on what is important has a tremendous benefit—it forces the analysts to fully understand the issues. Following checklists or using boilerplate text saves time but bloats documents and does nothing to increase our understanding of what matters.

Approaching the document with a commitment to consider the relative importance of each subject will create a shorter, more focused narrative. Supporting materials can be included in appendices, if needed. Other techniques already discussed, such as relying on good graphics, will also help keep a document brief. This element of a reader-friendly document is the easiest for me to explain but the hardest to put into practice. Moving a document past the gauntlet of technical reviewers without adding pages takes a truly solid understanding of what is and is not important and a strong commitment from the lead agency. Using sidebars and references to point to supporting information in technical appendices makes a solid document and should mollify many reviewers, although their acceptance may be grudging.

IV. What Has Been the Response to Reader-Friendly Documents?

Comments on the Alaskan Way Viaduct EIS (the first reader-friendly document in Washington State) have been mostly positive. The document has received awards from the National Association of Environmental Professionals, the Society for Technical Communications, the ACEC, and the Federal Highway Administration (FHwA). The U.S. Environmental Protection Agency (EPA) gave the document their highest rating (lack of objections), saying: "Your agencies have made a determined effort to fundamentally revise the traditional format used for EISs, to make this EIS more readable, accessible and understandable to the public. . . . In large measure, we think you have succeeded."[27]

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26. There are many good resources for improving the quality of our environmental documents. Edward Tufte has produced several excellent books by on graphic design and communication. *See* Edward R. Tufte, Beautiful Evidence (Graphics Press 2006); Edward R. Tufte, Envisioning Information (Graphics Press 1990); Edward R. Tufte, The Visual Display of Quantitative Information (Graphics Press 1983); Edward R. Tufte, Visual Explanations: Images Quantities, Evidence and Narrative (Graphics Press 1997). *See also* AASHTO/ACEC, Improving the Quality of NEPA Documents, A Joint Report From the AASHTO/ACEC Committee in Cooperation With the Federal Highway Administration (May 2006), *available at* http://environment.transportation.org/pdf/hot_documents/IQED-1%20for%20CEE.pdf; TransTech Management, Inc. & Parsons, Brinckerhoff With Akin, Gump, Strauss, Hauer & Feld LLP, requested by AASHTO Standing Committee on the Environment, Synthesis of Data Needs for EA and EIS Documentation—A Blueprint for NEPA Document Content, National Cooperative Highway Research Program Project 25-25(01) (Jan. 2005), *available at* http://www.trb.org/NotesDocs/25-25(1)_FR.pdf [hereinafter A Blueprint for NEPA Document Content].

27. EPA Region 10 Comment Letter on Alaskan Way Viaduct and Seawall Replacement Project Draft EIS (May 2004) (on file with author).

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Not all comments have been positive; this EIS and similar documents have sparked a debate that continues today. Some agency comments have questioned whether the approach meets legal requirements. Since I am not a lawyer, I am not qualified to answer this question, but my opinion should be clear enough. Further and more to the point, several reader-friendly documents produced in Washington State have been carefully reviewed by lead agency attorneys and approved before publication.[28]

There is an understandable but erroneous assumption that a reader-friendly document has been "dumbed down" or is in some manner lacking information important to the decision. This shows a fundamental misunderstanding of a reader-friendly document; done properly they have proportionately more information bearing on the decision since unnecessarily detailed information is summarized or referenced.

Other critical comments have come from within the NEPA community from reviewers who were clearly upset that the document "didn't look like an EIS." These comments point to a very real, practical challenge. There is a technical audience for all environmental documents, and its needs should not be ignored. Agencies with an obligation to review and comment on NEPA documents are often burdened with large workloads and short staff. The prospect of new formats with apparently less information appears to make their work harder. Their concern is quite valid, but can be addressed. Every quality environmental document must have a solid technical foundation. By providing clear directions and pointers to this information, reader-friendly documents should enable technical reviewers to find what they need with little additional effort.

V. What Lies Ahead?

At the national level, a joint effort by the FHwA, the AASHTO, and the ACEC to develop guidance on creating quality environmental documents was completed in May 2006.[29] The report produced by this effort addresses both document formats and legal sufficiency. Also, the National Cooperative Highway Research Program developed a "blueprint" for improving NEPA document quality.[30] In Washington State, the governor has issued a "plain-talk" executive order directing all state agencies to make their documents easily understood by the general public.[31] To assist their agency, the Washington State Department of Transportation has prepared a "Reader-Friendly Document Toolkit" and has offered training on clear writing skills.[32] General interest in improving the quality of environmental documents, whether they are called "reader-friendly" or not, appears to be spreading outside the transportation realm as well.

In the spirit of full disclosure (as required by NEPA) let me close with these observations. Creating reader-friendly environmental documents is not easy. You must have a thorough technical understanding and give your project a thoughtful evaluation.[33] Sifting through issues to describe what is important means knowing what is less important. Writing for a specific audience means understanding the full context of your project. Creating good graphics and writing clearly requires more time and effort than quickly assembling pieces of technical memos and reports. Summarizing and referencing supporting information means carefully checking for consistency and accuracy.

The rewards, however, are great. You will have a solid legal foundation, a better understanding of the project, and a more informed public. Ultimately, we can advance NEPA's purpose "[to] encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources."[34] That is a goal worthy of our efforts.

28. To my knowledge, only a few projects with "reader-friendly" documents have completed the NEPA process so that they could be challenged in court. None have.
29. *See* Joint AASHTO/ACEC Comm., Improving the Quality of Environmental Documents (2006), *available at* http://environment.transportation.org/pdf/IQED-1_for_CEE.pdf.
30. A Blueprint for NEPA Document Content, *supra* note 26.
31. Wash. Exec. Order No. 05-03 (Mar. 24, 2005), *available at* http://www.governor.wa.gov/execorders/eo_05-03.pdf.
32. *See* Wash. State Dep't of Transp., Reader-Friendly Document Toolkit (2008).
33. I have stressed this point throughout this Article because, unfortunately, many NEPA documents are produced by harried staff mindlessly following checklists and grabbing text from the last document that seems remotely relevant. This lack of thought robs us of much of the value NEPA should provide.
34. 42 U.S.C.A. §4321 (2009).