Natural Resource Condition Assessment Program

Author Template and General Formatting Guidance for Single-Resource Condition Assessments

This document provides a template for organizing and formatting reports for publication in the National Park Service (NPS) Natural Resource Report (NRR) series through the NPS Natural Resource Condition Assessment (NRCA) Program in Fort Collins, CO. Natural Resource Condition Assessments are for either one resource or multiple resources. This template applies to assessments focused on a single resource. The template is intended for both study investigators and authors who are preparing NRCAs. It serves as a content outline and formatting tool, includes some standardized language, and illustrates options for optional content. Notifications of errors or discrepancies and questions regarding the template are welcome and should be shared with the Fort Collins, CO, NRCA Team.

This template includes the following:

* Boilerplate front matter including standardized NPS content, NRR content, and NRCA Program content.
* Table of Contents with hyperlinks to other lists and sections, front matter, chapters, and appendices.
* Lists of Figures, Tables, and Appendices with hyperlinks to examples.
* Page numbering (including roman numeral front matter).
* Chapters 1–4 guidelines.
* Literature Cited with formatting details and examples.
* MS Word font Styles formatting as required by the NRR publication series.

How to Use this Template

This template is designed for use with Microsoft Word (MS Word). Yellow highlighted text is instructional and should be replaced with report content. Red italic text is also instructional and usually shows the name of the *MS Word Style* that should be applied to the adjacent text; delete red text after use. Leave all other text intact, unless otherwise noted. Delete headings that are not applicable to the report, or edit the exact wording of the headings as needed.

How is this template different from previous templates?

This report template is similar in structure to the template used for multiple-resource NRCA reports. To suit the more limited scope of NRCAs focused on a single resource, this template is shorter and has fewer requirements.

Things authors can do to make formatting by the Publication Team more efficient and consistent—BEFORE SUBMITTING FOR PUBLICATION

Author checklist:

* **Double check citations:** Make sure in-text citations match the literature cited section, and that citations that are not used in the text are deleted.
* **Personal communication sources** should be dated in the text with at least the year the information was gathered.
* **Figures and tables** that include other’s work should have captions that include the source information (Smith et. al 2020; site data provided by NPS ARD, etc.).
* **Figures** must have descriptive alternative text.
* **All tables and figures should be referenced in the text –** preferably in the paragraph immediately preceding the table’s/figure’s first appearance.
* **Make sure** t**here are no text boxes in the document** – including text boxes used as part of figures or for captions.
  + If your figures have text boxes and you are unsure how to format them otherwise, you may send them to the NRCA team as a file and we will format the figure and incorporate it into the report for you.
* **Ensure that web links**, if used, **are active** and that they lead to the correct site.
* **Briefly scan document** to fix any obvious text errors, and make sure units are used in a consistent format (i.e., abbreviated or spelled out – km vs. kilometer).
* **Tables** must be formatted for Section 508 accessibility compliance. See tables below for examples. Do not use images of tables—they must be actual tables that screen readers can navigate. Tables should have:
  + no blank cells (use “N/A” or an en-dash “–”, but not hyphens)
  + header names for all columns
  + no mid-table header rows (i.e., rows used only to break data into groups or a new section)
  + merged cells only in the first row, left-most column, and last row (for summary statistics such as a calculated total or average, etc.)
  + no information communicated by visual cues alone (e.g., colored text, cell shading, bold, etc.)
  + as simple a layout as possible. Data in a row must relate across all columns of the table, and data in a column must relate across all rows (i.e., don’t double-up data into two table halves to save space; complex tables should be separated and simplified).

