



ArcGIS Pro Permitting and Environmental Information Tool

OVERVIEW AND USER INSTRUCTIONS

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DISCLAIMER

This document is intended solely to assist federal broadband grant recipients and subgrantees in better understanding Infrastructure Investment and Jobs Act (IIJA) broadband grant programs and the requirements set forth in the Notice of Funding Opportunity (NOFO) for this program. This document does not and is not intended to supersede, modify, or otherwise alter applicable statutory or regulatory requirements, the terms and conditions of the award, or the specific application requirements set forth in the NOFO. In all cases, statutory and regulatory mandates, the terms and conditions of the award, the requirements set forth in the NOFO, and follow-on policies and guidance, shall prevail over any inconsistencies contained in this document.

NTIA's ArcGIS Pro Permitting and Environmental Information Tool (APPEIT) should be used for informational purposes only and is intended solely to assist users with preliminary identification of broadband deployments that may require permits or planning to avoid potentially significant impacts to environmental resources subject to the National Environmental Policy Act (NEPA) and other statutory requirements.

The tool is not an exhaustive or complete resource and does not and is not intended to substitute for, supersede, modify, or otherwise alter any applicable statutory or regulatory requirements, or the specific application requirements set forth in any NTIA NOFO, Terms and Conditions, or Special Award Condition. In all cases, statutory and regulatory mandates, and the requirements set forth in NTIA grant documents, shall prevail over any inconsistencies contained in these templates.

The tool relies on publicly available data available on the websites of other federal, state, local, and Tribal agencies, and in some instances, private organizations and research institutions. Layers identified with a double asterisk include information relevant to determining if an “extraordinary circumstance” may warrant more detailed environmental review when a categorical exclusion may otherwise apply. While NTIA continues to make amendments to its websites to comply with Section 508, NTIA cannot ensure Section 508 compliance of federal and non-federal websites or resources users may access from links on NTIA websites.

All data is presented “as is,” “as available” for informational purposes. NTIA does not warrant the accuracy, adequacy, or completeness of this information and expressly disclaims liability for any errors or omissions.

Please e-mail NTIAanalytics@ntia.gov with any questions.

PURPOSE AND OVERVIEW

The Department of Commerce's National Telecommunications and Information Administration (NTIA) is providing the ArcGIS Pro Permitting and Environmental Information Tool (APPEIT) to help federal broadband grant recipients and subgrantees identify permits and environmental factors as they plan routes for their broadband deployments. Identifying permit requirements early, initiating pre-application coordination with permitting agencies, and avoiding environmental impacts help drive successful infrastructure projects.

NTIA's public release of the APPEIT tool supports government-wide efforts to improve permitting and explore how online and digital technologies can promote efficient environmental reviews.

INTRODUCTION

TECHNICAL DESCRIPTION

This Esri ArcGIS Pro tool was created to support permitting, planning, and environmental review preparation efforts by providing access to data layers from publicly available sources, including federal review, permitting, and resource agencies. For the full list of APPEIT layers, see Appendix Table 1. The tool is comprised of an ArcGIS Pro Project containing a custom ArcGIS Toolbox tool, linked web map shared by the NTIA's National Broadband Map (NBAM), a report template, and a Tasks item to guide users through using the tool. This ArcGIS Pro project and its contents (maps and data) are consolidated into a packaged (.ppkx) project file.

To use APPEIT, users will input a project area boundary or project route line in a shapefile or feature class format. The tool will return as a CSV and PDF report that lists any federal layers from the [ArcGIS Pro Permitting and Environmental Information Web Map](#) that intersect the project. Users may only input a single project area or line at a time; multiple projects or project segments will need to be screened separately. For project route lines, users are required to specify a buffer distance. The buffer distance that is used for broadband projects should be determined by the area of anticipated impact and should generally not exceed 500 feet. For example, the State of Maryland recommends a 100-foot buffer for broadband permitting.¹ The tool restricts buffers to two miles to ensure relevant results.

For additional information about tasks or project packages see the Esri documentation below.

- [Introduction to Tasks](#)
- [Project Packages](#)

¹ [Navigating-Broadband-Permitting-Process.pdf](#)



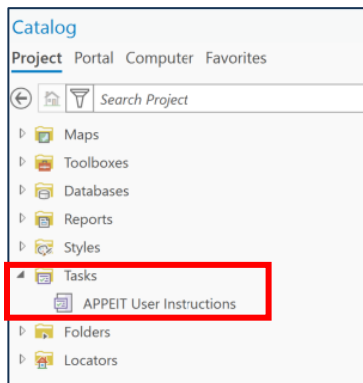
SYSTEM REQUIREMENTS

Please confirm that your system meets the [minimum requirements](#) to run ArcGIS Pro, and that you have ArcGIS Pro version 3.x installed. If needed, update your ArcGIS Pro software to the latest available version before opening the APPEIT project package. The tool has been designed to work with a basic-level license or above.

