Basin processing scripts

Background

- These scripts are designed to aid in the basins generation process.
- This code can be checked out at any time via Subversion:

  ```
  svn co https://ebm.nceas.ucsb.edu/svn/Modeling/Basins
  ```

- The code can also be viewed in Trac.

AML Usage

Install `basingenerate.aml` into your local Arc installation under: <arc root>atoolgrid i.e: C:arcgisarcexe9xatoo

To run, from the grid prompt run:

```
basingenerate DEM <maximum fill depth> <maximum nibble amount> <output>
i.e: basingenerate dem 100 12 f:\dev\wgs_globe\australia\bump_v2
```

Python Usage

When running the Python scripts, make sure that the interpreter is the same one ArcGIS recognizes. ESRI has a document detailing the process. The scripts perform the following operations:

```
basinBump.py    Rebuild a DEM based on burns, breaks and drains.
basinPours.py   Find the pour points for a baisn model
basinBuild.py   Generate a local 90m SRTM model
```

VBA Usage

Open the field calculator: Right click Shapefile, select *Open attribute table*, right click on the column to be calculated, choose *Calculate values*. From this field calculator, select *Load...* and chose a .cal file:

```
area.cal        Calculate areas, in square kilometers (km^2)
name_source.cal Choose name source <VMAP, GTN, geonames, manual>
basin_id.cal    Calculate basin_id column
```