

Maryland

Military & Compatibility
Layers of the
Smart DG+ Tool



USER GUIDE

INTRODUCTION

The ***Military & Compatibility Layers of the Smart DG+ Tool*** provide military and other federal, state, and local stakeholders with information to help develop renewable energy projects within the State of Maryland. The tool compiles a variety of GIS layers related to military operational areas and renewable energy development, throughout the state, as well as contact information for the relevant agencies for siting coordination. The tool allows the user to create custom areas of interest, or upload custom areas, that will output a list of relevant agencies to contact and every layer that intersects the custom area. The user can then save a report of these results as a PDF, Excel workbook, or as an HTML file.

The ***Military & Compatibility Layers of the Smart DG+ Tool*** starts with a map view, which also serves as the search page. When the user clicks on the military and compatibility layers, a disclaimer splash screen with information on the purpose of the layers, and contact information for the map tool will display. Clicking on Confirm will close this splash screen.

The initial map view of the ***Military & Compatibility Layers of the Smart DG+ Tool*** will display military installations and areas where military operations are conducted across the state.

Additional layers may also be selected and toggled on or off:

- Existing structures within Maryland airspace including wind turbines, communication towers, transmission lines, and radars
- Areas of energy development opportunity including solar and wind potential
- Land ownership including Jurisdiction boundaries, Maryland Department of Natural Resources lands, State protected lands, U.S. Fish & Wildlife Service protected lands, and National Park Service boundaries
- Environmental & Cultural Resource areas
- Location Reference Systems used by the military and map projection system for assigning location coordinates

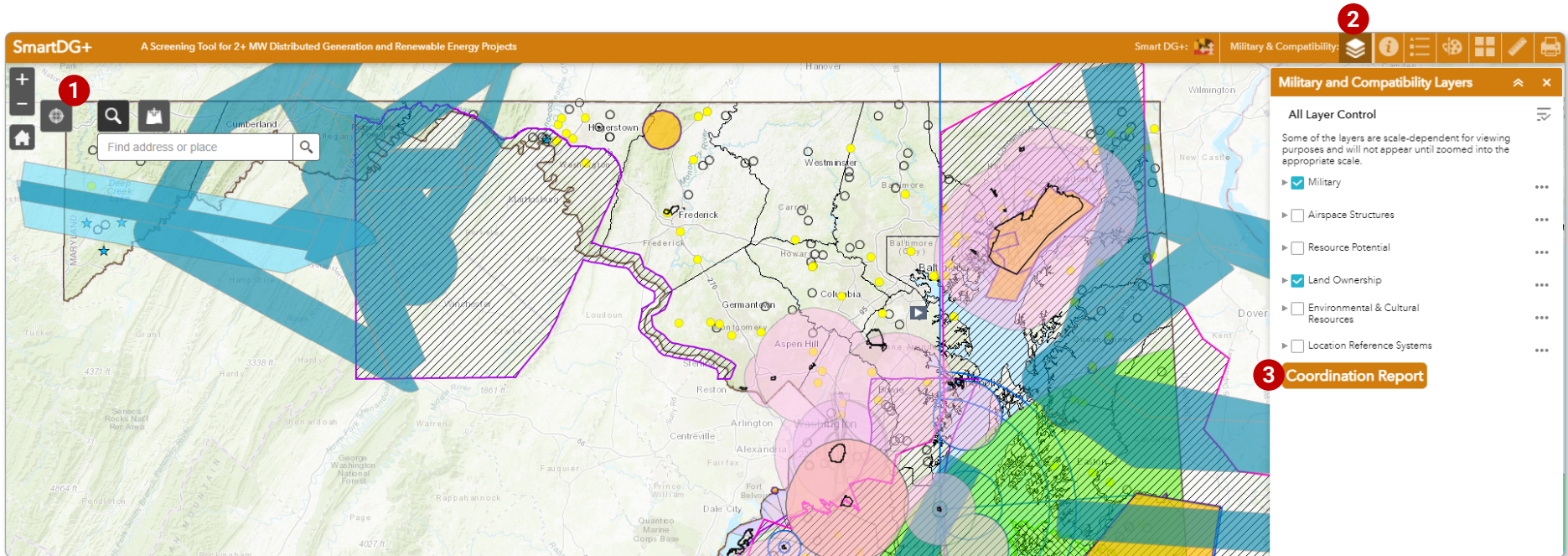
The Coordination Report button, located at the bottom of the Military & Compatibility Layers table of contents, is the primary way to interact with the military and compatibility data layers. Using the Coordination Report function, the user can drop a point, draw a shape, or upload data on the map to perform a custom search query to identify military operations and other features at that location. If a user uploads data on the map, the data will appear in the User Added Layers grouping. When the search is complete, the Coordination Report tool will switch from the Identify tab to the Results tab where individual features that intersect with the search area will be listed. The View/Print button will turn this into a report in a new window, which can then be saved or printed.

This User Guide provides more information on how to operate the Military and Compatibility layers of the Smart DG+ tool.

