

# **Writing Instructions for Environmental Assessments or Environmental Impact Statements for topics involving Fishery Management Actions in the North Pacific Ocean, Gulf of Alaska or Bering Sea**

Tamra Faris, Regional NEPA Coordinator  
for the Alaska Region, National Marine Fisheries Service

July 2002 version

These writing instructions are used to front-load preparation of NEPA documents for North Pacific Fishery Management Council fishery management-related actions. They are intended to answer frequently asked questions and guide the content, tone, style and appearance of text contributed by various authors toward portions of a NEPA document. These instructions were developed and have been evolving since 1997 because many of our NEPA documents are written by multiple authors, each of whom when left to their own, choose different formats or use different terms and word conventions to mean the same thing. By establishing this guidance, portions of large complex documents have successfully been tasked to diverse and geographically distant individuals, prepared concurrently with other sections, then when completed, strung together into a whole with minimal final editing.

Though more than one convention may exist and be technically correct, the results of multiple formats and styles are distracting to readers. To facilitate a more uniform final document and minimize the amount of editorial time that could be invested at the end standardizing multiple authors' contributions, the more common problem areas are addressed within and headed off through use of these directions. In some cases word conventions are specified to standardize the terminology rather than because one is necessarily correct and the other incorrect.

These instructions are specific to NEPA documents for fisheries management actions. Authors should also consult the U.S. Government Printing Office Style Guide for help with the more general writing conventions (<http://www.access.gpo.gov/styleman/2000/style001.html>).

Topic	Page
Content Editing .....	2
Potential Media Soundbites .....	4
Technical Editing .....	5
Word Conventions .....	10

**Content editing** is orchestrating the MESSAGE. It is looking at the final conclusions and verifying they are intentionally articulated in words the lead agency is comfortable with.

1. Balance and proportion of issue treatment. Arrange display of impacts so controversial issues are treated first and more thoroughly than issues perceived by the agency to be less- or non-controversial.
2. Disclose impacts on all issues for all alternatives. For example, it is not enough to present a discussion of impacts on the biological diversity issue for one alternative and remain silent with regard to impacts on biological diversity for the other alternatives. If a method of analysis is unknown to distinguish impacts relative to alternatives, that needs to be stated. If it happens too often, it tells us the alternatives were not chosen properly: “Alternatives including the proposed action. ... present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public.”CEQ regulations at Sec. 1502.14
3. Quantitative vs. qualitative. Description of impacts quantitatively is desirable whenever possible. When quantitative information is available it should be followed by interpretations of what it means. Impacts and threats should be interpreted in terms of what they might do to a population (in terms of the target species stock biomass, an age class, or the sex ratio, the juveniles or some reproductive component of a marine mammal population, the food web, or a trophic guild. Obviously the reference point needs to be described first, and to the extent it is subjective, explained. Long explanations such as what target species biomass is or what a trophic guild is should be in the Affected Environment chapter rather than Environmental Consequences.)

If quantitative information is not available, disclose impacts qualitatively. These are interpretations and predictions without quantitative backup.

4. Data without interpretation. All data presented in table format should be in the document for a reason. The main reason will be because they are necessary to support an interpretation or conclusion presented in the text. Examine tables for extraneous data by looking at all the rows and columns of data and comparing fields of data to interpretations in the text. If the table contains extra data (data not used in subsequent interpretations), either simplify the table by taking those data out, or add text to the body of the document interpreting those data in the appropriate context.
5. Best Available Information: Write with the objective of including some fact from all the key literature to the subject issue and that body of science or management so that a citation for that work ends up in the list of Literature Cited. Review the resulting reference lists for each section to ensure it reflects cognisance of “best available information” on those issues. Include information to trigger even references to literature

with findings not necessarily embraced by NMFS scientists for purposes of documenting that NMFS is aware of those studies, opinions, and competing hypotheses.

