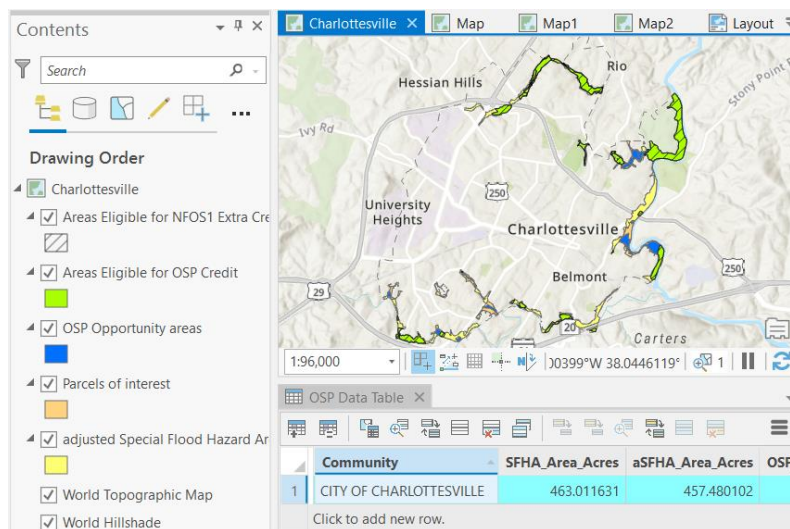University of Virginia – Open Space Preservation GIS Tool

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. NFHL_Copy: 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. SFHA: The communities SFHA, as defined in in the SFHA file you provide as input.
3. 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. OSP Eligible Areas: Areas in the aSFHA that are currently protected by land use regulations or the property owner, and therefore eligible for OSP credit.
5. NFOS1 Eligible Areas: 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. OSP Opportunity Areas: Open space areas in the aSFHA that could be eligible for OSP credit is protected by land use regulations or the property owner.
7. Future OSP Parcels: Tax parcels containing OSP Opportunity area.

Example output for the City of Charlottesville, Virginia.

Data Table

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

Field name	Description
SFHA_Area_Acres	Total area of the SFHA, in acres
aSFHA_Area_Acres	Total area of the impact adjusted SFHA, in acres
OSP_Acres_Curr	Area of land that is currently eligible for OSP credit, in acres
OSP_Acres_Future	Area of land that is not currently eligible for OSP credit, but could be if protected from development, in acres
OSP_Acres_Total	The sum of OSP_Acres_Curr and OSP_Acres_Future. The area of land is currently eligible or could be eligible for OSP credit if protected from development, in acres
NFOS1_Acres_Curr	Area of OSP eligible land that is also eligible for NFOS1 extra credit, in acres
OSP_Cred_Curr	The number of 422a credits the community is currently eligible to receive
OSP_Cred_Future	The number of additional 422a credits the community could receive if all OSP_Acres_Future were protected from development
NFOS1_Cred_Curr	The number of NFOS1 extra credits the community is currently eligible to receive
NFOS1_Cred_Future_Max	The number of NFOS1 extra credits the community could receive if all OSP_Acres_Total are credited under 422a and restored to their natural state
NFOS2_Cred_Future_Max	The number of NFOS2 extra credits the community could receive if all OSP_Acres_Total are credited under 422a and designated in a natural floodplain protection plan
DR_Cred_Future_Max	The number of Deed Restriction extra credits the community could receive if all OSP_Acres_Total are credited under 422a and protected by deed restrictions
OSP_Cred_Curr_Total	The total number of OSP credits the community is currently eligible to receive (422a + NFOS1)
OSP_Cred_Future_Total	The number of credits the community would be eligible to receive if all OSP_Acres_Total are credited under 422a, with no extra credit (with the exception of known NFOS1)
OSP_Cred_Future_Max	The number of credits the community would be eligible to receive if all OSP_Acres_Total are credited under 422a, NFOS1, NFOS2, and Deed Restrictions