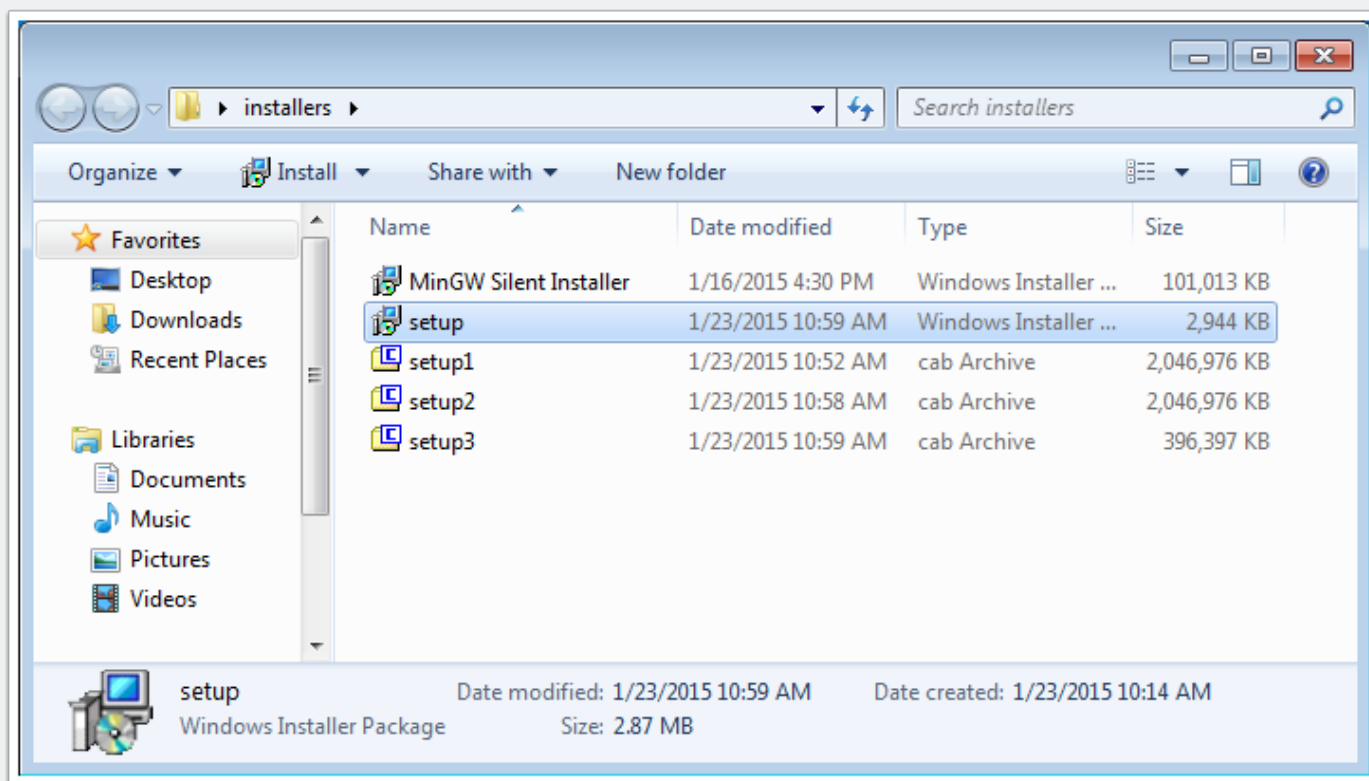


# PISCES Installation and Getting Started

This document will walk you through the PISCES setup process and get you started accessing the suite of available tools. It will begin with what options to choose during the actual installation and the help you load and use the PISCES tools

## 1. Running Setup

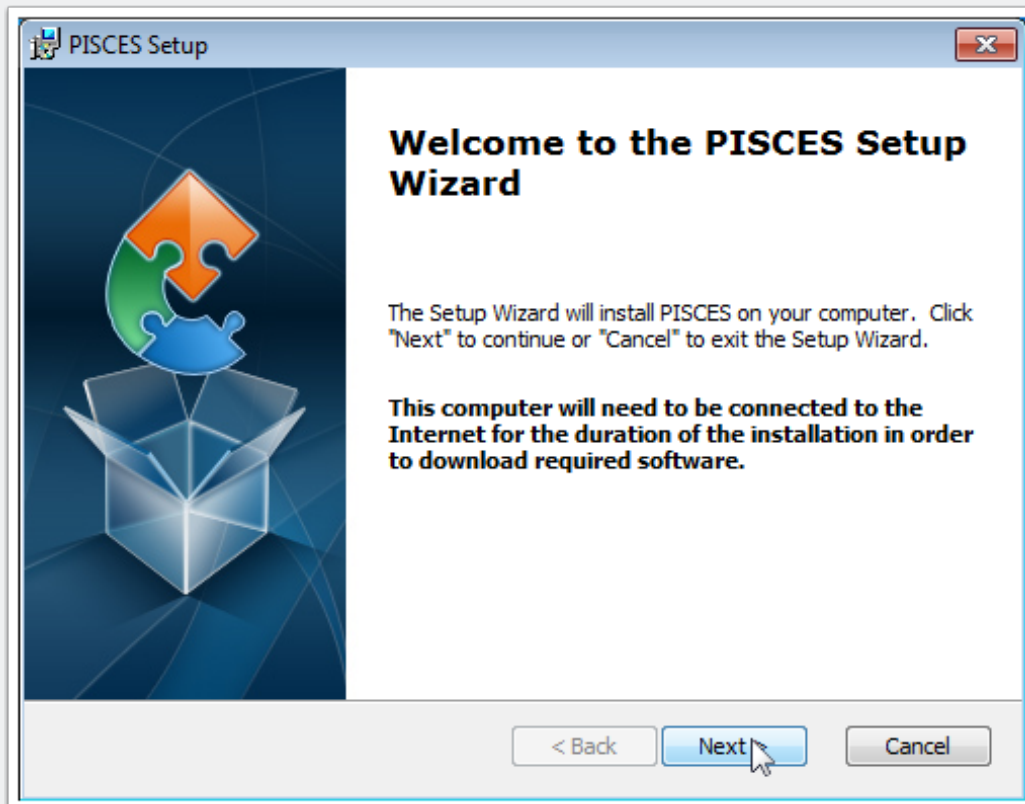
To begin, navigate to the folder your PISCES installer is located in, and double click the *setup.msi* file. It may show up simply as *setup* as well.