6. Contributors should not submit material that was not assigned to them or otherwise part of the outline. Document length is often a problem and a frequent source of criticism from our public. A NEPA document is not a destination publication for data, lists of research needs, white papers, essays, or other interesting and related material. Material that is published should be summarized and referenced, not repeated verbatim or incorporated electronically.
7. Advertising within one NEPA document what another NEPA document is going to contain, or the schedule with which it is to be completed, is not a good idea. Plans change, schedules change, the other NEPA document may take a different direction or never come about. Cross reference to material in another NEPA document only if it has been released to the public as a draft or final document, clearly stating which. We do not want to set ourselves up to be criticized for not completing a document on a particular schedule just because another document said we would. NEPA documents are not internal contracts for other analyses.
8. Proprietary or possessive wording for who is making interpretations contained in the analysis should be minimized. Use of phrases like "NMFS scientists" or "NMFS analysts" to identify who is making impact interpretations is generally unnecessary. Council staff, cooperating agency staff, and consultants contribute to the analysis on equal footing with NMFS analysts. When text emphasizes that interpretations were made by NMFS analysts it slights the contribution of non-NMFS analysts to the document. The individual or senior authors of specific sections are not generally advertised in bylines within the document, the appropriate place for listing authors (also known as preparers), their affiliation, credentials and what parts of the document they contributed to is appropriately placed in the list of preparers that is a required part of the document.

**Potential media sound bites:** look at wording of conclusions, their specificity, tone, and how they will sound to various audiences should they be chosen for media sound bites.

1. Emotionally charged words: Read conclusion statements for how they will sound if chosen to stand alone. Avoid verbs and adjectives that are emotionally charged and could become confrontational. Use of emotionally charged words is not an appropriate method of establishing context and intensity of impact. Examples: “The tunicate beds are **destroyed** annually by bottom trawl gear.” vs. “The tunicate beds are **disturbed** annually by bottom trawl gear.” “First year pollock **suffer** high natural mortality.” vs. “First year pollock **experience** high natural mortality.” Do not use “belief” or “believes” interchangeably with “opinion” or “know.” Rather than state NMFS **believes** Steller sea lions are prey limited say it is NMFS’ **opinion** that Steller sea lions are prey limited. Search on these words and change them: belief, believe, damage, destroy, destructive, good, insidious, massive, monstrous, serious, severe, suffer.
2. Judgmental words need to be used in a carefully defined context: The mechanism for the impact needs to be described along with an explanation of any judgmental conclusion. A statement such as “pot gear has **minor** impact on juvenile crab” needs to be in a context where the potential vectors of impact are listed, and a scale or rubric for rating impacts is established. A judgmental word like “minor” should not stand alone. Search on these words and make sure they are explained unequivocally: acceptable, bad, major, minimal, minor, negative, positive. Don’t use symbols (☺, +, -) for establishing a perspective level of impact because symbols are more difficult than judgmental words to define, plus they carry emotional charges. Conclusions that stop short of using judgmental words are fine. Example: Exploitation of red rockfish has no population level effects on northern fur seal.
3. Specificity of words and terms: use of terms that have very specific meanings from legislative acts. Examples, under the Endangered Species Act the terms **stock(s)**, **jeopardy**, **no jeopardy** have very particular meanings. Under the MSFCMA **overfished**, **and overfishing**, are defined very narrowly. Under NEPA determinations of **significant**, and **impact**, and **no impact**, trigger different levels of analytical documentation. All text should be screened to avoid ambiguous use of these terms. In a NEPA document the only acceptable time to use the word ‘jeopardy’ is when reporting that a determination of jeopardy was made in a specific biological opinion, and that opinion is cited.
4. Trendy terms. Examples: adaptive management, conservative approach, dysfunctional ecosystem, ecosystem management, ecosystem-based management, healthy ecosystem, risk averse. The problem with use of these terms is lack of a common understanding for what is meant. If they are used in a carefully crafted context and meaning is established in that context, use is acceptable. Watch out for subsequent usage in a context not established or a different context.

**Technical editing:** check for spelling, grammar, punctuation, abbreviations, numbering and contents for table and figure legends, labels within figures, section numbering, cross references, citations and reference format, headings, indexing, sentence and paragraph structure, and establishing visual consistency rules for all manner of format choices (fonts, bullets, spacing, text columns or not, margins, borders, page numbering, graphic layout).

