

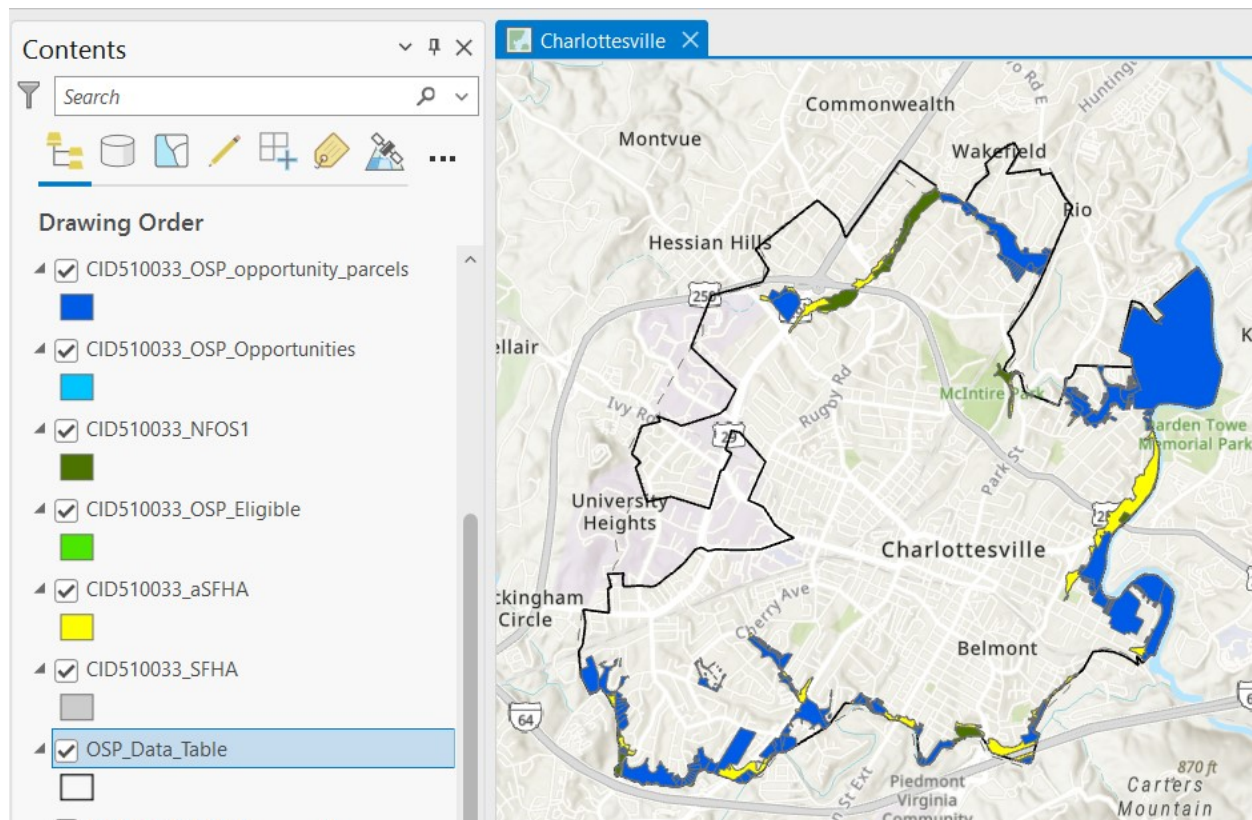
University of Virginia – Open Space Preservation GIS Tool

Output Guide

GIS Layers

The GIS tool generates a number of layers and adds them to the ArcGIS project. The final result will look something like the figure below. The layers that are added will depend on your community. For example, if your community does not have any Special Flood Hazard Area (SFHA), then you will not get the SFHA layer, and so on. Similarly, if you have not provided a tax parcels dataset, then you will not have a Parcels of Interest layer. In total, there are 7 possible layers.

- 1. CID_OSP_Data_Table:** This is a copy of the NFHL file you provide as input. The tool uses it to delineate community boundaries and will store data in its attribute table. See the Data Table section, below, for more details.
- 2. CID_SFHA:** The communities SFHA, as defined in in the SFHA file you provide as input.
- 3. CID_aSFHA:** The adjusted Special Flood Hazard Area. This is the regulatory floodplain in which OSP can receive CRS credit. The aSFHA is FEMA's Special Flood Hazard Area (SFHA) with federal lands, tribal lands, and bodies of water greater than 10 acres removed.
- 4. CID_OSP Eligible:** Areas in the aSFHA that are currently protected by land use regulations or the property owner, and therefore eligible for OSP credit.
- 5. CID_NFOS1 Eligible:** Areas in the aSFHA that are currently protected by land use regulations or the property owner and are in their natural state. These areas are eligible for extra credit through the CRS' Natural Functions Open Space - 1 Element.
- 6. CID_OSP Opportunity:** Open space areas in the aSFHA that could be eligible for OSP credit are protected by land use regulations or the property owner.
- 7. CID_OSP Opportunity Parcels:** Tax parcels containing OSP Opportunity area.



Example output for the City of Charlottesville, Virginia

If you enter several communities, in addition to the created layers for each community, there will be master layers that are the merged layers of all the communities you have entered and contain all the data.

Data Table

The attribute table for the layer titled, “OSP_Data_Table” contains numerical data from the GIS tool. Field definitions are provided in the table below.

Field Name	Description
SFHA_area	Total area of the SFHA, in acres
aSFHA_area	Total area of the impact adjusted SFHA, in acres
OSP_Eligible_area	Area of land that is currently eligible for OSP credit, in acres
OSP_Eligible_credit	The number of 422a credits the community is currently eligible to receive

NFOS1_Eligible_area	Area of OSP eligible land that is also eligible for NFOS1 extra credit, in acres
NFOS1_Eligible_credit	The number of NFOS1 extra credits the community is currently eligible to receive
OSP_Eligible_credit_Total	The total number of OSP credits the community is currently eligible to receive (422a + NFOS1)
OSP_opportunity_area	Area of land that is not currently eligible for OSP credit, but could be if protected from development, in acres
OSP_opportunity_credit	The number of additional 422a credits the community could receive if all OSP_opportunity_area were protected from development
NFOS1_opportunity_credit	The number of NFOS1 extra credits the community could receive if all OSP areas are credited under 422a and restored to their natural state
NFOS2_opportunity_credit	The number of NFOS2 extra credits the community could receive if all OSP areas are credited under 422a and designated in a natural floodplain protection plan
DR_opportunity_credit	The number of Deed Restriction extra credits the community could receive if all OSP areas are credited under 422a and protected by deed restrictions
OSP_opportunity_credit_Total	The number of credits the community would be eligible to receive if all OSP_opportunity_area are credited under 422a, with extra credits of NFOS1, NFOS2 and DR

The dataset metadata will provide comprehensive information about the various fields in the generated layers, offering valuable context and guidance for interpreting their meaning. Please refer to the original dataset's metadata, available through the link provided below, for interpreting other fields in the generated layers:

- [Metadata of FEMA's NFHL](#)
- [Metadata of National Hydrography dataset](#)
- [Metadata of Protected Areas Database](#)