Software Requirements

The ***Military & Compatibility Layers of the Smart DG+ Tool*** has been tested and is compatible with both Firefox 97 and Google Chrome 97. For best performance, avoid operating the tool using Internet Explorer or Edge. The Print to PDF function has been tested using Adobe Acrobat Reader release 20.004.30020. The Excel button has been tested using Microsoft Office 365.

OVERVIEW



Web Tool Features

- 1 Reset Layers:** Selecting this button will revert to the layers originally displayed upon first visiting the tool. Any layers that the user previously turned on will be turned off.
- 2 Military & Compatibility Layers:** Activates table of contents for military and compatibility layers. Upon activation, a disclaimer splash screen will appear. The disclaimer states the intent and limits of the tool. Upon clicking confirm, a predetermined selection of military layers

appear on the map. Selecting cancel will prevent the table of contents from opening. Within the Military & Compatibility Layers table of contents, the user can toggle individual layers on and off, view associated legends, and expand and collapse the layers. The three dot icon to the right of each layer, also known as the “context menu,” can be used to reorder layers, zoom to a specific layer, adjust layer transparency, and enable/disable the pop-up. The context menu also allows the user to run a Coordination Report

on any of the geometries in the individual layers. This is particularly useful when the user uploads their own data.

- 3 Coordination Report:** This button will launch the Coordination Report Menu on the left-hand side of the screen. For more information on creating a Coordination Report, see the next page of this User Guide.

CREATING A COORDINATION REPORT

SmartDG+ A Screening Tool for 2+ MW Distributed Generation and Renewable Energy Projects

Coordination Report

Identify Results

Create a Coordination Report

Filter from layer(s):

All Layers

Draw an area or upload a shape for the area you would like analyzed. Only one geometry type, such as points or areas, may be drawn at a time. Erase the drawing to return to the default options.

1 Identify **2** ?

Create a Coordination Report **2** ?

3 Filter from layer(s):

All Layers

Draw an area or upload a shape for the area you would like analyzed. Only one geometry type, such as points or areas, may be drawn at a time. Erase the drawing to return to the default options.

4 **5** **UPLOAD**

Add Data

a Generalize features for web display

b ?

SHAPE FILE CSV KML Geo JSON

DROP OR BROWSE

c BROWSE

Step 1: Creating Area of Interest

You may create a proposed area of interest that will overlay the map. This can be done either by drawing directly on the map or by uploading data.

- 1 Identify Tab:** Tools for starting a new search query.
- 2 Info:** Information about the tool.
- 3 Filter from layer(s):** Isolate the search query to run on only one layer using a drop down menu.
- 4 Draw buttons:** Allow user to draw a shape which will define the search directly into the map view area.
- 5 Upload:** Launches a new Add Data popup that allows you to add an area of interest of your own.
 - a Generalizing:** Generalizes features for faster display.
 - b Info:** Information about the tool.
 - c Browse:** Navigate to file location. You can upload your area of interest in the following file formats:
 - Shapefile:** Must be zipped to upload. Can contain multiple features.
 - KML (Google Earth):** KML only, KMZ files are not compatible. To convert from KMZ to KML, unzip the KMZ document using a zip software.
 - CSV, GPX, and GeoJSON** are also acceptable data formats.

Once a file has been uploaded, a message box will appear and will allow you to run the coordination report. If you select "No", the report can be run from the context menu of the layer in the View the Data Layers window.

CREATING A COORDINATION REPORT

SmartDG+ A Screening Tool for 2+ MW Distributed Generation and Renewable Energy Projects

Find address:

Coordination Report

Identify Results

Create a Coordination Report

Filter from layer(s):
All Layers

Draw an area or upload a shape for the area you would like analyzed. Only one geometry type, such as points or areas, may be drawn at a time. Erase the drawing to return to the default options.

Click to add a shape, or press down to start and let go to finish

Coordination Report

Identify Results

Create a Coordination Report

Filter from layer(s):
All Layers

Draw an area or upload a shape for the area you would like analyzed. Only one geometry type, such as points or areas, may be drawn at a time. Erase the drawing to return to the default options.

UPL

[Get Results](#) [Export Drawn Area](#) [Erase Drawing](#)

Coordination Report

Identify Results

Results found: 90 [View / Print](#) [Clear](#) [Clear Selection](#)

Installation Coordination Area
Name: Adelphi Laboratory Center
Contact: Elana Messner
Position: Master Planner
Phone: (410) 278-0927
Email: elana.messner.civ@mail.mil

Installation Coordination Area
Name: Naval Support Activity Bethesda
Contact: Shawna Lemonds
Position: Community Planning Liaison Officer
Phone: (301) 295-5787
Email: Shawna.lemonds@navy.mil

Helicopter Operations

Step 2: Running a Query

Once you have identified your area of interest on the map by drawing a shape or have uploaded your area of interest through the upload link, three options are presented to you:

- 1 Get Results:** Run query on area of interest.
 - a** Once clicked, the Coordination Report panel will switch from the Identify tab to the Results tab with a list of the results in your selected area of interest for you to view/print.
- 2 Export Drawn Area:** Save area of interest as a GeoJSON file for later use.
- 3 Erase Drawing:** Clear all features to start over.