Editing topics are expanded below to provide a format for consistency. Other ways of doing things may work, these are offered to facilitate efficiency.

#### Abbreviations and acronyms:

Spell out abbreviations and acronym definitions at first mention in Chapters 1 and 2, and at first mention in first order sections of Chapters 3 and 4 (3.1, 3.2, 3.3, ... 4.1, 4.2, 4.3, etc.).

The reason for the different protocol between chapters is Chapters 3 and 4 are generally much longer in length, readers may read in an issue selective order rather than front to back, and consequently may be wondering what an abbreviation means.

Don't use obscure abbreviations in titles, summaries, or figure and table legends, however the use of common ones like BSAI or GOA is acceptable.

Abbreviations used in column headings of tables need to be spelled out in a note immediately following that table.

Don't make abbreviations for things that are used just once or twice in the document.

Don't confuse the abbreviations for nautical miles with regular miles, or metric tons with tons, meters with mortality.

Spell out "less than" and "greater than;" don't use < or > in text, however these symbols are acceptable in a table.

All the abbreviations used in the document should be spelled out and assembled in one place in the document (such as inside the back cover) or in an abbreviation list that is itself part of the table of contents.

Bullets: use the small dot symbol ( • ) which is the character 4,3 off the typographic symbols menu) for bullet leaders. Capitalize the first letter of a bulleted item and use a period at the end. Use of numbered bullets can be quite problematic when individually drafted sections are joined together and the numbering schemes of combined sections pick up with the wrong number.

#### Capitalization:

Follow normal rules for capitalization. Do not capitalize a word just to give it emphasis or because it happens to be the topic or issue being discussed at the time.

Capitalize federal only when it is part of the official name of a federal agency, a federal act, some other proper noun, or used as "the Federal Government."

"State" is not capitalized, unless used as "the State of Alaska," or another state.

Capitalize alternative when referring to a specific alternative; Alternative 1, Alternative 2, etc.

Do not capitalize alternative when referring to an unnamed group of alternatives.

Embedded Codes: Formatting, such as: margins, tabs, page numbering, and lists, such as: Table of Contents, Lists of Tables, Lists of Figures, Index, References or Literature Cited, are

produced by embedding codes in the document and using the various generate functions. Authors - Do not embed margin change codes, custom tab settings, page numbering, headers, footers, or messages into your submissions. If you are using customize the tab settings so data appear in columns you probably need to use the table or column feature to display those data instead. Neither should contributing authors mark to the Table of Contents, Lists of Tables, Lists of Figures, Index, or References; leave that to the end, preferably to a technical editor. The reason individual authors are asked not to embed codes is when pieces are strung together to create the whole document it is simpler to add page numbering and mark to lists consistently when the parts are free of embedded codes that might conflict with each other. If your writing method included cutting and pasting from various documents you probably included many embedded codes inadvertently. Before submitting a section on up the line, open the reveal code feature of their program and scan the document deleting spurious embedded codes .

Fonts: use Times New Roman size 11 for basic text and the legends for tables and figures, use size12 bold for section headings. For data in tables that needs to line up evenly, use the aerial font, no smaller than size 10. Footnotes use Times New Roman size 10.

Margins: 1 inch margin top, bottom, left, and right side. (Exceptions made for tables that otherwise just won't fit on a page, but that almost fit and will still be readable when the pages are bound.)

Measurements: When using measurements, list the English or U.S. equivalent form first, and place the metric form parenthetically second -- e.g., 60 miles (96 km).

Numbering:

Section Numbering: A NEPA document usually is arranged around an outline using section numbers. Consider the chapter number a first order number (1, 2, 3, 4 etc.) Within chapters, put in a period and number sections (1.1, 1.2, 1.3.1, 1.3.2 etc.), consider those second, third, and fourth order numbers (similar to how stream orders are designated).

The outline and numbering system are usually established by the Document Manager or designee. Authors (contributors) should conform to that system. If authors detect a problem with the numbering in the outline they should check with the Document Manager before deviating.

