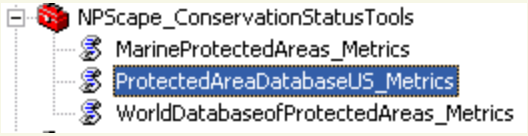
NPScape Tool Example

- ArcGIS script tools = Python script + GUI

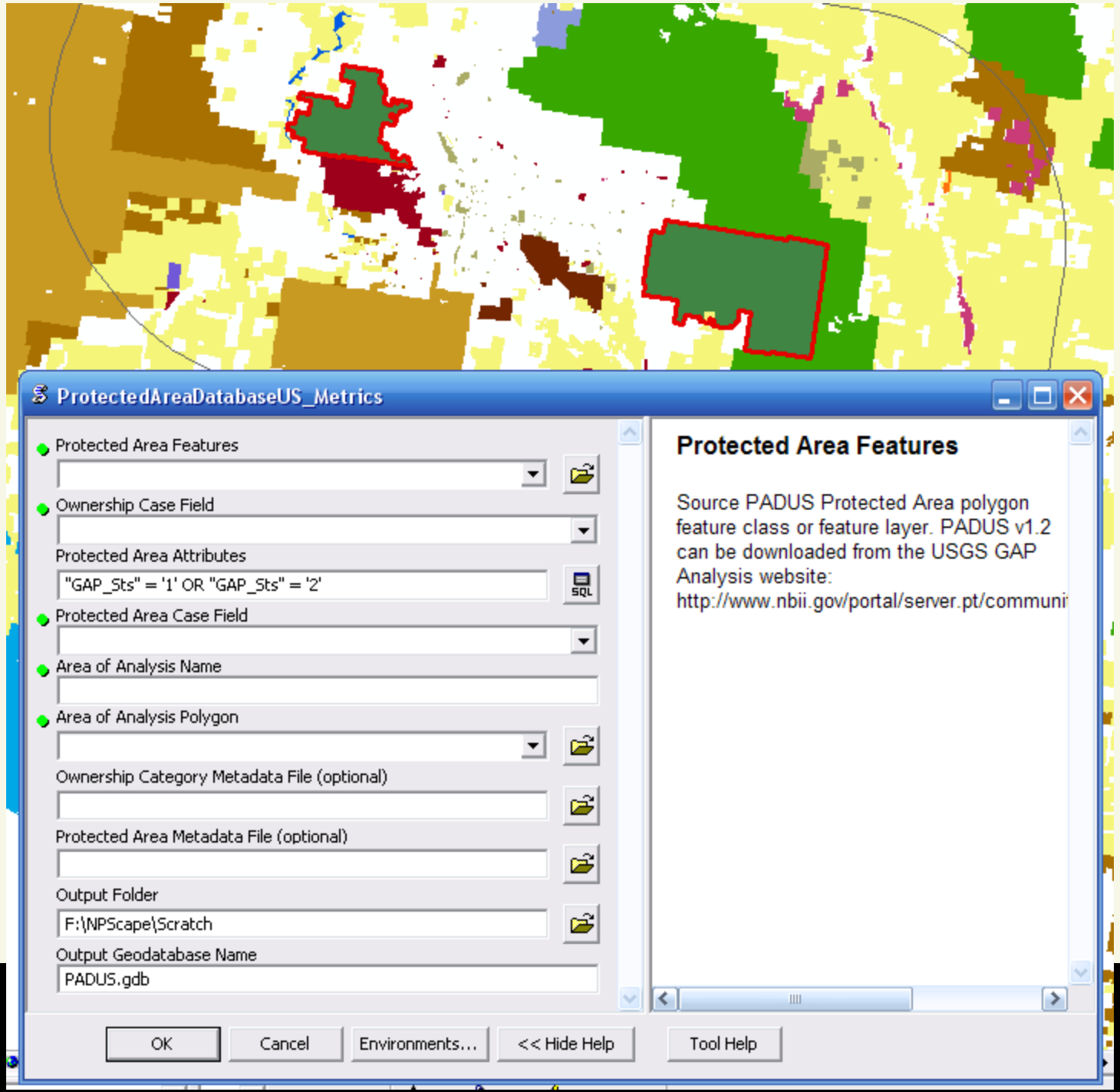
```python
import PAD_cac_PercentOwnership_ScriptTool
import PAD_cap_ProtectedStatus_ScriptTool
import os,time,arcgisscripting

reload (PAD_cac_PercentOwnership_ScriptTool)
reload (PAD_cap_ProtectedStatus_ScriptTool)

from PAD_cac_PercentOwnership_ScriptTool import PAD_cac_PercentOwnership_ScriptTool
from PAD_cap_Protected

gp0 = arcgisscripting.cre

Input_PA_Features = gp0.

Case_Field_CAC = gp0.Ge

SQLString_CAP = gp0.Getf

Case_Field_CAP = gp0.Ge

AOA_Identifier = gp0.Getf

Input_AOA_Feature_Clas

if (gp0.GetParameterAsTe
    CAC_Metadata_Templa
else:
    CAC_Metadata_Template = None
if (gp0.GetParameterAsText(7) <> ""):
    CAP_Metadata_Template = gp0.GetParameterAsText(7) # Example: O:\\Templates\\Metadata\\NPScape_PAD
else:
    CAP_Metadata_Template = None
```

```python
        # Calculate AOA total area using AOA polygon:
        aoaArea = 0
        gp.CopyFeatures(AOA_Layer,"in_memory\\temp_aoa")
        gp.AddField_management("in_memory\\temp_aoa", "TOTAL_AREA_SQKM", "FLOAT", "", "", "", "", "NULLABLE", "NON_REQUIRED"); showGpMessage()
        gp.CalculateField_management("in_memory\\temp_aoa", "TOTAL_AREA_SQKM", "!shape.area@squarekilometers!", "PYTHON", ""); showGpMessage()
        rows = gp.SearchCursor("in_memory\\temp_aoa")
        row = rows.next()
        while row:
            aoaArea += row.GetValue("TOTAL_AREA_SQKM")
            row = rows.next()
        del rows, row
        gp.Delete_management("in_memory"); showGpMessage()
        #if gp.Exists(AOA_Layer): gp.Delete_management(AOA_Layer); showGpMessage()

        #gp.MakeFeatureLayer_management(AOA_FC_Temp, AOA_Layer); showGpMessage()

        # Select PA polys within AOA:
        gp.SelectLayerByLocation_management(PAD_Layer,"INTERSECT",AOA_Layer); showGpMessage()

        # Clip
        gp.Clip_analysis(PAD_Layer,AOA_Layer,Output_CAP); showGpMessage()

        # Repair Geometry:
        gp.RepairGeometry_management(Output_CAP, "DELETE_NULL"); showGpMessage()
```

Python scripts using ArcGIS functions



ArcGIS Toolbox created from scripts

- Conservation Status
- Landcover
- Pattern
- Roads

PAD-US Tool Example for Saguaro NP