DOWNLOAD AND SETUP

SETUP

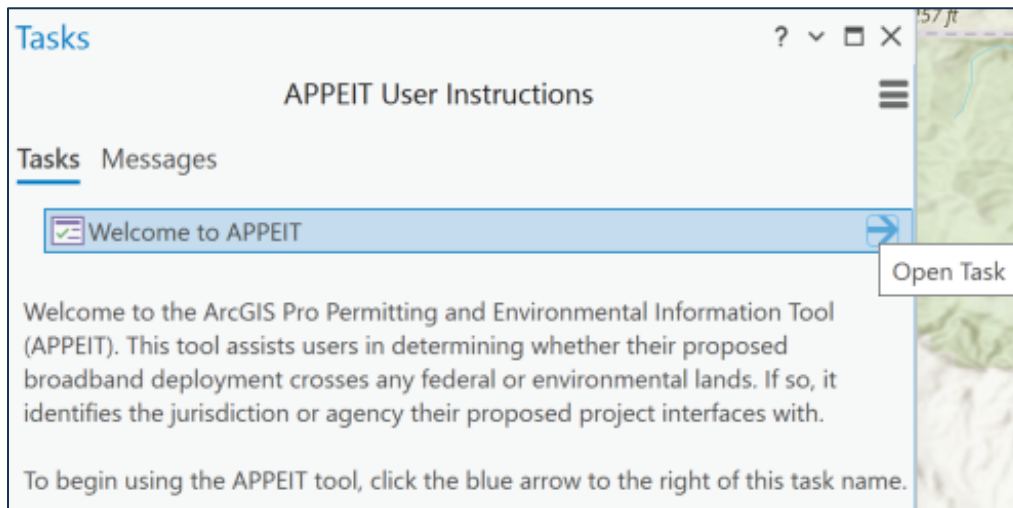
1. Use this [link](https://nbam.maps.arcgis.com/home/item.html?id=37fa42c6313e4bdb9d8a9c05d2624891) to download the project package, which is available at:
<https://nbam.maps.arcgis.com/home/item.html?id=37fa42c6313e4bdb9d8a9c05d2624891>.
2. Navigate to your downloads folder, open ["APPEIT_Public_20250228.ppkx"]
 - If prompted, choose a folder location to open and unpack the ArcGIS Pro project structure.
 - If you are not prompted, the project unpacks to the default location set in the Sharing and Download section of your ArcGIS Pro Options. This setting can be found under the Project Tab > Options > Sharing and Download.
3. Once the project package opens, navigate to the Catalog pane and select the Tasks dropdown.



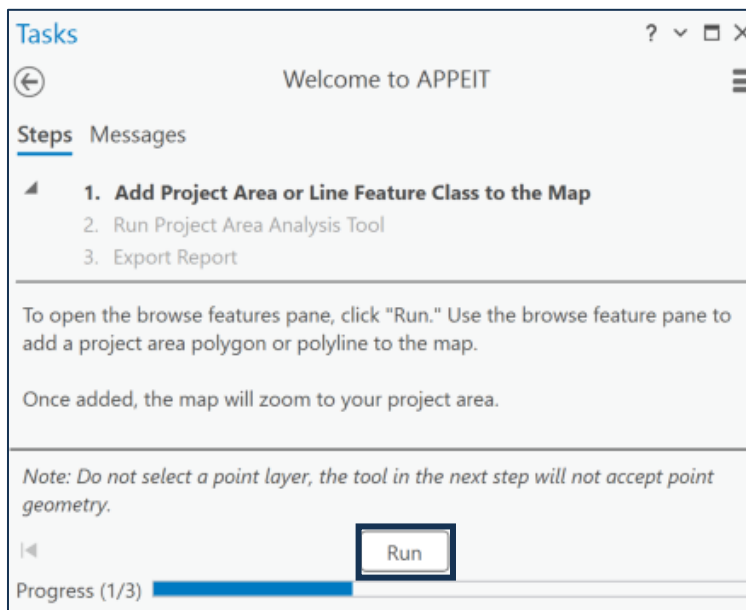
4. Double click the APPEIT User Instructions task, and a Task pane will open. You are now ready to use the tool!

RUN APPEIT

1. Double click “Welcome to APPEIT” in the Tasks pane



2. The first task instructs you to add your project file. This can be a polygon or a line but must represent a single project. The tool cannot incorporate multiple projects in one run, however, the tool can screen discontinuous segments/areas of a single project.



3. Click Run and the “Add Data” pane will open. Navigate to your file and click “Open” to add your file to the map.
4. The map will zoom to the area of your file and the task will proceed to the next step.
5. Enter the Project Name and Project ID / Grant ID.
 - a. For Broadband Equity Access and Deployment (BEAD) program projects, use the Project ID assigned by the Eligible Entity. Refer to the BEAD Final Proposal Guidance v1.2. for more information on project ID’s.
 - b. For other IIJA broadband grant programs, use the assigned Grant ID.