Figure and Table Numbering: Number tables and figures consecutively within each section, only stop at the second order and use -1, -2 to distinguish unique tables or figures (Table 4.2-1, Table 4.2-2; Figure 4.2-1, Figure 4.2-2). If the same figure or table is used in a subsequent section of the analysis, do not reproduce and assign the figure a unique number; cross reference to the figure (these cross references are called table call-outs). If the figure or table appears in a totally separate EA or EIS, it is probably better to reproduce that table or figure in the current analysis because it may be difficult for the reader to access the other document. Update data, as appropriate, and cite the original table or source of data in a note under the figure or table.

Numbers (numeric or text): Following the *Federal Register* writing protocol, numbers are expressed as a figure for measurements (7 ft), percentage (7%), time (7 hours), except for first word of a sentence. Numbers are spelled out for less than 10 objects (seven vessels) or as a figure for 10 or more (70 vessels), except it seems to be ok to use figures in one sentence with a "string" containing other figures, (licenced vessels in the BSAI include 7 pot vessels, 70 hook-and-line vessels, and 700 trawlers).

Plain English:

Follow Plain English guidelines; define obscure technical terms, don't use a three syllable word if a two syllable word will get the point across.

Minimize the use of Greek symbols, formulas, and other population dynamics abbreviations in text.  $(B/B_{MSY} - a)/(1 - a)F_{ABC} \leq m_H \times (B/B_{MSY} - a)/(1 - a)Ic$   $B/B_{MSY} \leq aF_{OFL} = 0$   
 $F_{ABC} = 0, B, B_{MSY}, F_{MSY}, F_{30\%},$  and  $F_{40\%}$  ( $F_{30\%}/F_{40\%}$ ) Occasional use of abbreviations is permissible in tables, figures, or in bullets.

Each symbol needs to be explained at first use.

Punctuation:

Use a comma before a quoted statement, question, or exclamation.

Use a colon in place of a comma if the quotation contains more than one sentence or is set off on separate lines.

Use commas to separate a series of dependent clauses introduced by a colon unless they are long or contain internal commas, in which case, use a semicolon.

Use commas to set off the year when it follows the month and day.

Use a serial comma. It's the one before the "and, or, or nor."

References: Reference citations in text (Author(s') last name, year). If more than one reference by the same author for the same year indicate a, b, c, after the year. Cite original and appropriate references for the source material. NMFS writes and re-writes material in many types of forums (Stock Assessment and Fishery Evaluation (SAFE) reports, Environmental Assessments) and other general papers that are put together for various audiences. Do not cite a SAFE report for life history or biological information that happened to be in the introduction of that SAFE report, cite the original reference. Do not cite step down publications like the ADF&G Notebook Series for fisheries facts. Especially do not cite an obscure draft environmental assessment that was never circulated to the public and would be practically impossible for the public to find. If you are using preliminary research findings, cite them as a personal communication (and make sure to check with the author that it is correctly stated). Do not make the reference author's name the subject of a sentence. That style of writing confounds the Endnote software which generates the reference and ends up making the sentence look internally redundant. Example of what not to do: Livingston (Livingston, 1991b) studied major food items of pollock. Correct example: As they age, pollock become increasingly piscivorous and can be highly cannibalistic, with smaller pollock being a major food item (Livingston, 1991b).

Authors should provide consistent and accurate reference information including: Last name, first and second initials, second and subsequent authors first and second initials and last name. Year.

Title. Journal. Volume: page numbers. Include office and address information in place of journal name for government documents. If it is a chapter of a book, include the book and publisher information. Check and update references that say “In Press” as to whether they have been published put in the year of publication. This may seem obvious, but in this cut and paste generation it is necessary to remind ourselves to update information to ensure the document we are producing is current.

Agency documents should be referenced and alphabetized by agency, not under “anonymous” or the staff person’s name that drafted them.

