

**NHDPlusV2 CA3TV2 Readme**  
**Horizon Systems Corporation**  
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## Contents

Microsoft SQL Server 2012 Express LocalDB and CA3TV2 Tool .....	1
Known Problems & Issues .....	1
Installation .....	2
Accessing the User Guide for CA3TV2 .....	2
Data Requirements .....	2

## Microsoft SQL Server 2012 Express LocalDB and CA3TV2 Tool

CA3TV2 uses MS SQL Server 2012 Express LocalDB. MS SQL Server 2012 Express LocalDB must be installed on the computer that is going to run CA3TV2. The SQL Server instance must be accessible to the login of the user who will be running CA3TV2. If SQL Server is installed with default parameters, then the default server instance name is *(localdb)\V11.0*.

The CA3TV2 accumulation function uses a pre-built SQL database that is available, for each NHDPlusV2 VPU, from

<http://www.horizon-systems.com/NHDPlus/V2Accumulation.php>.

Each database is packaged as a component named:

NHDPlusV21\_<drainagearea>\_<VPUid\_NHDPlusAttributes2\_<version>

These components are installed just like other NHDPlusV2 VPU data.

## Known Problems & Issues

Process improvements have been made to avoid the memory problem described below. However, please use the workaround described and report any occurrence of this problem to the NHDPlus Team. When allocating and accumulating a categorical raster that has many values, such as National Land Cover Data which has 20 values, CA3TV2 may experience memory errors. To successfully process such a categorical raster, the categories should be divided into 2 or more groups. Each group can be processed through CA3TV2 separately.

**Required change to WINDOWS' settings for each user login: A change in ArcGIS in version 10.2, triggered a change to the processing of delimited text files. In order to continue to properly process these files, the following WINDOWS' setting must be changed:**

**Control Panel -> Region and Language -> Additional settings / Digit grouping – change from 123,456,789 to 123456789.**

If you experience problems with the CA3TV2, please contact [nhdplus@hscnet.com](mailto:nhdplus@hscnet.com).

## **Installation**

Install or upgrade Microsoft .NET (see CA3TV2 “System Requirements” on the NHDPlusV2 Tools webpage). Links to the Microsoft web page for .NET are also on the tools webpage.

Install SQL Server 2012 Express LocalDB and SQL Server 2012 Management Studio. Install packages are available on the NHDPlusV2 Tools webpage

Install CA3TV2. Create a directory on your hard drive to use for the installation. Download a copy of NHDPlusV2CA3TV2\_<version number>.7z into that directory. Use 7-Zip to unzip NHDPlusV2CA3TV2\_<version number>.7z using the “Extract Here” option. Once the installation is complete, this directory and its contents may be removed, if desired.

Double-click on CA3TV2Setup.exe to start the installation program. The installation program will place all the necessary files on your local hard drive and add the necessary entries to your computer’s registry. During the installation, you will need to select a location on your hard drive to be used for NHDPlus Tools. This will default to C:\NHDPlusTools in the install process. You may change the default to a <drive>:\<foldername> of your choice. The folder may already exist, but that is not required. It is recommended that all NHDPlusV2 tools be installed in the same folder. The CA3TV2 install will be placed in a sub-folder called \CA3TV2 under the folder specified during the install.

## **Accessing the User Guide for CA3TV2**

The CA3TV2 user guide is incorporated into the tool and can be accessed from the “Help” button on the CA3TV2 main window.

## **Data Requirements**

CA3TV2 expects NHDPlusV2 data to be stored in its default folder structure (in bold). For example:

D:\NHDPlusData (your NHDPlus data folder)

**\NHDPlusMS**  
**\NHDPlus05**  
**\NHDPlusAttributes**  
**\NHDPlusCatchment**  
**\NHDPlus06...**

For each NHDPlusV2 VPU in which you plan to run CA3TV2, the following NHDPlusV2 VPU data components are required and must be downloaded and installed on your local system:

NHDPlusAttributes  
NHDPlusAttributes2 (see Data Extensions->Accumulation Extension on the webpage)  
NHDPlusCatchment