# PISCES Installation and Getting Started

## 1.1 Beginning Install

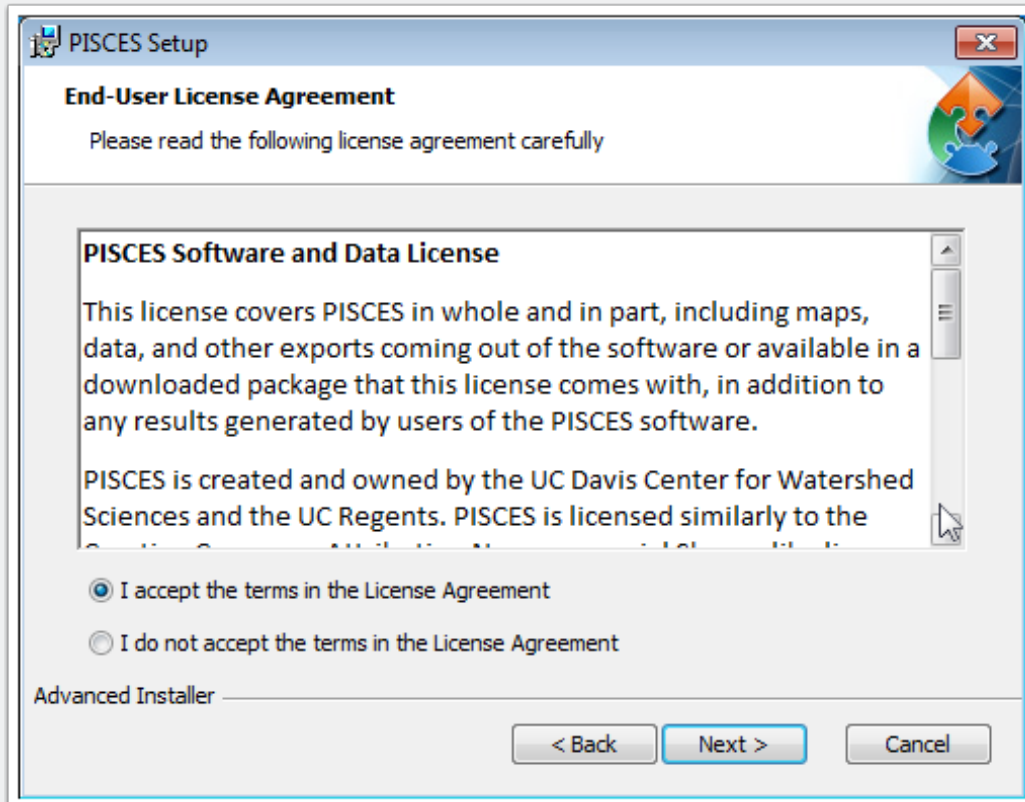
You will notice a familiar installation process. Note that the computer needs to be connected to the Internet throughout the installation or the install will fail. Click *Next*



# PISCES Installation and Getting Started

## 1.2 The PISCES license

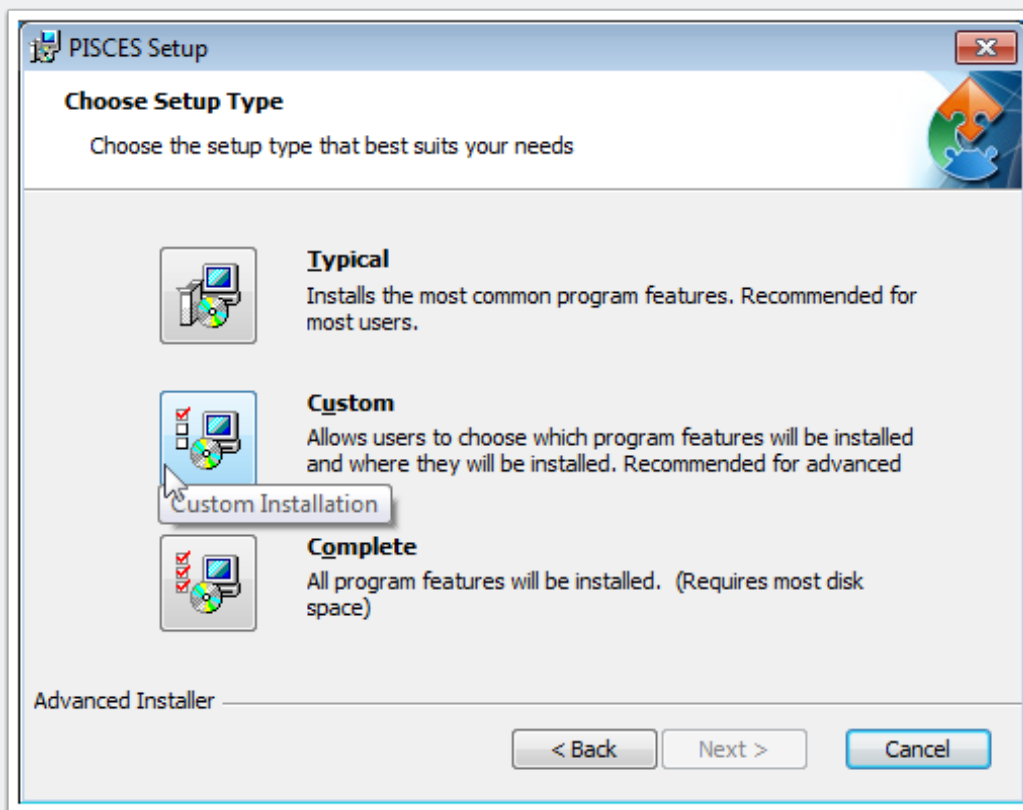
Look through the license, and then accept the terms if you wish to continue. Click *Next*