Example:

- National Marine Fisheries Service (NMFS). 1979. "Endangered Species Act Section 7 Biological Opinion for the Bering Sea/Aleutian Island Groundfish Fishery Management Plan." National Marine Fisheries Service, Alaska Region, P.O. Box 21668, Juneau, AK 99802. 4 p.
- NMFS. 1991a. "Endangered Species Act Section 7 Biological Opinion for the Fourth Quarter Walleye Pollock Harvest in the 1991 Gulf of Alaska (GOA) Groundfish Fishery issued September 20, 1991." National Marine Fisheries Service, Alaska Region, P.O. Box 21668, Juneau, AK 99802. 6 p.
- NMFS. 1991b. "Recovery plan for the humpback whale (*Megaptera novaeangliae*)." Prepared by the Humpback Whale Recovery Team for the National Marine Fisheries Service, Silver Spring, MD 20910. 105 p.

Authors: List all references at the end of the section they go with. Technical Editors enter the data in Endnote software, generate a complete Literature Cited list to put in the NEPA document. The Literature Cited lists are usually a stand alone chapter in an EIS though appendices to that EIS may also contain their own lists of literature cited.

Reference to *Federal Register (FR)* or Code of Federal Regulations (CFR) sections do not require accompanying footnotes or an entry in the literature cited section. The reader is able to find the source from the basic information. Simply include it with the text following these examples:

Sentence interpreting some point of fishery regulations blah blah blah (Figure x of 50 CFR part 679 Updated *month day, year*).

Sentence referencing something published in the *Federal Register* but not yet cast in stone in the CFR. To prevent exceeding the quota for Pacific Ocean Perch, NMFS is prohibiting directed fishing for Pacific Ocean Perch in the Western Regulatory Area of the Gulf of Alaska (67 FR 47472).

Scientific Names: Take a minimalist approach to use of scientific names unless it is a species known only by its scientific name. Follow protocol of common name followed by scientific name in parenthesis, use italic font for the scientific name. Example: walleye pollock (*Theragra chalcogramma*). Don’t repeat scientific names every time you use a common name. Verify/check Latin and native names/spelling.

Spacing: Double space between headings, bullets, and between paragraphs, otherwise use single space. Start text and headings flush left (don’t indent the headings or text).

Tense:



A NEPA document is written to predict impacts that will result from a proposed federal action.

In the spirit of predicting, use “would” rather than “will” (i.e., something *would* be built vs. something *will* be built--as appropriate).

When referring to the document use “this SEIS” or “this EA” or “this EIS”. If you use “this draft EA” or “draft EIS” then all the “drafts” need to be deleted when the document is issued as a final and that is very time consuming.

#### Titles:

**Figure and Table Titles.** Every figure and table used in an analysis needs to have a descriptive title so that when lists of figure or table titles are generated and put in the front of the document the wording assists a reader scanning these titles in finding that for which they might be looking. Do not include “notes” such as (values are in 1000 of metric tons) in the title, but do put them in the figure or table.

**Alternative Titles:** Refer to an alternative by its name (“Alternative A” or “Alternative B”; “Alternative 1” or “Alternative 2”) consistently with the system of numbering alternatives that the project leaders dictated. Do not repeat the descriptions of alternatives or paraphrase the descriptions lest slight discrepancies between the descriptions develop. Do not develop unique names for the alternatives that differ from those used to establish the alternatives by the project leader. For example, if the alternatives are described and labeled as Alternative A, Alternative B, Alternative C, etc.; then do not start calling them the Green Alternative, or the Carharts Alternative, or the Industry Alternative and don’t switch back and forth between numerical and alphabetic labels. Names for alternatives may be used if established by the project team. Be aware, however, not everyone will agree an alternative that has the title “healthy ecosystem alternative” will coincide with their concept of what a healthy ecosystem alternative would look like, and consequently will continually be challenging it.

**Tone:** Make statements in positive voice when at all possible; avoid negative voice whenever possible.

**Word Conventions:** Many of our documents are written by multiple authors, each of whom may use different word conventions to say the same thing. Though more than one convention may be technically correct, the results are distracting to readers. To make the final document appear more uniform one convention is chosen over the others.

