**TNC Lands Quarterly Quality Control Process (5/23/12)**

Before starting, verify that data submitted via web map (webedit version) has been incorporated.

Save a copy of the TNC lands data, datestamped and labeled as pre-QC, to the local TNC lands archive. All steps here should be run on a new QC version of the TNC lands feature class. All models are located in the QC\_TNC\_lands.tbx toolbox

**First:**

1. Create a new layer or version before proceeding (include “nullfix” in the name)
2. Start an edit session in ArcMap and run the entire **1\_NullFix** model, which does the following:
   1. *Recode any "" or "<Null>" values in all fields to NULL (also recode values of 0 to NULL for MA\_IFMS\_ID, TR\_IFMS\_ID, and CLS\_ACRES)*
   2. *Recode values earlier than January 1951 (as TNC was not founded until then) from PROTDATE & MOD\_DATE & CLSTRANDDA & TENUREEXP to NULL (as this date is an artifact from a source where the date was left blank)*
3. Manually recode values to match domains where possible (e.g. change "NO" to "No", or "TNC" to "The Nature Conservancy"): consider modifying QC\_nullfix script to handle the common issues.
4. REMOVE INVALID IDs? Either delete all IDs less than 8 digits long, or join to a master table of valid IDs?

**Geographic Attributes:**

1. **Country (COUNTRY)**: Manually populate NULL values based on a spatial join
2. **State (STATE)**: Manually populate NULL values based on a spatial join (note that currently one record is properly NULL since it is in Canada)

**Data from CLS join:**

1. Extract the data with the above edits to the local TNC lands archive (with the “nullfix” label).
2. Create a new layer or version before proceeding (include “clsjoin” in the name)
3. Add all dbf files from CLS to the mxd, start an edit session, and open and validate the **2\_CLS\_import** model and then run the entire model (See QC\_CLS\_Import.docx for details of how it works, but in essence it takes a bunch of dbf files, joins them, and imports the data)
4. After completion, run the entire **1\_NullFix** model again to fix 0 values introduced during the import process

**Other Attribute Updates:**

Create a new layer or version before proceeding (include “attfix” in the name)

Run the entire **3\_Attribute\_Update** model, which does the following:

1. ***Sector (OWNER)****: Populate NULL values with "Private"*
2. ***Designation (DESGNTN)****: Populate NULL values with "Conservation Preserve"*
3. ***Protection Holder (PROTHOLD)****: Populate NULL values with "The Nature Conservancy"*
4. ***CMS:*** *Populate NULL values using code below during quarterly QC:* 
   1. ***Intent (CMS\_INTENT)****:*
      1. *= "Biodiversity Focus" WHERE (PROTMECH = 'Fee-simple ownership' OR PROTMECH = 'Fee-simple / easement combination' OR PROTMECH = 'Agreement') AND CMS\_INTENT IS NULL*
      2. *= "Biodiversity Compatible" WHERE (PROTMECH = 'Deed Restriction' OR PROTMECH= 'Full conservation easement') AND CMS\_INTENT IS NULL*
   2. ***Duration******(CMS\_DURATN):***
      1. *= "Permanent Commitment" WHERE (PROTMECH= 'Full conservation easement' OR PROTMECH = 'Fee-simple ownership' OR PROTMECH = 'Fee-simple / easement combination') AND CMS\_DURATN IS NULL*
      2. *= "Long Term Commitment" WHERE PROTMECH = 'Deed Restriction' AND CMS\_ DURATN IS NULL*
   3. ***Effective Management Potential******(CMS\_EMP)****:* 
      1. *= "High Potential" WHERE (PROTMECH= 'Full conservation easement' OR PROTMECH = 'Fee-simple ownership' OR PROTMECH = 'Fee-simple / easement combination') AND CMS\_EMP IS NULL*
      2. *= "Moderate Potential" WHERE PROTMECH = 'Deed Restriction' AND CMS\_ EMP IS NULL*
5. ***GAP Category (GAPCAT)****: Populate NULL values according to this chart during quarterly QC:* [*http://maps.tnc.org/datadictionary/CMS\_GAP\_Chart.doc*](http://maps.tnc.org/datadictionary/CMS_GAP_Chart.doc)
   1. *= 1 WHERE (PROTMECH = 'Fee-simple ownership' OR PROTMECH = 'Fee-simple / easement combination' OR PROTMECH = 'Agreement') AND GAPCAT IS NULL*
   2. *= 2 WHERE (PROTMECH = 'Deed Restriction' OR PROTMECH= 'Full conservation easement') AND GAPCAT IS NULL*

**Final Touches:**

1. Update QC Exception field to flag problems (currently we use 3 values to flag records missing either IFMS\_ID field or both of them, it could be used to flag other problems as well) and set the field to null for records that no longer have problems.
2. Update metadata w/ new date, etc. Export and post to maps.tnc.org
3. Regenerate points layer from polygons, update metadata for the point layer as well

Save a copy of the data, datestamped and labeled as post-QC to the local TNC lands archive.

Check the edits back in to SDE, and contact Dave when complete. Update cache in test and plan for deployment to production. Remind Dave to rebuild spatial index and run a compress if needed.