- c. If no Project Name or ID exists, then a placeholder name and ID can be entered.

Tasks

Welcome to APPEIT

Steps Messages

1. Add Project Area or Line Feature Class to the Map

2. Run Project Area Analysis Tool

3. Export Report

1. Enter Project Name:

- For Broadband Equity Access and Deployment (BEAD) program projects, use the Project Name assigned by the Eligible Entity.
- For other IIJA broadband grant programs, use the assigned Grant ID.
- If no name exists, then a placeholder name can be input.

2. Enter Project ID Grant ID:

- For Broadband Equity Access and Deployment (BEAD) program projects, use the Project ID assigned by the Eligible Entity. Refer to the [BEAD Final Proposal Guidance v1.2](#) for more information on project ID's.
- For other IIJA broadband grant programs, use the assigned Grant ID.
- If no ID exists, then a placeholder ID can be input.

3. Select an input project area or line feature class:

Use the drop down menu to select the project file you added to the map in step 1 or drag it in from the map contents pane. If a polyline input is chosen, a buffer distance and units must also be specified.

Parameters Environments

Project Name

Test Project

Project ID

Testing 123

Input Project Area or Line

Test_Line

Project Buffer Distance (Line Only)

500

Buffer Units

Feet

Note: Shapefile or feature class inputs are accepted. This input does not accept point geometry.

Skip Run Next Step

Progress (2/3)

6. Use the drop-down menu to select the project file you added to the map in step 3 or drag it in from the map contents pane.
 - a. Optionally, use browse button to add a different project area or line feature class directly to the tool.
7. If your project area file is a line, you must specify a Project Buffer Distance and select one of the Buffer Unit options from the dropdown. If your project area file is a polygon, no additional settings are necessary. Please reference buffer distance recommendations in the technical description section of this document.
8. Click Run.
9. To view the tool's progress, click "View Details". Here you can see messages about the tool's progress. Depending on the size of your project, it is estimated that each run will take

approximately 10-20 minutes. When the tool completes, it will provide a message with the location of a CSV report output. To generate the PDF report, continue to the next step.

The screenshot shows the 'Parameters' pane for the 'Project Area Analysis Tool'. The tool is currently 'Running...'. A red box highlights the 'View Details' button. Other buttons visible are 'Open History' and 'Suggestions'. At the bottom, there are 'Skip', 'Run', and 'Next Step' buttons, along with a progress bar showing 'Progress (2/3)'.

```
... Coastal Zone Management Act
... NOAA - Coral Reef Habitat Combined
... National Levee Database - Leveed Areas
... National Register of Historic Places - Points
... National Register of Historic Places - Polygons
Merging Analysis...
Writing results to report...
ArcGIS Pro Report updated successfully.
CSV Report saved: C:\Users\Documents\APPEIT_Public\APPEIT_Report_2025-03-07_133150.csv
Cleaning up...
Succeeded at Friday, March 7, 2025 1:35:38 PM (Elapsed Time: 4 minutes 1 seconds)
```

10. Once the tool is completed, click Next Step.
11. Within the 'Tasks' pane, navigate to the Input Report dropdown and select "ArcGIS Pro Permitting & Environmental Information (APPEIT) Report."
12. Choose where you would like the PDF File saved.

The screenshot shows the 'Tasks' pane with the 'Export Report' step selected. It provides instructions on how to export the report to PDF, including selecting the 'Input Report' and choosing a location to save it. The 'Parameters' section below shows the 'Input Report' dropdown set to 'ArcGIS Pro Permitting & Environmental Information (APPEIT) Report' and the 'PDF File' field set to 'C:\Users\Report.pdf'. A red box highlights the 'Run' button at the bottom. The progress bar at the very bottom shows 'Progress (3/3)'.

13. Ignore the additional options on this page. Data Definition, Export Options, and Page Range options give you additional settings to modify the output report, but it is recommended that no changes should be made.
14. Click Run.
15. Once this step is completed, you can review the PDF report output. The report output lists any layer(s) that has an overlap with the project area or line input. The report will include the layer category, layer name, subcategory area name, and the best management practice (BMP) resource area. Some layers do not have a subcategory breakdown and are simply listed as presence/absence. These layers will show 'NA' as the area name.

Category	Layer Name	Area Name	Resource Areas
Federal/Tribal Land	BIA AIAN National LAR	Standing Rock	1.7, 1.8
Floodplains/Wetlands	FEMA Flood Hazard Zones	NA	1.5
Infrastructure	Electric Retail Service Territories	GRAND ELECTRIC COOP, INC	1.1

Additionally, every report will contain a supplemental BMP Resource Links page which contains hyperlinks to the different resource area BMPs and mitigation measure materials.