# PISCES Installation and Getting Started

## 1.3 Setup Types

You'll see a prompt to choose the type of setup you wish to run. The *Typical* option selects everything you'll usually need to run PISCES, but may be missing components or features you need. *Complete* installs everything available, and *Custom* allows you to choose yourself. **For this walkthrough, please choose *Custom*.**



## 1.4 Select your components and installation directory

In this step, you will select the components you want to install and the installation directory for PISCES.

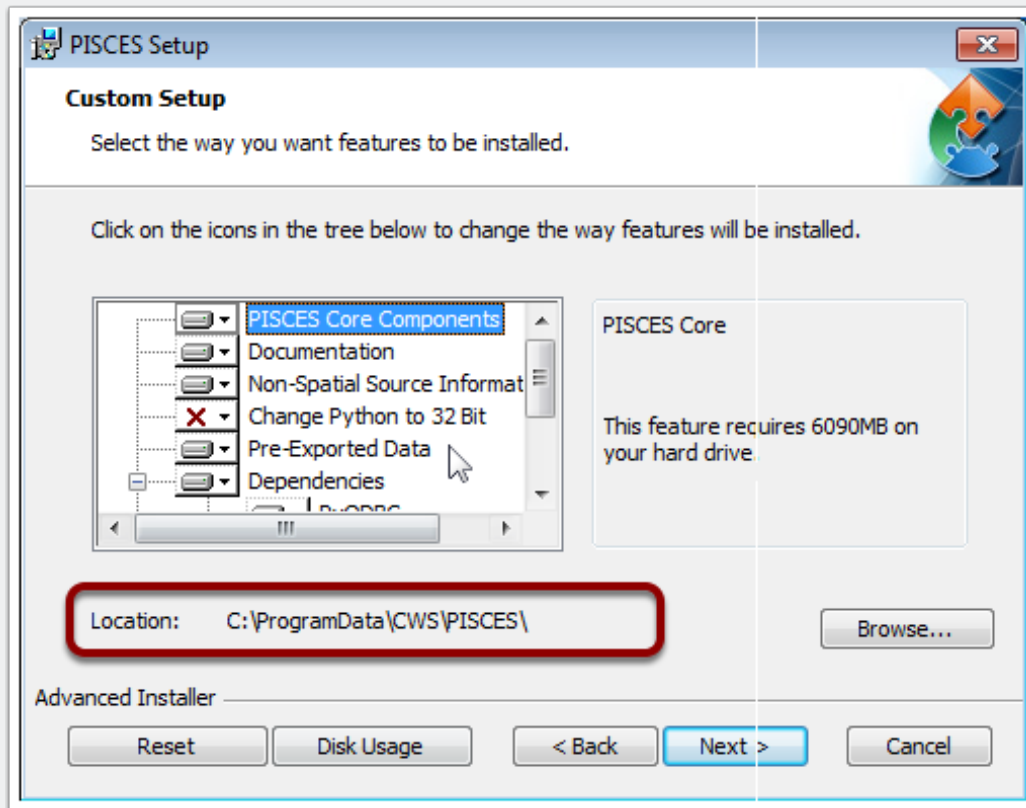
# PISCES Installation and Getting Started

By default, PISCES installs to **C:\ProgramData\CWS\PISCES**, but you can change this by clicking the *Browse* button and selecting another folder.

In the component selection box, you can choose which items you wish to install. The following options are available as of this writing:

- **PISCES Core Components** (*required*)
- **Mercurial Version Control Capabilities** (*not in all distributions of PISCES*) - For use in PISCES development. No need to install unless you are going to work on building and extending PISCES
- **Documentation** (*installed by default*) - Full PISCES documentation. Also available at <http://pisc.es.ucdavis.edu/doc>
- **Non-Spatial Source Information** (*installed by default*) - Source data, such as PDFs, word documents, verbal descriptions, etc, that were part of PISCES data development.
- **Change Python to 32 Bit** (*not installed by default*) - Reassociates .py files with the 32 bit version of Python. Only necessary if you plan to work with PISCES on the command line and have 64-bit background geoprocessing installed.
- **Pre-exported data** (*installed by default*) - Pre-populated geodatabase of PISCES data layers, and map documents associated with them will be installed to the PISCES folder.
- **Dependencies** (*installed by default*) - Software that PISCES requires to run. Install these unless you already have them, or need a specific version you already have installed.
- **Add Python to User PATH variable** (*not installed by default*) - Makes it easier to run PISCES from the command line. Optional.

# PISCES Installation and Getting Started



## 1.5 The Default Installation Location - ProgramData

Take special note of the installation location (from the previous step). While many programs install the software to one folder and let you choose where to put data, PISCES puts data in the software folder by default, so you'll want to know where it is. Further, PISCES installs itself to a folder named *ProgramData* in the default configuration. *ProgramData* is special because it is a shared data folder for many different pieces of software, and it is a *hidden* folder, so unless you have your Windows installation set to show those kinds of folders, you won't see it.

