**DEVELOP National Program Python Package (dnppy)**

**Software Classification and Safety Criticality**

This project has been classified as Class E software per the document titled "SACR-dnppy-Class E - 11-19-14.pdf".

The software activity is in full compliance with LPR 7150.2 and LMS-CP-7150.6 for Class E software.

**Schedule & Resources**

This software effort was started in September 2014 and will take 0.15 WYE to reach the public release stage. The development plan is to get a few core functions in place, implement a system by which functionality can be added, implement a bug reporting and resolution protocol, and place dnppy into the public domain where it can be developed internally as well as externally for an indefinite amount of time.

**Compliance Matrix**

The software compliance matrix is attached as an appendix to this document.

**Testing**

Each function of each module is tested to verify proper functionality for any anticipated scenario. An internal-only browser based bug reporting system will be implemented into the DEVELOPedia project for identification of bugs, and the DEVELOP programs Geoinformatics YP class will be responsible for bug fixes. New functions will be subject to testing before they are included in new versions of the module.

**Data Management**

**Version Control & Backups:** Version control for this software will be done by incrementing version numbers released on a periodic basis coinciding with the start of the summer, fall, and spring terms.

The release schedule for versions which incorporate the most recent progress are as follows:

Spring 2015 1.15.1 (python 2.7)

Summer 2015 1.15.2

Fall 2015 1.15.3

Spring 2016 1.16.1

Summer 2016 1.16.2

Fall 2016 1.16.3

Etc…

With second number corresponding to the year, and the third digit corresponding to the term. Small intermediate updates that must be made will add a digit to the third number and incrementally increase. Major updates will result in the first digit incrementally increasing. Major updates are expected to coincide with shifts in the supported python environment, and versions of ESRI ArcMap.

Every version will remain available on the DEVELOP GitHub page for download, and each will include its own installer script.

Backups will be maintained by the DEVELOP program and used in the event of a compromised Git.

**Software Release:** Software will be uploaded to the DEVELOP GitHub account with the naming conventions and version control detailed above.