Best Management Practices (BMP) Resource Links

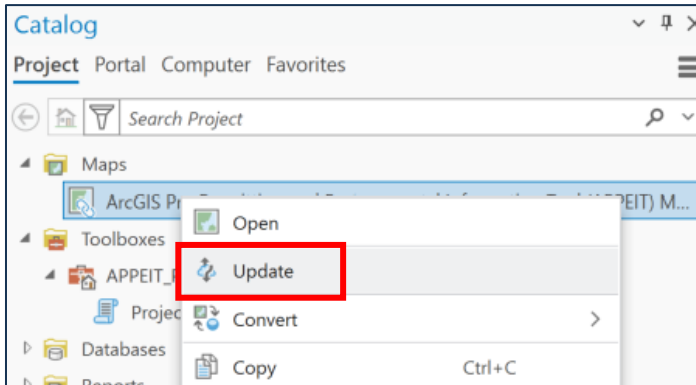
https://broadbandusa.ntia.gov/sites/default/files/2025-08/EHP_NTIA_BMPs_and_Mitigation_Measures_2025.pdf

Resource Area	Resource Area Name	Url
Resource Area 1.1	Roads, Right-of-Ways, Utilities, and Emergency Services	https://broadbandusa.ntia.gov/sites/default/files/2025-08/BMPs_and_Mitigation_Measures_Section_1.1_-_Roads_Right-of-Ways_Uilities_and_Emergency_Services.pdf
Resource Area 1.4	Water Resources	https://broadbandusa.ntia.gov/sites/default/files/2025-08/BMPs_and_Mitigation_Measures_Section_1.4_-_Water_Resources.pdf
Resource Area 1.5	Wetlands and Floodplains	https://broadbandusa.ntia.gov/sites/default/files/2025-08/BMPs_and_Mitigation_Measures_Section_1.5_-_Wetlands_and_Floodplains.pdf
Resource Area 1.6	Biological Resources	https://broadbandusa.ntia.gov/sites/default/files/2025-08/BMPs_and_Mitigation_Measures_Section_1.6_-_Biological_Resources.pdf
Resource Area 1.7	Land Use, Recreation and Airspace	https://broadbandusa.ntia.gov/sites/default/files/2025-08/BMPs_and_Mitigation_Measures_Section_1.7_-_Land_Use_Recreation_and_Airspace.pdf
Resource Area 1.7	Land Use, Recreation and Airspace	https://broadbandusa.ntia.gov/sites/default/files/2025-08/BMPs_and_Mitigation_Measures_Section_1.7_-_Alaska_Land_Use_Recreation_and_Airspace.pdf
Resource Area 1.8	Cultural Resources	https://broadbandusa.ntia.gov/sites/default/files/2025-08/BMPs_and_Mitigation_Measures_Section_1.8_-_Cultural_Resources.pdf
Resource Area 1.9	Air Quality	https://broadbandusa.ntia.gov/sites/default/files/2025-08/BMPs_and_Mitigation_Measures_Section_1.9_-_Air_Quality.pdf
Resource Area 1.10	Noise and Vibrations	https://broadbandusa.ntia.gov/sites/default/files/2025-08/BMPs_and_Mitigation_Measures_Section_1.10_-_Noise_and_Vibrations.pdf
Resource Area 1.11	Human Health and Safety	https://broadbandusa.ntia.gov/sites/default/files/2025-08/BMPs_and_Mitigation_Measures_Section_1.11_-_Human_Health_and_Safety.pdf

TROUBLESHOOT COMMON ISSUES

1. **APPEIT Map is out of sync, update map from source:** If you see this warning, one or more layers are missing from the APPEIT Map. This may occur if NTIA has updated the map, a layer was offline during the update, or a layer is incorrectly named. To resolve, try updating

the connection to the web map by navigating to the catalog pane, maps, right-click on the APPEIT map and select update. If the issue persists, please contact NBAM support for assistance at NTIAanalytics@ntia.gov.



2. **{Error} Occurred on layer: {layer name} It will NOT be included in the analysis:** If you see this warning, one or more of the layers in the APPEIT Map could not access the rest service. This could be due to a temporary server-side issue, a request timeout, or the service being offline. To resolve, try rerunning the tool or updating the map from the source as described above.
3. **Failed to Open Project – The Permitting_MapPackage.ppkx project file does not exist in its last saved location:** To resolve this warning, change the default setting for unpacking Project Packages in the [sharing and download settings](#) of ArcGIS Pro.
 - a. Open the options menu and select the Share and Download in the left side menu.
 - b. Expand the Unpacking section.
 - c. Select “Ask where to save before unpacking” under Project Packages and Project Templates.
 - d. Click Ok and close ArcGIS Pro.
 - e. Reopen the Permitting_MapPackage.ppkx project file.
4. **[Issues with cloud storage locations such as OneDrive](#).** Generally, ArcGIS Pro does not support the use of cloud storage services, such as OneDrive and Google Drive. Unpacking the APPEIT Project Package to a location synced by cloud storage platforms can cause errors, including “AttributeError: ‘NoneType’ object has no attribute ‘tables’”. If you are experiencing errors running the tool, verify where the APPEIT package was unpacked. Unpack it to a local folder and try again if needed.
5. Any errors accessing layers will be listed at the end of your report. Layers not included in the analysis will be noted; these layers could overlap with your project area. Review any errors to ensure all necessary data is included.