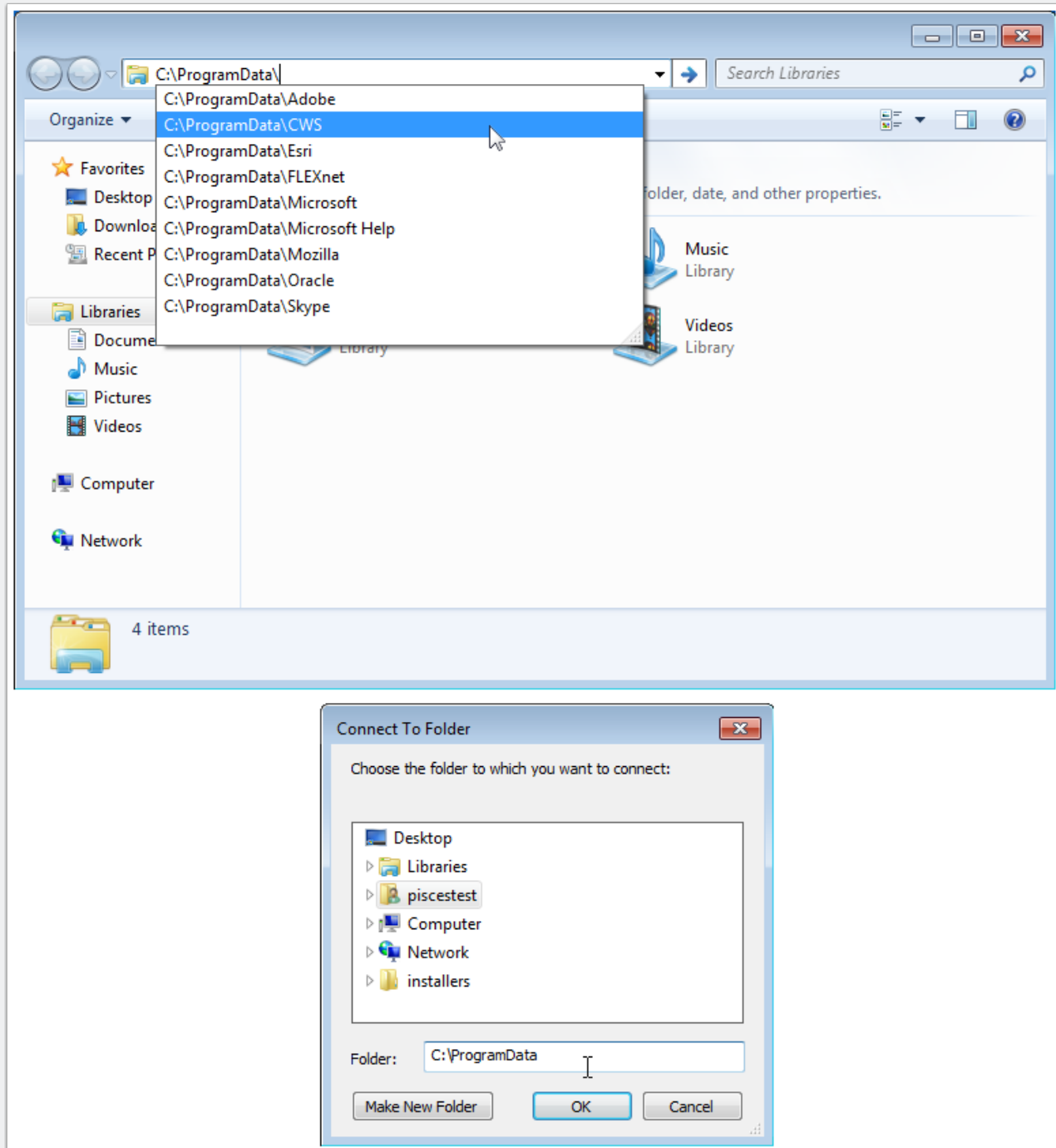
You can access the PISCES installation folder in any of three ways.

# PISCES Installation and Getting Started

1. You can open it using the shortcut created in the Start Menu after installation
2. You can unhide the folder or show hidden folders in your operating system preferences (this document won't cover this)
3. You can manually type the path into the address bar in Windows Explorer as shown in the screenshot. If you type it and hit Enter, it will take you to the folder. **You can use this same method in ArcGIS in order to create a folder connection to the PISCES folder.** In ArcGIS, you will type the path into the folder selection box when connecting a folder instead of an address bar (see second screenshot).

**You can also select another folder to install PISCES in another folder, if that is easier to work with.** The only requirement is that anyone who works with PISCES must be able to read and write to the folder it is in - if you are the only user of PISCES on your computer, feel free to install it to a location that is convenient for you, in your Documents folder, or wherever works best.