**Table 1.** Example of a ***non-conforming*** table. Note the use of blank cells and hyphens, mid-table header rows, missing column headings, merged cells in areas other than allowed, bold and colored text used to communicate info, data organized so that it doesn’t relate to all columns and all rows, etc.

|  | |  | 2017 | 2018 |  |  | 2017 | 2018 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Species Name** | | **Common Name** | **Count** | | **Species Name** | **Common Name** | **Count** | |
| Mammals | | | | | | | | |
| *Canus lupus* | | Dog | 125 | 140 | *Felis catus* | Cat | 134 | 120 |
| Dinosaurs | | | | | | | | |
| ***Tyrannosaurus rex*** | | T-Rex | 0 | 0 |  |  | 0 | 0 |
| **Total 2017** | | | | | **159** | | | |
| **Total 2018** | | | | | **160** | | | |
| **Indicator** | **Measure** |  | **Rationale** | | | | | |
| Mammals | Counts | Resource is in good condition; condition is improving; high confidence in the assessment. | These animals are doing fine. | | | | | |
| Reptiles |
| Dinosaurs | - | - | - | | | | | |

**Note:** Species in bold are extinct, items in red are estimated counts.

**Table 2.** Example of a ***conforming*** table. Data from Table 1 has been divided into two less-complex tables here and in Table 3. There are no blank cells, mid-table header rows were converted to a merged left “category” column, first row has merged cells (Count), table notes “A” and “B” in *each* relevant cell explain what bold and shaded cells communicate, last row of summary data has merged cells.

| Category | Species Name | Common Name | Count | |
| --- | --- | --- | --- | --- |
| 2017 | 2018 |
| Mammals | *Canus lupus* | Dog | 125 B | 140 |
| *Felis catus* | Cat | 134 | 120 B |
| Dinosaurs | ***Tyrannosaurus rex A*** | T-rex | 0 | 0 |
| **Total** | | | **159** | **160** |

A Extinctspecies, also shown in bold text.

B Estimated count, also shown with gray cell shading.

**Table 3.** Example of a ***conforming*** table. Note there are no blank cells (used “N/A” and/or en-dashes), all columns have heading names (added “Condition/Trend”), data is repeated in each row to avoid merged cells in rows/columns that are not allowed.

| Indicator | Measure | Condition/Trend | Rationale |
| --- | --- | --- | --- |
| Mammals | Counts | Resource is in good condition; condition is improving; high confidence in the assessment. | These animals are doing fine. |
| Reptiles | Counts | Resource is in good condition; condition is improving; high confidence in the assessment. | These animals are doing fine. |
| Dinosaurs | N/A | N/A | – |

**The template begins on the next page**

**(Please delete these pages that precede it)**

National Park Service LogoNational Park Service   
U.S. Department of the Interior

Natural Resource Stewardship and Science

Type the Project Title Here *(nrps Title)*

A Condition Assessment For (place park name here) (nrps Subtitle)

Natural Resource Report NPS/XXXX/NRR—202X/XXXX *(nrps Series name/number)*





**ON THIS PAGE**If you inserted an inside front cover photo on this page, type the caption here *(nrps Inside covers)*   
Image credit goes here

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Type the Project Title Here *(nrps Title)*

A Condition Assessment For (place park name here) (nrps Subtitle)

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Author One,1 Author Two,2 Author Three,1 Author Four3 *(nrps Normal single line)*

1 National Park Service (organization name is mandatory)   
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Address Line 2 (address is optional)   
City, State Zip code (city and state are mandatory, Zip code is optional)

2 Organization Name (organization name is mandatory)   
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Month Year

U.S. Department of the Interior

National Park Service

Natural Resource Stewardship and Science

Fort Collins, Colorado

The National Park Service, Natural Resource Stewardship and Science office in Fort Collins, Colorado, publishes a range of reports that address natural resource topics.These reports are of interest and applicability to a broad audience in the National Park Service and others in natural resource management, including scientists, conservation and environmental constituencies, and the public.

The Natural Resource Report Series is used to disseminate comprehensive information and analysis about natural resources and related topics concerning lands managed by the National Park Service. The series supports the advancement of science, informed decision-making, and the achievement of the National Park Service mission. The series also provides a forum for presenting more lengthy results that may not be accepted by publications with page limitations.