Category	Layer Name	Area Name	Resource Areas
Federal/Tribal Land	BIA AIAN National LAR	Standing Rock	1.7, 1.8
Floodplains/Wetlands	FEMA Flood Hazard Zones	NA	1.5
Infrastructure	Electric Retail Service Territories	GRAND ELECTRIC COOP, INC	1.1
Infrastructure	Electric Retail Service Territories	MONTANA-DAKOTA UTILITIES CO	1.1
Infrastructure	Electric Retail Service Territories	MOREAU-GRAND ELECTRIC COOP INC	1.1

Report Totals

Count: 5

Errors detected, these layers are not included in the analysis: ('EPA Programs ', 'Impaired Waters - Assessment Lines')

If an error occurs, you should manually verify any potential overlap with the project or rerun the tool. If you run into consistent issues, try updating the connection to the web map as described under issue 1.

APPENDIX

TABLE 1 – APPEIT LAYERS

APPEIT relies on publicly available data on the websites of other federal, state, local, and Tribal agencies and, in some instances, private organizations and research institutions. Table 1 below lists all layers, layers with a double asterisk include information relevant to determining whether an “extraordinary circumstance” may warrant a more detailed environmental review when a categorical exclusion may otherwise apply.

Group	Layer Name	Source
Federal/Tribal Land	NPS Land**	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/NPS_Land_Permitting_Layer/FeatureServer/0
Federal/Tribal Land	USBR Land**	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/USBR_Land_for_Permitting/FeatureServer/0
Federal/Tribal Land	USACE Lands for Permitting**	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/USACE_Land_Permitting_Layer/FeatureServer/0
Federal/Tribal Land	BIA AIAN National LAR**	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/BIA_AIAN_LAR_Layers/FeatureServer/0
Federal/Tribal Land	BIA AIAN LAR Supplemental**	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/BIA_AIAN_LAR_Layers/FeatureServer/1
Federal/Tribal Land	BIA AIAN Tribal Statistical Areas**	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/BIA_AIAN_LAR_Layers/FeatureServer/2
Federal/Tribal Land	Alaska Native, and Native Hawaiian Areas**	https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/AIANNHA/MapServer/47
Federal/Tribal Land	DoD Lands for Permitting**	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/DoD_Lands_for_Permitting/FeatureServer/0
Federal/Tribal Land	USFS Surface Ownership Parcels**	https://apps.fs.usda.gov/arcx/rest/services/EDW/EDW_BasicOwnership_01/MapServer/0
Federal/Tribal Land	USFWS National Realty Boundaries	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/USFWS_National_Realty_Boundaries/FeatureServer/0
Federal/Tribal Land	BLM Lands**	https://services.arcgis.com/P3ePLMYs2RVChkXj/arcgis/rest/services/USA_Bureau_of_Land_Management_Lands/FeatureServer/0
Federal/Tribal Land	USACE Project (Points)**	https://geospatial.sec.usace.army.mil/server/rest/services/CPN/Corps_Project_Notebook/FeatureServer/0

Federal/Tribal Land	USACE Navigable Waterway Network	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/Commercially_Navigable_Waterways/FeatureServer/0
Federal/Tribal Land	USACE Land Parcel Area**	https://geospatial.sec.usace.army.mil/server/rest/services/REMIS/cwldm/FeatureServer/4
Federal/Tribal Land	GSA Federal Real Property**	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/GSA_Federal_Real_Property/FeatureServer/0
Federal/Tribal Land	Historical Trails - Lines	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/National_Historic_Trails/FeatureServer/0
Federal/Tribal Land	Historical Trails - Polygons	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/National_Historic_Trails/FeatureServer/1
Critical Habitats	Critical Habitat - Polygon Features – Final**	https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/USFWS_Critical_Habitat/FeatureServer/0
Critical Habitats	Critical Habitat - Polygon Features – Proposed**	https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/USFWS_Critical_Habitat/FeatureServer/2
EPA Programs	Resource Conservation and Recovery Act (RCRA)**	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/Resource_Conservation_and_Recovery_Act_RCRA/FeatureServer/0
EPA Programs	National Pollutant Discharge Elimination System Sites (NPDES)**	https://services.arcgis.com/cJ9YHowT8TU7DUyn/arcgis/rest/services/FRS_INTERESTS_NPDES/FeatureServer/0
EPA Programs	Major National Pollutant Discharge Elimination System Facilities (NPDES_MAJOR)**	https://services.arcgis.com/cJ9YHowT8TU7DUyn/arcgis/rest/services/FRS_INTERESTS_NPDES_MAJOR/FeatureServer/0
EPA Programs	Toxic Release Inventory (TRI)**	https://services.arcgis.com/cJ9YHowT8TU7DUyn/arcgis/rest/services/FRS_INTERESTS_TRI/FeatureServer/0
EPA Programs	Superfund Nation Priorities List (SEMS_NPL)**	https://services.arcgis.com/cJ9YHowT8TU7DUyn/arcgis/rest/services/FRS_INTERESTS_SEMS_NPL/FeatureServer/0
EPA Programs	Assessment Cleanup and Redevelopment Exchange System (ACRES)	https://services.arcgis.com/cJ9YHowT8TU7DUyn/arcgis/rest/services/FRS_INTERESTS_ACRES/FeatureServer/0