# PISCES Installation and Getting Started

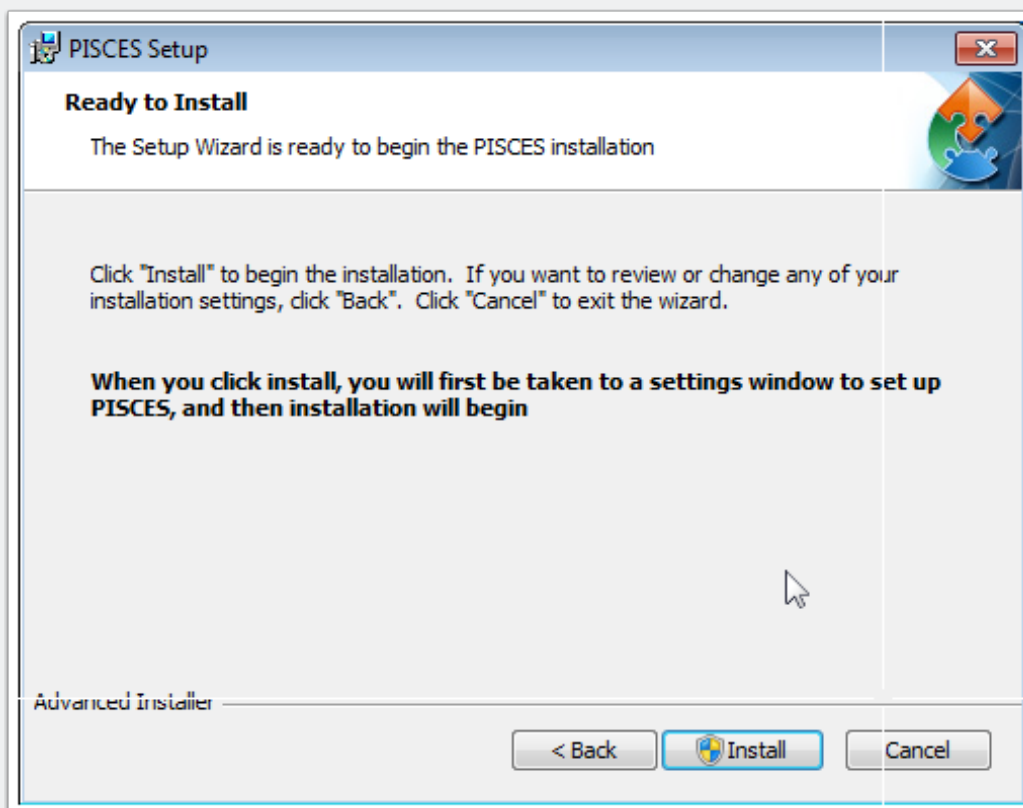




# PISCES Installation and Getting Started

## 1.6 The False Install Page

The software will prompt you to begin the installation, but you will have one more page of options



## 1.7 PISCES options

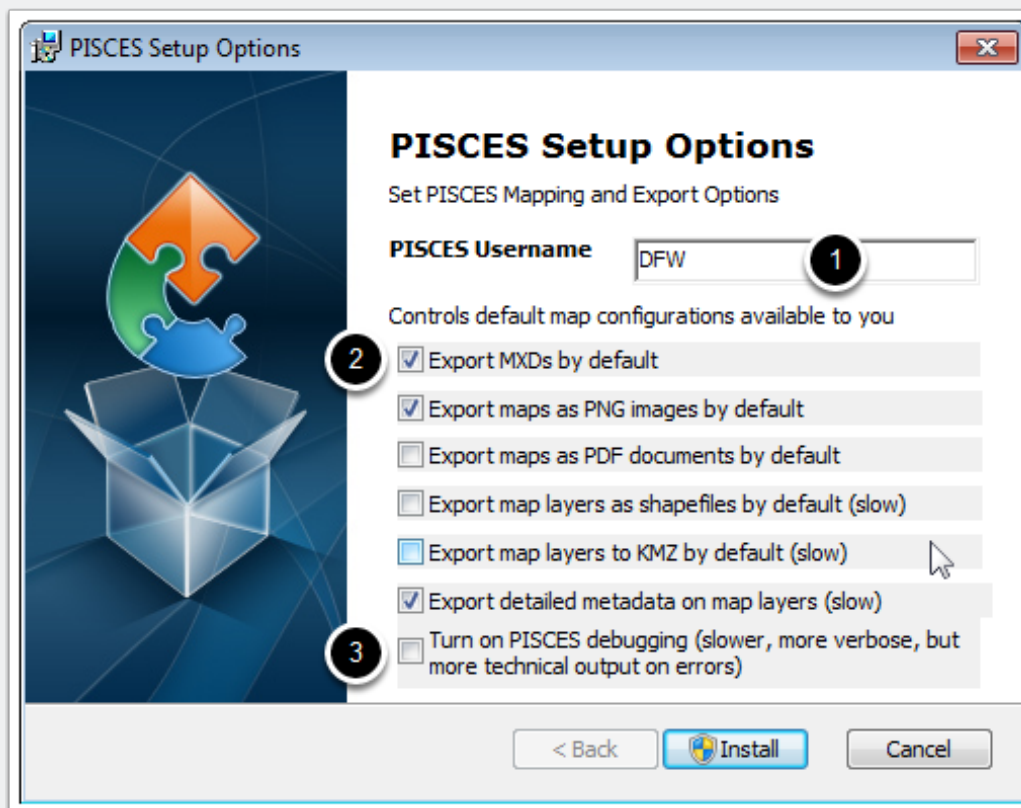
The installer will prompt you to set some PISCES application options. All of these can be changed later if need be, but this interface is the easiest place to set your defaults.

1. The first option, to set a username simply controls the map sets available by default. The default value of *DFW* is appropriate for most uses of PISCES and will show all relevant map output options in the PISCES toolbox.

# PISCES Installation and Getting Started

2. Most of the checkboxes (except the last one) set default options for export formats available for maps. The PISCES mapping tool allows you to set these options at the time it's run, but these will be the default values that it will use. If you have a common workflow, then setting the options here will let you work faster for map exports.
3. The last option turns on **debugging mode, which is more likely to make PISCES unstable**. In debugging mode, PISCES usually stops (crashes) when it runs into an error, and prints that error out to the screen. In its normal mode, it attempts to continue on, skipping what it was doing if necessary. Only turn on debugging mode if you know what you're doing.

When you are done, click *Install* to begin installation. The installer will run and should take 10-30 minutes depending on your computer. **It may prompt you for an administrator's password as well.** When it is complete, you can exit the installer.



# PISCES Installation and Getting Started

## 2. Using PISCES - Start Menu shortcuts

The PISCES installer will install a set of start menu shortcuts for you intended to help you get more familiar with how PISCES works and where your outputs are located.