All manuscripts in the series receive the appropriate level of peer review to ensure that the information is scientifically credible and technically accurate.

Views, statements, findings, conclusions, recommendations, and data in this report do not necessarily reflect views and policies of the National Park Service, U.S. Department of the Interior. Mention of trade names or commercial products does not constitute endorsement or recommendation for use by the U.S. Government.

This report is available in digital format from the [Natural Resource Condition Assessment Program](https://www.nps.gov/orgs/1439/nrca.htm) and the [Natural Resource Publications Management website](https://www.nps.gov/im/publication-series.htm). If you have difficulty accessing information in this publication, particularly if using assistive technology, please email [irma@nps.gov](mailto:irma@nps.gov).

Please cite this publication as:

Lastname, A. B., C. Lastname, and D. E. Lastname. 202X. Full title of report in sentence case: Including subtitle. Natural Resource Report NPS/XXXX/NRR—202X/XXXX. National Park Service, Fort Collins, Colorado.

NPS XXX/XXXXX, Month Year

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Executive Summary *(nrps Heading 1)*

All reports will have an Executive Summary. The Executive Summary will serve as a “stand alone” section that summarizes the important facts discussed in the report and the conclusions reached in relation to study objectives. A well prepared summary can be as short as one to two pages. It should be as brief as possible, yet cover the subject in a clearly written, non-technical style so that, on its own, the reader is informed about the project and the conclusions made.

The purpose of the summary is to inform potential readers of the important points of the paper without having to actually read the paper. It can also serve as an “advertisement” for the paper that readers use to determine whether they want to read the entire paper. *(nrps Normal)*

Acknowledgments *(nrps Heading 1)*

Briefly acknowledge those who directly helped with research or writing, and include acknowledgement of the funding (and support, if applicable) provided by the National Park Service’s Natural Resource Condition Assessment Program and other organizations as appropriate. *(nrps Normal)*

List of Terms, Small Glossary, Acronyms, or Contacts (optional) *(nrps Heading 1)*

This section is also optional. Some reports include a list of terms (or small glossary), commonly used acronyms, or personal contacts. If they will fit on one page, two or more sections of this type may be placed on the same page. If you include acronyms, make sure they are defined the first time they are used, and are used at least once more after being defined. *(nrps Normal)*

Introduction (*Do not edit*)

The National Park Service’s (NPS) Natural Resource Condition Assessment (NRCA) Program evaluates natural resource condition**s** in park units and delivers the results to park staff, scientists, strategic planners, and the general public through reports and associated products. All NRCA efforts strive to report resource condition information in a way that informs multiple levels of park stewardship activities. Stewardship activities may include partnerships, resource stewardship plans, and park management plans, and may inform on-the-ground actions that park management can readily implement.

Natural Resource Condition Assessments are short-term projects where a pressing issue or critical data or knowledge gap exists. They can be used to evaluate at least one park natural resource, characterize landscape or watershed-scale condition, conduct vulnerability assessments, plan resource restoration, and conduct effectiveness evaluations resulting from park management activities. As short-term projects, NRCAs primarily rely on the use and synthesis of existing science and data. They are intended to strengthen our understanding of current resource conditions and their relationship to environmental processes across the landscape, and to improve the delivery of best available science for park management.

Standard products include a detailed project report and associated products. Associated products may be data summaries, resource briefs, geospatial maps and information, story maps, and others. All reports and associated products are available via the NPS Datastore (<https://irma.nps.gov/DataStore/>).

This page should be left as a blank page (if needed) so that Chapter 1 always starts on an odd page.