EPA Programs	Integrated Compliance Information System for Air (AIR)	https://services.arcgis.com/cJ9YHowT8TU7DUyn/arcgis/rest/services/FRS_INTERESTS_AIR/FeatureServer/0
EPA Programs	Impaired Waters - Assessment Points**	https://gispub.epa.gov/arcgis/rest/services/OW/ATTAINS_Assessment/MapServer/0
EPA Programs	Impaired Waters - Assessment Lines**	https://gispub.epa.gov/arcgis/rest/services/OW/ATTAINS_Assessment/MapServer/1
EPA Programs	Impaired Waters - Assessment Areas**	https://gispub.epa.gov/arcgis/rest/services/OW/ATTAINS_Assessment/MapServer/2
EPA Programs	Sole Source Aquifers**	https://geopub.epa.gov/arcgis/rest/services/NEPA/ssist/Water/MapServer/6
EPA Programs	Ozone 8-hr (2015 Standard)	https://gispub.epa.gov/arcgis/rest/services/OAR_OAQPS/NonattainmentAreas/MapServer/2
EPA Programs	Ozone 8-hr (2008 standard)	https://gispub.epa.gov/arcgis/rest/services/OAR_OAQPS/NonattainmentAreas/MapServer/1
EPA Programs	Ozone 8-hr (1997 standard)	https://gispub.epa.gov/arcgis/rest/services/OAR_OAQPS/NonattainmentAreas/MapServer/0
EPA Programs	PM2.5 Annual (2012 standard)	https://gispub.epa.gov/arcgis/rest/services/OAR_OAQPS/NonattainmentAreas/MapServer/7
EPA Programs	PM2.5 24hr (2006 standard)	https://gispub.epa.gov/arcgis/rest/services/OAR_OAQPS/NonattainmentAreas/MapServer/5
EPA Programs	PM2.5 Annual (1997 standard)	https://gispub.epa.gov/arcgis/rest/services/OAR_OAQPS/NonattainmentAreas/MapServer/6
EPA Programs	PM10 (1987 standard)	https://gispub.epa.gov/arcgis/rest/services/OAR_OAQPS/NonattainmentAreas/MapServer/8
EPA Programs	Lead (2008 standard)	https://gispub.epa.gov/arcgis/rest/services/OAR_OAQPS/NonattainmentAreas/MapServer/3
EPA Programs	SO2 1-hr (2010 standard)	https://gispub.epa.gov/arcgis/rest/services/OAR_OAQPS/NonattainmentAreas/MapServer/4
Infrastructure	EIA - Natural Gas Wells	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/Natural_Gas_Wells_Permitting/FeatureServer/0
Infrastructure	EIA - Underground Natural Gas Storage	https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/Underground_Natural_Gas_Storage/FeatureServer/0
Infrastructure	EIA - Power Plants	https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/Power_Plants_in_the_US/FeatureServer/0
Infrastructure	EIA - Natural Gas Interstate and Intrastate Pipelines	https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/Natural_Gas_Interstate_and_Intrastate_Pipelines_1/FeatureServer/0
Infrastructure	EIA - Crude Oil Trunk Pipelines	https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/Crude_Oil_Trunk_Pipelines_1/FeatureServer/0