COORDINATION REPORT RESULTS

Viewing/Exporting Report Results

1 Results: Shows a list of features that intersect the area of interest.

a Clicking on a feature in the Results Tab will pan to the area of interest and display the contact information associated with that feature.

Note: This tool can return results that are not currently visible on the map, including points of contact who do not represent military operational areas, but which still intersect the area of interest.

2 View/Print: Launches a new page listing every feature that intersects the search area:

b PDF (or Print): Allows for printing the results page or saving it as a PDF. Be sure to enable print background in your browser settings to preserve the table color shading when printing hardcopies.

c HTML: Allows for saving the results page as an HTML file.

d Excel: Exports the reports table to a new Excel workbook. The resulting Excel file will prompt the user with a message upon opening. Confirm "Yes", click the "Enable Editing" button in the ribbon.

Note: Depending on the browser used, the above features may cause the Coordination Report window to close. The user will be reverted to the map. Clicking the View/Print button again on Results tab will reopen the Coordination Report window.

e Map, including points of contact who do not represent military operational areas: Screenshot maps of the area of interest.

f Results: Scroll the page down for a table of the intersecting features, as well as contact information for the relevant responsible agencies.

Note: Contact information may be repeated if the POC is responsible for multiple sites.

3 Clear: Removes the drawn shape and empties the results list.

Coordination Report

Identify 1 Results

Results found: 2 View / Print Clear Clear Selection 3

Installation Coordination Area
Name: JBA Davidsonville Transmitter Site
Contact: Krist Zimmerman
Position: Community Planning Liaison Officer
Phone: (540) 395-7045
Email: kristofer.zimmerman.cr@us.af.mil

Installation Coordination Area
Name: Naval Research Laboratory Chesapeake Bay Detach
Contact: Karsten Koch
Position: NRL Strategic Integration
Phone: (202) 767-2928
Email: karsten.koch@nrl.navy.mil

Military Training Route (Floor At or Below 500 feet)

Installation Coordination Area
Name: JBA Davidsonville Transmitter Site
Contact: Krist Zimmerman
Position: Community Planning Liaison Officer
Phone: (540) 395-7045
Email: kristofer.zimmerman.cr@us.af.mil

Save As [PDF (or Print)] [HTML] [Excel]

Several assets, including installations, airspace, radars and additional operating areas are critical to the military for maintaining operational capability. Weather radars called NEXRAD, are also critical for weather forecast agencies. Early coordination among military agency, industry, and community stakeholders is effective for ensuring development is compatible with military operations and to minimize potential project delays and financial. Based on the area you selected, the following sections identify military assets that could be impacted, and other coordination information including points of contact. Coordination should occur as early as possible to discuss solutions.

For general questions or comments on compatibility contact the Maryland Department of Planning at (410) 767-4500.

For questions specific to compatibility with

- Aberdeen Proving Ground contact (410) 278-0927
- Annapolis Naval Academy contact (410) 293-1084
- Fort Detrick contact (301) 619-2441
- Fort Meade contact (240) 429-4491
- Joint Base
- Martin St
- Naval Res
- Naval Res
- Naval Sul
- Naval Sul
- Naval Sul
- Wallops F

Name	Contact	Position	Phone	Email
JBA Davidsonville Transmitter Site	Krist Zimmerman	Community Planning Liaison Officer	(540) 395-7045	kristofer.zimmerman.cr@us.af.mil
Naval Research Laboratory Chesapeake Bay Detachment	Karsten Koch	NRL Strategic Integration	(202) 767-2928	karsten.koch@nrl.navy.mil

Maryland

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The Military & Compatibility Layers of the Smart DG+ Tool is maintained by the Maryland Department of Natural Resources, Power Plant Research Program.

For questions specifically about the SmartDG+ Tool, contact:

Maryland Department of Natural Resources, Power Plant Research Program (410) 260-8660

For general questions or comments on military compatibility in Maryland, contact:

Maryland Department of Commerce, Office of Military and Federal Affairs (410) 767-6300

For questions specific to compatibility with military installations in Maryland, contact:

Aberdeen Proving Ground (410) 278-0927	Blossom Point Research Facility
Annapolis Naval Academy (410) 293-1084	Army Research Laboratory (410) 278-0927
Fort Detrick (301) 619-2441	Naval Research Laboratory (202) 767-3697
Fort George G. Meade (240) 429-4491	Naval Research Laboratory
Joint Base Andrews (540) 395-7045	Chesapeake Bay Detachment (202) 767-3697
Maryland Air National Guard	Naval Support Facility Bethesda (301) 295-5787
(Martin State Airport) (423) 946-4612	Naval Support Facility Indian Head (202) 754-6410

For questions specific to compatibility with military installations outside of Maryland on compatibility in Maryland, contact:

Delaware Air National Guard (302) 323-3554	Wallops Flight Facility (757) 824-2555
Naval Air Station Oceana (757) 433-9141	West Virginia Air National Guard (304) 445-7554
Naval Support Facility Dahlgren (202) 754-6410	