Chapter 1. Management Issue and Approach *(nrps Heading 1)*

This section provides the background information necessary to understand why the described study was conducted, along with any background or other information necessary to provide a context for the information presented. It includes a description of the study approach, including what key resource(s) was studied and the indicator(s) and/or measure(s) used for condition assessment. This section also documents which data sets were used in the study, how new data were collected (if applicable), and how data analysis was performed. *(nrps Normal)*

1.1 Management Issue or Critical Information Need (*nrps Heading 2*)

This section provides the background information necessary to understand why the described study was conducted, as well as any background or other information necessary to provide a context for the information presented. *(nrps Normal)*

1.2 Study Approach (*nrps Heading 2*)

This section should describe the primary driving issue(s) behind the study, including what products or management actions the study results will inform. *(nrps Normal)*

1.2.1 Selection of Key Resources, Indicators, and Reference Criteria (nrps Heading 3)

This section should document how and why the selected key resources, indicators, and reference criteria are appropriate to answering the management questions. *(nrps Normal)*

Chapter 2. Study Methods *(nrps Heading 1)*

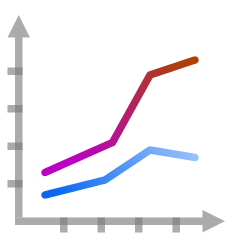
2.1 Data Sources (*nrps Heading 2*)

This section should describe what basic types of existing data sets were used, basic information on how data were collected, and a description of how the data are/are not appropriate to addressing the key resource.

2.2 Methodology/Analysis

This section should describe how the data were analyzed and any other methods used in the study.

Instructions for Figures, Photos, Tables, and Equations

 *(nrps Image line)*

**Figure 1.** Figures (maps, non-decorative photos, charts, etc.) should be in *nrps Image line* font Style and **placed** **in line with text** **directly following the paragraph that contains the figure’s first mention**. For document stability, please do not text wrap figures and, if possible, ensure figures are between 4.5” and 6.5” in width. **Each figure caption must correspond to only one image file**; for figures comprised of multiple images or that have text boxes or shapes overlaid on them, you must combine everything into one single image file before inserting it into your report (i.e., do not just use the “group” tool in Word). All figures must have a caption and be properly cited. **Construct your captions so that the first sentence is a concise, general description of the figure, containing *exactly* what you want to have displayed in the Table of Figures.** Add secondary sentences for additional information that you *do not* want included in the Table of Figures, such as descriptions of the different parts of the photo, map, chart, etc. and image sources or credits. Throughout your report, be consistent with the basic layout scheme (justification, borders, and size) and crop images to remove built-in borders or extra white space around image edges. Ensure that all graphic features are discernable and all major text attributes (legends and labels) are legible. **All graphics must also have descriptive alt-text embedded.** *(nrps Figure caption).*



Purely decorative graphics (i.e., photos and images that do not show data results or analyses, facts, or contextual information) should be formatted in a way consistent with figures but should not be mentioned in the text or listed in any list of contents. All photos must have a caption and be properly cited (e.g., Cows grazing in the Sunnyside Meadow at ROMO. (NPS/JOHN DOE). *(nrps Photo caption)*

**Table 4.** Tables should be in MS Word Tables (not pictures or images of tables or tables housed in external MS Office files (e.g., MS Excel), and they should be **placed in line with text directly following the paragraph that contains the table’s first mention**. For document stability, do not text wrap tables. All tables should be consistently formatted; the table below is formatted in a way that is compliant with NRCA standards and protocol and is highly recommended. **If necessary, only the left-most column, and the top- and bottom-most rows may contain merged cells; do not use mid-table horizontally-merged header rows, indentation, or blank cells to demarcate separate categories—use vertically-merged cells in the left-most column only, or preferably, separate the data into different tables**. Please be mindful of keeping consistent capitalization and abbreviation schemes across tables. Tables should be no greater than 6.4” in width on a portrait page and 8.9” on a landscape page. **Construct your captions so that the first sentence is a concise, general description of the table, containing *exactly* what you want to have displayed in the Table of Tables.** Add secondary sentences for additional information that you *do not* want included in the Table of Tables. Due to the possibility of movement during formatting, please do not add the heading “continued” to tables that span multiple pages, as this will be done by the NRCA publication team. *(nrps Table caption).*