Infrastructure	EIA - Hydrocarbon Gas Liquids Pipelines	https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/Hydrocarbon_Gas_Liquids_Pipelines_1/FeatureServer/0
Infrastructure	EIA - Petroleum Products Pipelines	https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/Petroleum_Products_Pipelines_1/FeatureServer/0
Infrastructure	Electric Power Transmission Lines	https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/US_Electric_Power_Transmission_Lines/FeatureServer/0
Infrastructure	Electric Retail Service Territories	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/Electric_Retail_Service_Territories_HIFLD/FeatureServer/0
Infrastructure	National Scenic Byways	https://services1.arcgis.com/fBc8EJBxQRMchlei/arcgis/rest/services/NTIR_TRANS_NationalScenicByways_NSBP_In/FeatureServer/0
Infrastructure	USFS Special Uses Communications Sites	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/US_Forest_Service_Communication_Sites/FeatureServer/0
Infrastructure	USFS - Right of Way	https://apps.fs.usda.gov/arcx/rest/services/EDW/EDW_ALPStatusAndEncumbrance_01/MapServer/71
Infrastructure	USGS - Coal Fields	https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/USA_Coal_Fields_view/FeatureServer/0
Infrastructure	Surface and Underground Coal Mines	https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/Surface_and_Underground_Coal_Mines_in_the_US/FeatureServer/0
Infrastructure	Rail Lines	https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/Transportation_v1/FeatureServer/9
Infrastructure	Railroad Crossings	https://services1.arcgis.com/4yjifSiIG17X0gW4/arcgis/rest/services/FRA_Crossing_Inventory_Form_71_Current/FeatureServer/0
Floodplains/Wetlands	FEMA Flood Hazard Zones**	https://hazards.fema.gov/arcgis/rest/services/public/NFHL/MapServer/28
Floodplains/Wetlands	USFWS Wetlands**	https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/USA_Wetlands/FeatureServer/0
Floodplains/Wetlands	Wild and Scenic Rivers**	https://geopub.epa.gov/arcgis/rest/services/NEPAassist/Water/MapServer/9

Floodplains/Wetlands	CBRS Units**	https://cbrsgis.wim.usgs.gov/arcgis/rest/services/CoastalBarrierResourcesSystem/MapServer/3
Floodplains/Wetlands	Coastal Zone Management Act**	https://coast.noaa.gov/arcgis/rest/services/Hosted/CoastalZoneManagementAct/FeatureServer/0
Floodplains/Wetlands	NOAA - Coral Reef Habitat Combined	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/Coral_Reef_Habitat_Combined/FeatureServer/0
Floodplains/Wetlands	National Levee Database - Leveed Areas**	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/National_Levee_Database_Leveed_Areas/FeatureServer/0
Historic Places	National Register of Historic Places – Points**	https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/nrhp_points_v1/FeatureServer/0
Historic Places	National Register of Historic Places – Polygons**	https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/NationalRegisterofHistoricPlaces_Polygon/FeatureServer/0

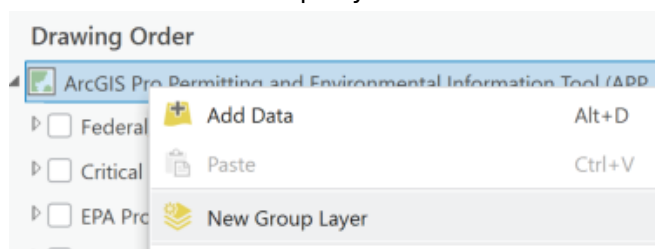
APPEIT LAYERS CUSTOMIZATION GUIDE

DESCRIPTION

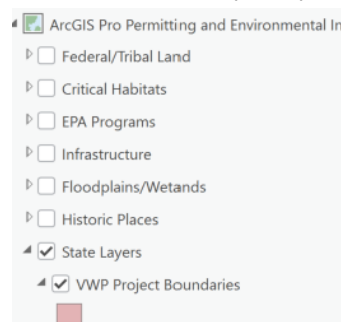
The National Telecommunications and Information Administration released the ArcGIS Pro Permitting and Environmental Information Tool (APPEIT) to assist federal broadband grant recipients and subgrantees in identifying required permits and environmental considerations when planning broadband deployment routes. APPEIT offers flexibility, allowing users to customize the tool by adding or removing map layers to meet their specific needs. This document provides step-by-step instructions to reconfigure the tool to work with a custom set of layers.

STEPS TO UPDATE LAYER LIST

1. Open the [APPEIT Project Package](#) and save it.
2. Open the ArcGIS Pro Permitting and Environmental Information Tool (APPEIT) Map and navigate to the contents pane to view the standard list of layers included in APPEIT.
 - a. To add a layer as a new category for the report, right click in the maps contents pane a select “New Group Layer”.



- i. Name the group layer. For this example, we will create a new group called “State Layers”.
 - ii. Add a new layer into the group. For this example, we are adding the Virginia Water Protection (VWP) Project Boundaries layer.



Link to layer: [Virginia Water Protection \(VWP\) Project Boundaries](#)