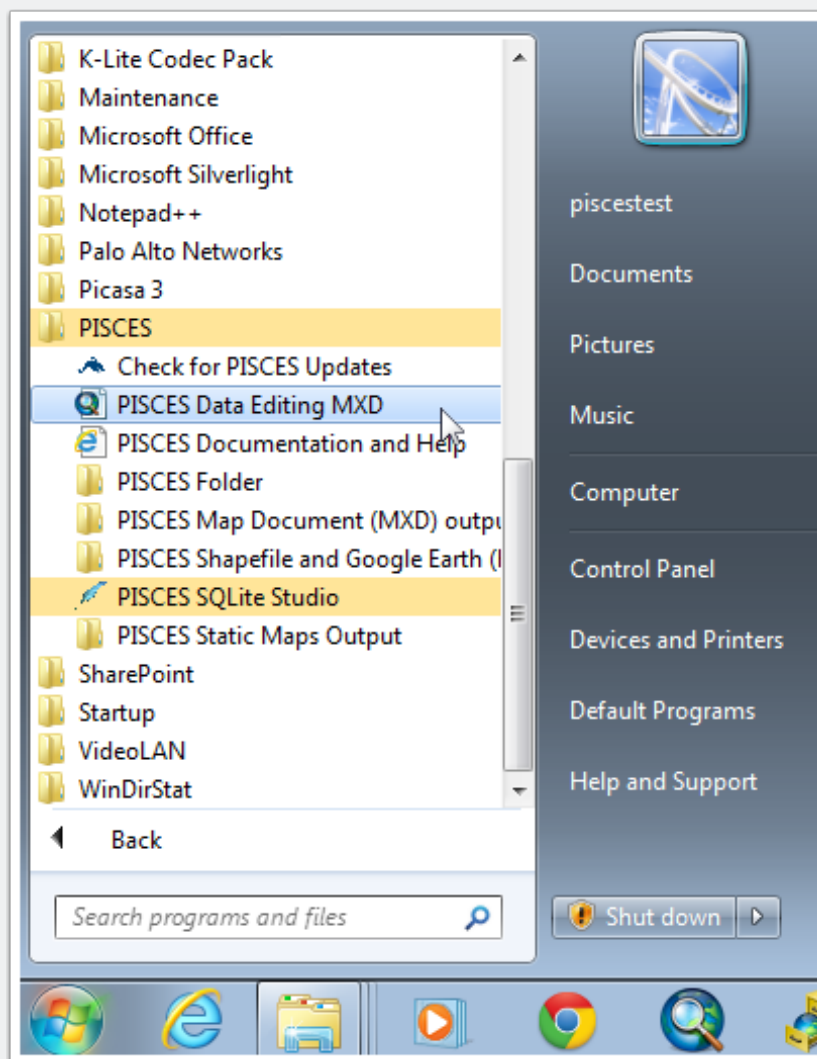
The installed shortcuts (yours may be in a different order) are:

1. Check for PISCES Updates
2. PISCES Editing and Export MXD (*covered in a subsequent section*)
3. PISCES SQLite Studio (*covered in a subsequent section*)
4. PISCES Documentation and Help
5. PISCES Folder
6. PISCES Map Document (MXD) Output Folder
7. PISCES Shapefile and Google Earth (KMZ) Output Folder
8. PISCES Static Maps Output Folder
9. PISCES Command Prompt

Items 5-8 are all shortcuts to folders in your PISCES installation. The first one to the folder as a whole, and the other three to various output locations. The PISCES Data Editing MXD and the PISCES SQLite Studio will be covered in subsequent sections (and the full PISCES documentation).

Item 9, the comand prompt, opens a Windows command prompt at the location of the PISCES code, allowing you to interface with older parts of the software that require that form of input.

