# **NASA DEVELOP National Program**

Deliverable Checklist Fall 2018

# General Style Notes (for all or most deliverables)

- o The correct file name was used.
- o The most recent template was used.
- o The short title was created by combining (only) the study area and application area. If the project is a continuation, a 'II' or 'III' should also be included.
- o Capitalization is consistent.
  - E.g. For the Earth observations section of the Project Summary, the first word for parameter is capitalized for all points or lowercase for all points.
  - The first letter of each word in the title, subtitle, and VPS title are capitalized (title case).
- o Slash marks are not used in a sentence. They are fine to use in a list if necessary.
- Semicolons are used correctly. Semicolons should be used to separate two independent clauses (meaning they are both complete thoughts and the semicolon could be replaced with a period).
- o I.e. and e.g. are used correctly. Use "i.e." (meaning "that is") to give further explanation of something. Use "e.g." (meaning "for example") to give a few examples, not a complete list.
- o One space is used between sentences.
- o For rough and final drafts submitted to NPO, all comments have been addressed, deleted, and changes have been accepted. A "clean" final draft is archived at the node.
- o Multiple images are not saved together into a single image; images can be resized independently of each other.
- o Formal node names should be used for each deliverable (e.g. Alabama Marshall, Colorado Fort Collins).
- Note: NASA's EOS (<u>Earth Observing System</u>) is a system sub-set of NASA missions focused on specific areas of climate science. Not all NASA satellites (and therefore not all of the satellites used at DEVELOP) are in the EOS. It is generally best to avoid using EOS in deliverables.
- o Consistency is key!
  - Pronouns throughout the paper we, the/our team, or the project team are good options
  - How you write EO's compare satellite and sensor formats (e.g. If you write Landsat 8 OLI (satellite & sensor), don't just write Sentinel-2(satellite)

## **Abstract**

**Purpose**: While not a separate deliverable, the abstract appears in the Project Summary, Tech Paper, and on the Poster. It is a short summary of your project that introduces the problem, partners, NASA EO, results, & significance. It is also used on your project page on the DEVELOP website.

- o The abstract "lives" in the project summary.
- o Acronyms are spelled out the first time they are used in the abstract, as well as the first time they are used in the text.
- o There are no citations in the abstract.
- o Write in past tense and avoid passive voice.
- o Abstract: 150 250 words, one paragraph
- o Include the NASA EO that were used and the partner organizations.
- o If you need to make changes to your abstract after you've submitted the Project Summary FD, send any updated versions to the Project Coordination team and ensure that the updated version is used on any subsequent deliverables and on your project page on DEVELOPedia.



## **Project Summary**

**Purpose:** The Project Summary is your go-to document for project information. The content in this document is compiled for reporting to NASA HQ and is often shared with future teams, partners, and the Capacity Building and Applied Sciences Programs. You can use this to complete your project page on DEVELOPedia.