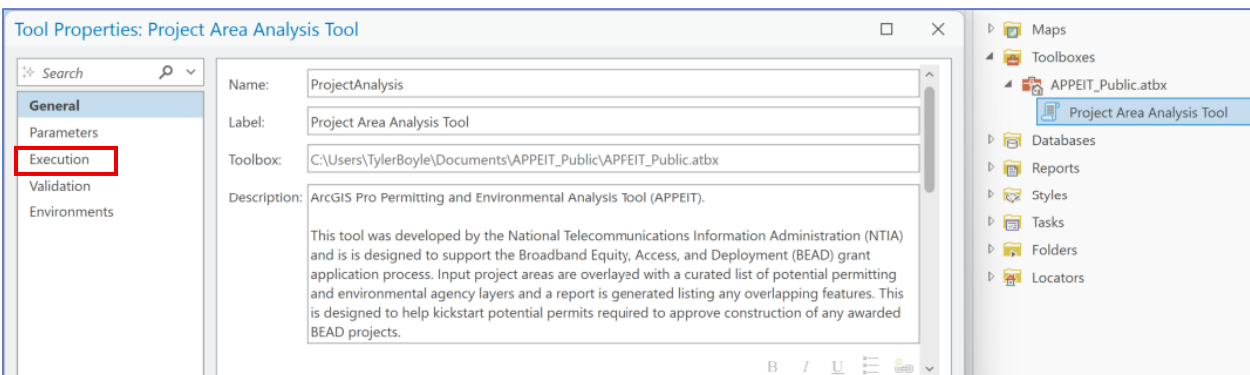
- iii. Note: If only adding new layers to the map, it is best practice to add them to the bottom of the list; it will make the next steps easier.
 - b. If adding or removing from an existing group layer, simply remove the layer from the map or add the layer to the group layer.
 - c. Save your project.
 3. Export a copy of the APPEIT Reference Index Table to File Geodatabase Table format.
 4. Open the new index table in ArcGIS Pro and modify the records to match the new list of layers in your updated map.

- a. If you added a new category and layer, add a new row to the table with the relevant information. Adding the VA example with the new State category should be added as shown below.

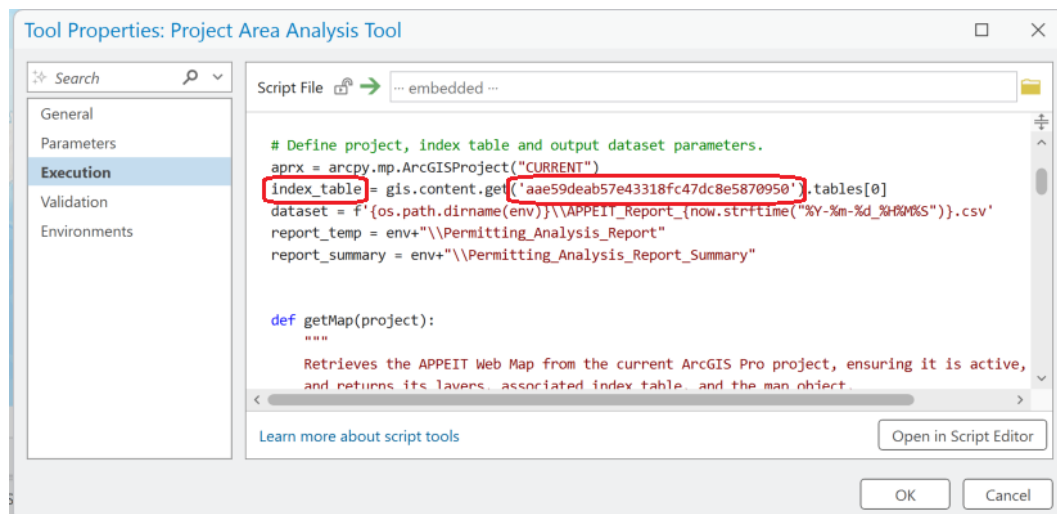
OBJECTID *	Category	Layer	Field	Position
55	Floodplains/Wetlands	USFWS Wetlands	<Null>	61
56	Floodplains/Wetlands	Wild and Scenic Rivers	<Null>	62
57	Floodplains/Wetlands	CBRS Units	<Null>	63
58	Floodplains/Wetlands	Coastal Zone Managem...	<Null>	64
59	Floodplains/Wetlands	NOAA - Coral Reef Hab...	<Null>	65
60	Floodplains/Wetlands	National Levee Databas...	SYSTEM_NAME	66
61	Historic Places	National Register of His...	RESNAME	68
62	Historic Places	National Register of His...	RESNAME	69
63	Federal/Tribal Land	Historical Trails - Lines	TRAILNAME	16
64	Federal/Tribal Land	Historical Trails - Polyg...	TRAILNAME	17
65	State Layers	VWP Project Boundaries	PROJECT_NAME	71

Click to add new row.

- i. Make sure the Category and Layer name exactly match the contents pane in the map.
 - ii. If desired, add a field name that will be used to summarize the results, in this case we will summarize results by “PROJECT_NAME”. Leave as null if you do not need to summarize a field.
 - iii. Add the new layer position. Note that we skipped position 70, which is reserved for the group layer “State Layers”.
- b. If making additions or subtractions to existing categories, follow the same steps, making sure to update the positions for all layers in the map.
- c. Save edits on the index table.
5. Publish the index table to ArcGIS Online.
6. Open the tool properties of the Project Area Analysis Tool and select the execution tab.



7. Find the “index_table” parameter and replace the item ID value with the new item ID for the updated index table that you have published. Ensure that you have shared the new table in a way you can access it from ArcGIS Pro.



8. Save and close the script.
9. You should now be ready to run the APPEIT with your customized layer list.