| Land Cover Class \* *(nrps Table header)* | Hectares | % Land Cover |
| --- | --- | --- |
| No data *(nrps Table cell)* | 1,041,794.3 | 63.8 |
| Snow/cloud/light barren | 157,026.8 | 9.6 |
| Snow/cloud/light barren | 57,023.3 | 3.5 |
| Mixed forest | 47,142.5 | 2.9 |
| Open low shrub graminoid/mesic bog/graminoid shrub tundra | 41,426.3 | 2.5 |
| Closed shrub graminoid | 38,946.5 | 2.4 |
| Mountain shadow | 37,945.3 | 2.3 |
| Conifer forest | 37,071.8 | 2.3 |
| Deep clear water | 36,059.5 | 2.2 |
| Open low shrub eric./conifer woodland/mesic bog/eric. shrub tundra | 32,030.3 | 2.0 |
| Lichen shrub tundra | 27,116.5 | 1.7 |
| Miscellaneous deciduous (open alder, cottonwood, birch, willow) | 21,993.8 | 1.3 |
| Lichen | 19,882.0 | 1.2 |
| Ice, snow and clouds | 12,512.5 | 0.8 |
| Shallow/sedimented water | 8,041.3 | 0.5 |
| Marsh/very wet bog | 5,364.3 | 0.3 |
| Shadow | 4,609.8 | 0.3 |
| Wet bog/wet meadow | 4,510.0 | 0.3 |
| Turbid and/or shallow water | 1,245.8 | 0.1 |
| **Total** | **1,631,742.0** | **100.0** |

\* This table was published in 2016 for Lake Clark National Park and Preserve. (For a table with one note, we suggest using an asterisk [\*]; for a table with more than one note, we suggest using the superscript scheme A, B, C, etc.) In addition, any cell shading, bolding, or other *meaningful* visual-only information in a table must also be communicated by its own table note, demarcated with asuperscript *in each individual cell* that uses the particular formatting scheme *(nrps Table note)*

**Note:** Special characters, symbols, and fonts are very common in NRR reports. For formulas, we suggest that you use the *Insert / Equation* menu tools built into MS Word for formulas. Here is an example:

Chapter 3. Study Results *(nrps Heading 1)*

This section reports on the results of the study. It should include current condition reporting for the selected park resource(s), indicator(s) and/or measure(s) used in the study, including the reference criteria and rationale used for making that determination. Current condition reporting must include the table below. This section should maximize credibility and defensibility of study findings.*(nrps Normal for all non-heading body text)*

**Rationale and Key Points:** Include rationale for condition findings. What is the reference condition used? What are the remaining concerns or data gaps or next steps? Do these indicators say something about the condition of the resource? Identify primary threats or stressors to the resource if appropriate. BE BRIEF!

**Table 5.** A general description of the table goes in the first sentence of the caption, which will populate the Table of Tables entry. Add other sentences, as needed, to go into more detail.

| Resource | Condition Indicators Assessed | Condition Status/Trend | Rationale & Key Points |
| --- | --- | --- | --- |
| Fire impacts along Big River watershed | Acres burned per year | Declining Condition/Unknown Trend | 10% more than average burned in 2018 (10-year average 2001–2011).  Changing fire regimes are burning important ecosystem food sources and destroying plants critical for erosion control.  Later seasonal rains due to climate fluctuation may be increasing fire frequency in the park. Later rains lead to fuel increases in erosion prone areas. |
| Big River volume | Annual average daily discharge | Variable Condition/Stable Trend | While the volume of water flowing in the park’s river shows large year-to-year fluctuations without distinct long term change, recent timing of peak flow is more variable and occurs earlier in the spring. |
| Average date of peak flow | Good Condition/No Trend | While the volume of water flowing in the park’s river shows large year-to-year fluctuations without distinct long term change, recent timing of peak flow is more variable and occurs earlier in the spring. |
| Volume at peak flow | Stable Condition/Declining Trend | 10-year average peak flow volume is 2500 cfs. Peak flow in 2018 was recorded at 2100 cfs, following smaller recorded declines in 2016–2017.  Volume of upstream water diversion has not been quantified. |
| Pacific Willow *(Salix lucida)* | Number of plants per study plot | Good Condition/Stable Trend | After a decrease in number of plants following fire and subsequent erosion events in 2002 and 2003, populations have recovered and are stable in 2018. |
| Elk *(C. canadensis roosevelti)* | Elk population | Good Condition/Decreasing Trend | Number of elk counted in the Big River watershed has decreased annually since 2015. Number of animals in 2018 was 265 and the 5-year average (2011–2017, no data in 2012) was 285 animals.  There is no clear correlation between food source availability as plant populations in the watershed have rebounded following fire in 2003, and the elk’s primary browse (Pacific Willow) isn’t scarce. |