<i>Correct</i>	<i>Not Correct</i>
% (in text, tables, and figures)	percent
50 CFR 679.4 (a)	50 CFR Sec. (nor sec.) 679.4 (a) 50 CFR §§ 679.4 (a)
300-500 (example)	<i>not</i> 3-500 unless the first number is only to 1 significant digit
20%-75% (example)	<i>not</i> 20-75%
A season, A1 season, A2 season, B season, etc.	<i>not</i> "A" season <i>nor</i> "A" Season, etc.
ADF&G	ADFG
Area (when referencing a statistical area, e.g., Area 620)	area 620
at sea (when stand alone prep/noun phrase)	at-sea
at-sea (adj.)	at sea
because	since (unless a time period is established)
BSAI	BS/AI BS-AI BSA
<i>C. bairdi</i> (note italics)	C. bairdi, bairdi, c. bairdi
<i>C. opilio</i> (note italics)	C. opilio, opilio, c. opilio
catcher vessel	catcher-vessel
catcher/processor	catcher-processor catcher processor
CDQ Program	CDQ program
Celsius	Centigrade
codend	cod-end
crabs (use crabs for plural of crab)	crab
crew member	crewmember
decisionmaking	decision-making
deep water flatfish	deep-water flatfish deepwater flatfish
driftnet	drift-net
e.g., (note the comma)	e.g.
emergency rule (lower case to describe the process)	Emergency Rule
Emergency Rule (upper case to reference a specific rule)	emergency rule
ex-vessel	exvessel
fax	FAX Fax
<i>Federal Register</i> (in italics)	<u>Federal Register</u> Federal Register federal

<i>Correct</i>	<i>Not Correct</i>
	register
final rule (lower case to describe the process)	Final Rule
Final Rule (upper case to reference a specific rule)	final rule
footrope	foot rope
freshwater	fresh water fresh-water
gillnet	gill-net
hook-and-line (search & replace in tables)	hook and line Hook & Line hook-&-line
i.e., (note the comma)	i.e.
IFQ Program	IFQ program
Improved Retention/Improved Utilization Program	<i>not</i> lower case <i>nor</i> Improved retention/Improved utilization
insignificant	non-significant <i>nor</i> non significant <i>nor</i> not significant
interim emergency rule (lower case to describe the process)	Interim Emergency Rule
Interim Emergency Rule (upper case to reference a specific rule)	interim emergency rule
Island	Is.
landfast ice	land fast ice land-fast ice
long lasting	long-lasting longlasting
long term (adv)	longterm long-term
long-term (adj)	longterm long term
long-time	longtime long time
Magnuson-Stevens Act	MSFCMA
mothership	mother ship mother-ship
mt (for metric ton)	t, MT
multispecies	multi-species <i>nor</i> multi species
nearshore	near shore
NMFS approved scales	NMFS certified scales <i>nor</i> NMFS certified flow scales
non-AFA	nonAFA non AFA
nonpelagic	non-pelagic non pelagic
nonpelagic trawl	bottom trawl
nontrawl	non-trawl non trawl
North Pacific Fishery Management Council	North Pacific Fisheries Management Council
offshore	off-shore off shore
ongoing	on-going on going

<i>Correct</i>	<i>Not Correct</i>
open water	openwater    open-water
Pacific cod	cod, P. cod
Pacific ocean perch	Pacific Ocean perch
polycymaking	policy making    policy-making
recordkeeping	record keeping    record-keeping
rulemaking	rule-making    rule making
SAFE Report	SAFE (not just SAFE)
seabirds	sea birds
seafloor	sea floor
seawater	sea water
Section (in CFR citations or insert entire citation, e.g., 50 CFR 679.4)	section, sec., Sec., §§, Part §§
shallow water flatfish	shallow-water flatfish
shorebased	shore-based <i>nor</i> shore based
shoreside facility (when speaking of permits)	shore plant
shoreside processor(s)	shoreplant(s)    shore plant(s)
short term (adv)	
short-term (adj)	
since (if a time period is established)	use <i>because</i> if no time period established
southeast Alaska	SE Alaska
spatial and temporal	spatial/temporal    spatial / temporal
Saint Paul Island	St. Paul Is.
stationary floating processors	floating stationary processors
Steller sea lion	stellers    and it is not spelled Stellar sea lion
these data	the data    this data
thornyhead rockfish	thornyheads
U.S. or United States (when used as a noun)	US
U.S.S.R.	USSR
well-being	well being
year-round	year round