# PISCES Installation and Getting Started



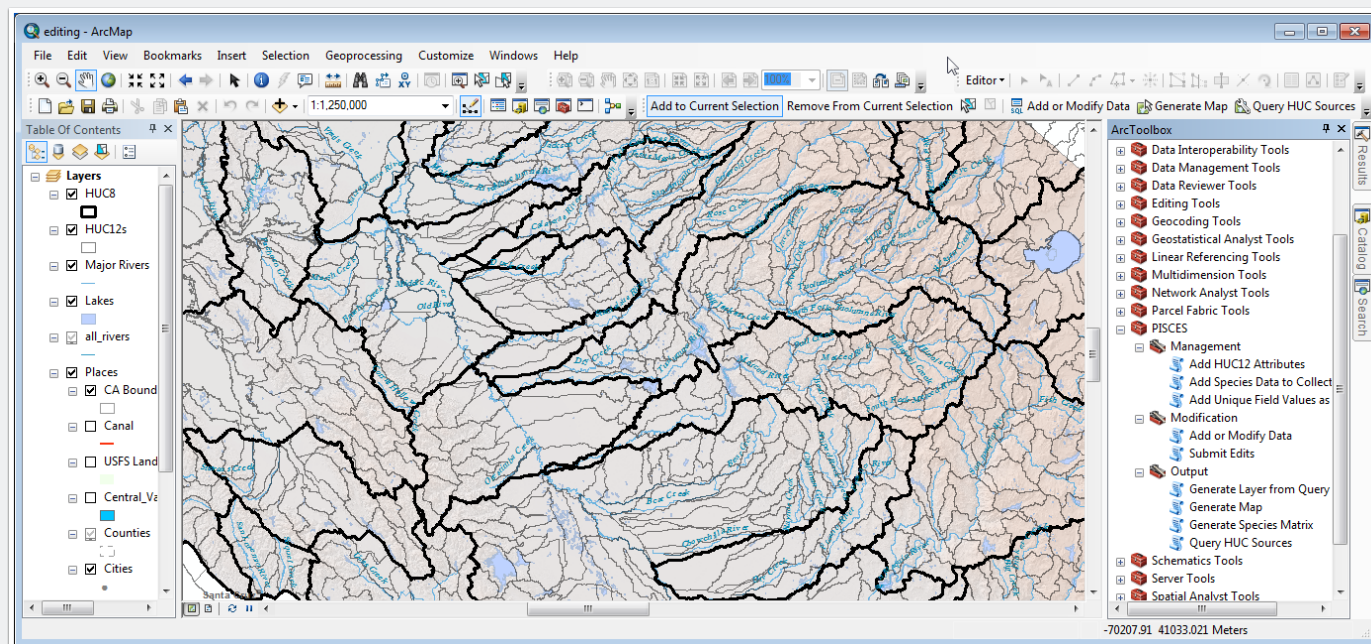
## 3. Using PISCES - Accessing tools

Most PISCES tools are accessed through an ArcGIS toolbox (*PISCES.mxd*) accessible in the *tbx* folder of your main PISCES installation. You can add this toolbox to any other map document and gain access to PISCES functionality.

# PISCES Installation and Getting Started

When you first begin using PISCES, however, we recommend using a map document that comes with PISCES since it will have the toolbox, relevant data, and some preconfigured toolbars set up for you to use. This document is named *editing.mxd* and is accessible from a shortcut PISCES creates in your Start Menu when you install it. It is listed as PISCES Data Editing MXD.

For help setting up your own map documents to have some or all of the PISCES tools, see [Setting up a blank map](#) in the PISCES documentation



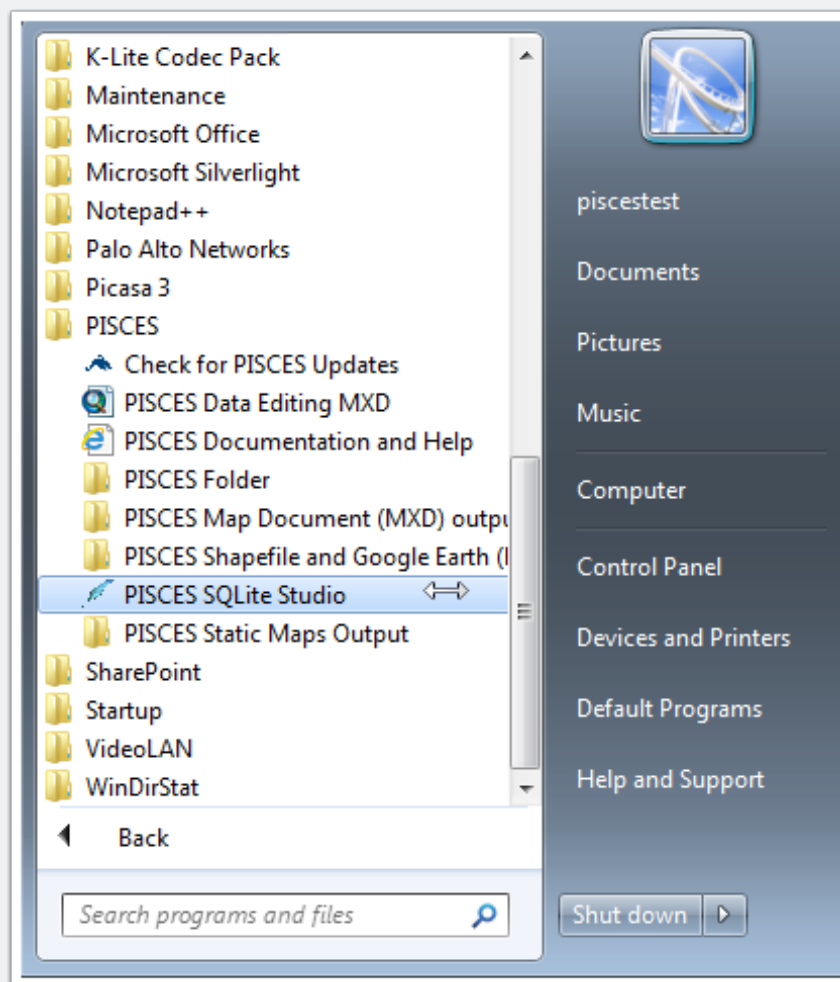
## 4. Using PISCES - Editing the Database

While many PISCES functionalities have ways to access them via the toolbox, many can only be accessed through editing the database directly, or the command line. The [full PISCES documentation](#) covers the database structure and edits, but you'll need to know how to view and connect to the database. PISCES comes with a piece of software

# PISCES Installation and Getting Started

called SQLite Studio (accessible from the start menu) for connecting to the database and modifying it. It requires some one-time setup to get started.