Chapter 4. Summary and Recommendations *(nrps Heading 1)*

This section is less about delivering rigorous scientific findings and more about providing useful interpretations and suggestions to park managers related to the management issue noted in Chapter 1. It can also help park managers think about logical next steps to take as part of ongoing efforts to protect and manage important park natural resources. (*nrps Normal*)

Literature Cited *(nrps Heading 1)*

Below are examples for how to cite various types of literature in an NRCA report.

Note: Please only include one Literature Cited section for the entire body of the report. In regard to Appendices: 1) Each individual appendix can have its own literature cited at end of appendix; or 2) The citations used in the Appendices section can be included in this Literature Cited section).

Agency, Company, etc. as Author Examples

Fung Associates Inc. and SWCA Environmental Consultants. 2010. Assessment of natural resources and watershed conditions for Kalaupapa National Historical Park. Natural Resource Report. NPS/NPRC/WRD/NRR—2010/261. National Park Service, Fort Collins, Colorado*. (nrps Literature cited)*

Greater Yellowstone Whitebark Pine Monitoring Working Group. 2014. Monitoring whitebark pine in the Greater Yellowstone Ecosystem: 2013 annual report. Natural Resource Data Series. NPS/GRYN/NRDS—2014/631. National Park Service. Fort Collins, Colorado.

National Park Service. 2016. State of the park report for Zion National Park. State of the Park Reports. No. 23. National Park Service. Washington, District of Columbia.

U.S. Forest Service (USFS). 1993. ECOMAP. National hierarchical framework of ecological units. U. S. Forest Service, Washington, D.C.

Traditional Journal Article Examples

Bradbury, J. W., S. L. Vehrencamp, K. E. Clifton, and L. M. Clifton. 1996. The relationship between bite rate and local forage abundance in wild Thompson’s gazelles. Ecology77:2237–2255. *(nrps Literature cited)*

Oakley, K. L., L. P. Thomas, and S. G. Fancy. 2003. Guidelines for long-term monitoring protocols. Wildlife Society Bulletin 31(4):1000–1003.

Sawaya, M. A., T. K. Ruth, S. Creel, J. J. Rotella, J. B. Stetz, H. B. Quigley, and St. T. Kalinowski. 2011. Evaluation of noninvasive genetic sampling methods for cougars in Yellowstone National Park. The Journal of Wildlife Management 75(3):612–622.

Book Example

Harvill, A. M., Jr., T. R. Bradley, C. E. Stevens, T. F. Wieboldt, D. M. E. Ware, D. W. Ogle, and G. W. Ramsey. 1992. Atlas of the Virginia flora, third edition. Virginia Botanical Associates, Farmville, Virginia.*(nrps Literature cited)*

Book Chapter Examples

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Appendix A. (*nrps Heading 1 appendix* — if there are fewer than three (3) appendices, use *nrps Heading 1* instead so that they are listed in the Table of Contents, then remove the Table of Appendices)

The Department of the Interior protects and manages the nation’s natural resources and cultural heritage; provides scientific and other information about those resources; and honors its special responsibilities to American Indians, Alaska Natives, and affiliated Island Communities.

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