- o The correct template was used. Do not change the font style and/or size.
  - All text is Garamond. Do not change the font style and/or size from the template.
  - The formatting for each section matches the template.
    - E.g. Science advisor affiliations are in parentheses
    - E.g. Bullets are used for Community Concerns and Project Objectives
- Word counts are correct.
  - Project Synopsis: 80 100 words
- Transition Plan, Software Release Plan, & Project Continuation Plan: 100 words max (each)
  Change '(s)' for any given section.
  - E.g. National Application Area(s) Addressed on the template should read either:
    - National Application Area Addressed: Application Area 1, or
    - National Application Areas Addressed: Application Area 1, App Area 2, etc.
- When choosing keywords, do not include words listed in your project title. Think of words or phrases that are specific to your project and could be used in search engines. Only capitalize the first letter of the first keyword and any acronyms or proper nouns.
- o Each state in the study area is listed with postal acronyms.
- o If working on a seasonal project, include study period months.
- o For Community Concerns, all points are written in complete sentences and have periods.
- o For Project Objectives, all points start with an action verb; do not write as complete sentences with periods.
- o For partner organizations table, list end users first.
  - Every partner is either a collaborator or an end user, but not both.
  - Boundary organizations are also listed as either a collaborator or an end user, and the notation for boundary organization is at the end of the listing.
- The "Decision Making Practices & Policies" and "Project Benefit to End User" sections include discussion of the decision or decisions that the end users are making and how NASA EO data can help.
- For DEVELOP purposes, include NASA, European Space Agency, NOAA, or commercial airborne/satellite platforms in the *Earth Observations* table. Other data/imagery including LiDAR/UAV from a partner or other agency, NAIP imagery, multi-satellite modeled products (i.e. NASA's MERRA-2). Note: This list is not inclusive.
- Know your data sources. For published ancillary datasets list the original source for Creator Organization (i.e. person/organization who actually created the dataset) followed by the formal dataset name. This may require you to look at metadata or product websites to find this information.
- o Check the <u>Nomenclatures</u> page on DEVELOPedia for correct Partner, EO, Dataset, Model, and Software names. If you can't find what you are looking for, let the PC team know so we can add it to our master list!
- o Cross-check your EO: All Platforms & Sensors listed in the **Earth Observations** table must be included in the 'Earth Observations Used' column of the **End Products** table.
- o The "Software Release Category" column in the End Products table is answered.
- o Delete "Software Release Plan/POC" and "Project Continuation Plan" sections from the "Project Handoff Package" if not applicable.

## **Tech Paper**

**Purpose:** The Tech Paper provides the technical details for partners and future DEVELOP teams to replicate and understand. In fully explains the problem, provides a scientific basis for your



methodology, and thoroughly explains your results and what they mean for your project partners. It can even act as a foundation for a future publication.

- o The correct template was used.
  - All text is Garamond. Do not change the font style and/or size from the template.
  - All formatting matches the template.
    - E.g. The subtitle is not italicized.
    - E.g. Science advisor affiliations are not in parentheses.
- o Text is left justified throughout the document.
- o Heading levels are consistent.
- o Write in past tense. Here are examples in the past passive and past active voice.
  - Past passive: Three 2 L samples were taken at a depth of between 0.1 and 0.5 m at the down-wind end of each wetland.
  - Past active: Each of the three groups took 2 L samples at a depth of between 0.1 and 0.5 m at the down-wind end of each wetland.
- o Each paragraph should have at least three sentences.
  - E.g. You don't need a separate paragraph for each data source under the Data Acquisition section. Group content together so you have substantive content.
- Word counts are correct.
  - Keywords 2-8 words
  - Introduction section 500-800 words
  - Methodology section 2-6 pages
  - Results and Discussion section approximately 2-6 pages
  - Conclusions 200-600 words
  - The entire tech paper (everything before the references & appendices) is no longer than 12 pages.
- o The final draft title page is updated to reflect "Final Draft November 15, 2018."
- Acronyms are spelled out the first time they are used in the text, even if they have also been spelled out in the abstract.
- o The tech paper answers all questions included in the template.
- o Only capitalize proper nouns; e.g. random forest, generalized linear model, most species common names, etc. are not capitalized.
- All figures and charts have captions according to the template examples and are referenced in the text.
- o Figures can be grouped. Text and map elements do not have to be separate. However, text must be large enough and clearly legible (no blurry text).
- o The Introduction can be divided into subsections or written under a single heading.
- o A minimum of 5 references is required for the introduction section (e.g. information about your focal species, habitat, or problem, scientific basis for your methods, etc.).
- o Consider including an Earth observations table in the *Data Acquisition* section if you have multiple data sources.
- o Be specific in why you did particular methods don't leave the readers hanging. Are you answering "The Five Ws" (who, what, when, where, & why)?
- $\circ$  Equations are numbered  $\underline{\text{and}}$  referenced in the text.
  - The equation number should be right aligned
  - Garamond font find Normal Text on the left side of the Equation Tools tab
- o Conclusions should summarize the main findings and major implications of the study. Things like "We made a map" are not proper conclusions. What does the map show and what does that mean to your question and your partners?
- o The funding sentence after the acknowledgements is included.
- o The references section is formatted consistently using APA formatting.
- o The references section includes Digital Object Identifiers (DOIs) for NASA data products.
- o The Glossary is complete. Be consistent with how you write each entry (i.e. sentences vs. fragments).
- o If there are no appendices, the heading is deleted.



- Consider image gallery or other way to share additional images/figures with partners you don't have to include everything in the tech paper
- Appendices
  - Use appendices to include detailed information that would be distracting in the main body of the paper (e.g. supplementary information, equations, maps, etc.)
  - Each distinct item should have its own appendix. Separate content into multiple appendices if necessary.
  - Restart numbers labels for tables and/or figures at each appendix (i.e., A1, A2, etc. for Appendix A, B1, B2, etc. for Appendix B), if necessary.
  - Don't forget to refer to your appendix in text.
- Including a lot of high resolution images exported from ArcGIS could make your tech paper file size very large. Consider compressing images in your tech paper by clicking on the image -> Picture Tools -> Compress Pictures.
- o Required statements are included.
  - NASA legal statements
  - Copernicus Sentinel data acknowledgement, if used

### **Poster**

**Purpose:** This is a visual demonstration of your project, highlighting important aspects in an appealing and easy to understand way. These are often presented at node closeout events, conferences, and recruiting events.

- o The correct template was used.
  - Correct fonts were used.
    - Headings are Century Gothic and 44 point font.
    - Other text is Garamond.
    - Body text is at least 24 point font.
    - Caption text is at least 16 point font.
  - The formatting for each section matches the template.
    - E.g. Objectives and conclusions are provided in bulleted lists
    - E.g. Bullets are the correct style, size, and color
- o Turn on slide guides and keep poster content within the red margins.
- The left edge of the sections are lined up (double check this if sections were rearranged); use the align tool in Powerpoint.
- o Title case was used for the project subtitle.
- o The abstract matches the final project summary.
- o Think of ways to demonstrate the project methodology visually. Think outside the box! Any flowcharts are created within PowerPoint to be editable, rather than saved as an image.
- o Any text on the study area map is legible. The map and legend are not saved as a single image. All images (maps, figures, tables, graphs, etc.) MUST have separate and editable text.
- o Images in the Earth observations section were taken from <u>DEVELOPedia</u>. All text is editable and not saved as an image. If your EO is not listed, contact the PC team.
- o The results section is mostly imagery.
- o Only US federal agency logos are included on the poster.
- o If the project is a continuation, previous team members are included in the acknowledgements section. For acknowledging past contributors, their DEVELOP location.

#### **Presentation**

**Purpose:** Use the presentation to tell the story of your project. Presentation skills are critical to effectively communicate your science to partners and for recruiting and conference presentations.

- o The correct template was used.
  - The correct application area color was used.



- All text is century gothic.
- Header text is between 40 and 60 point font.
- Other text is no smaller than 20 point font.
- o Authors' names are aligned
- Every slide has speaker notes that are detailed enough for someone unfamiliar with the project to give the presentation. It is not uncommon for a CL or Fellow to present a project at a later date – these notes are crucial for giving a quality presentation.
- o Slides are mostly visual, with the least amount of text necessary.
- o Legends are imported separately from maps (not within the same image).
- o All text on images is legible.
- o Flowcharts are editable and not saved as an image.
- o Only US Federal agency logos are included in the presentation.
- o Map base layers are cited in the speaker notes.
- o All imagery MUST fit one of the following:
  - Collected by the team (make sure any people have signed media release forms)
  - Provided by the partner (with written permission to use it)
  - From a US federal agency, and in the public domain (not taken by a partner)
  - From the DEVELOP collection on Flickr
  - Under a Creative Commons license not all licenses are created equal! Look up the specific <u>license type</u> and make sure your image is cited correctly.
- o All images are cited appropriately with image URLs in the speaker notes.
- o Image borders (if any) are consistent throughout the presentation.
- o If the project is a continuation, previous team members are included in the acknowledgements section. For acknowledging past contributors, their DEVELOP location.