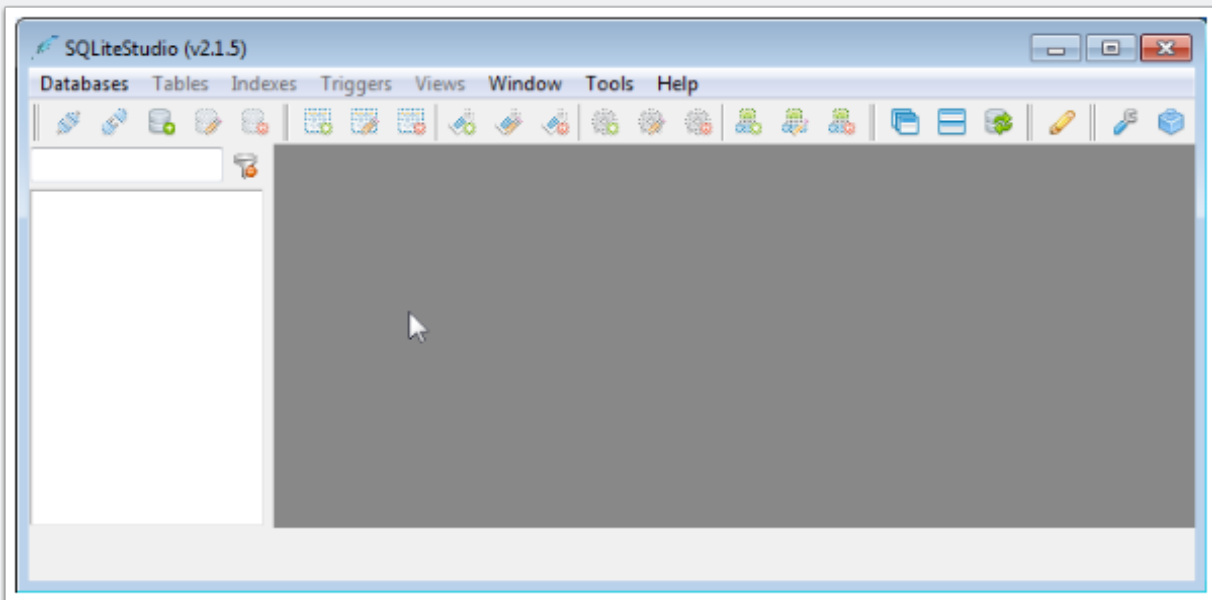
To begin, go to your start menu and, in the PISCES section (on Windows 8, type PISCES to search) and open PISCES SQLite Studio.



# PISCES Installation and Getting Started

## 4.1 Opening the database

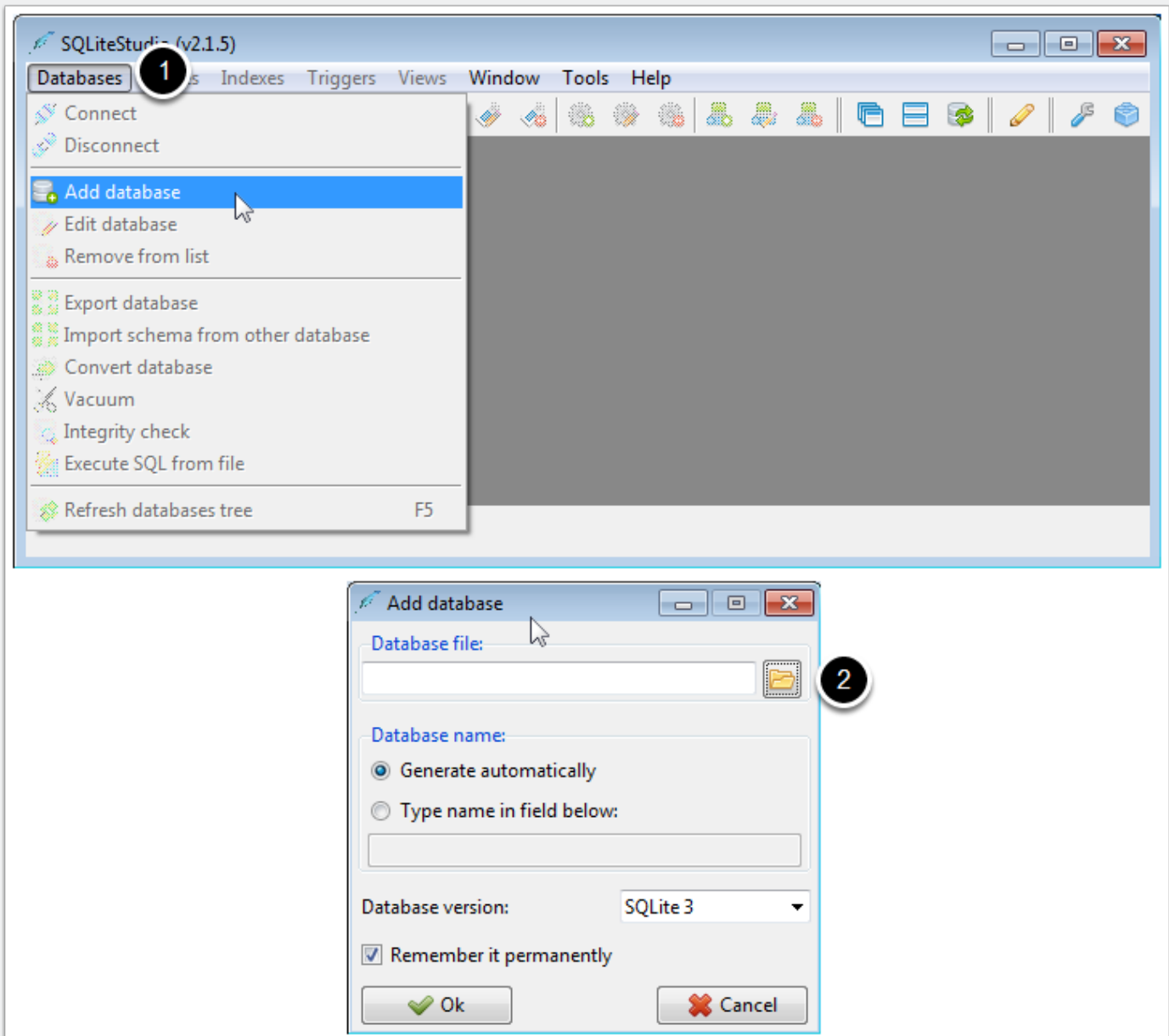
SQLite studio will open, but will be empty. We'll need to connect it to the PISCES database for the first time.



# PISCES Installation and Getting Started

## 4.2 Add the PISCES database

1. Click *Databases > Add Database* to connect to the PISCES database
2. In the dialog that pops up, click the browse button (folder icon) in the *Database file* area.

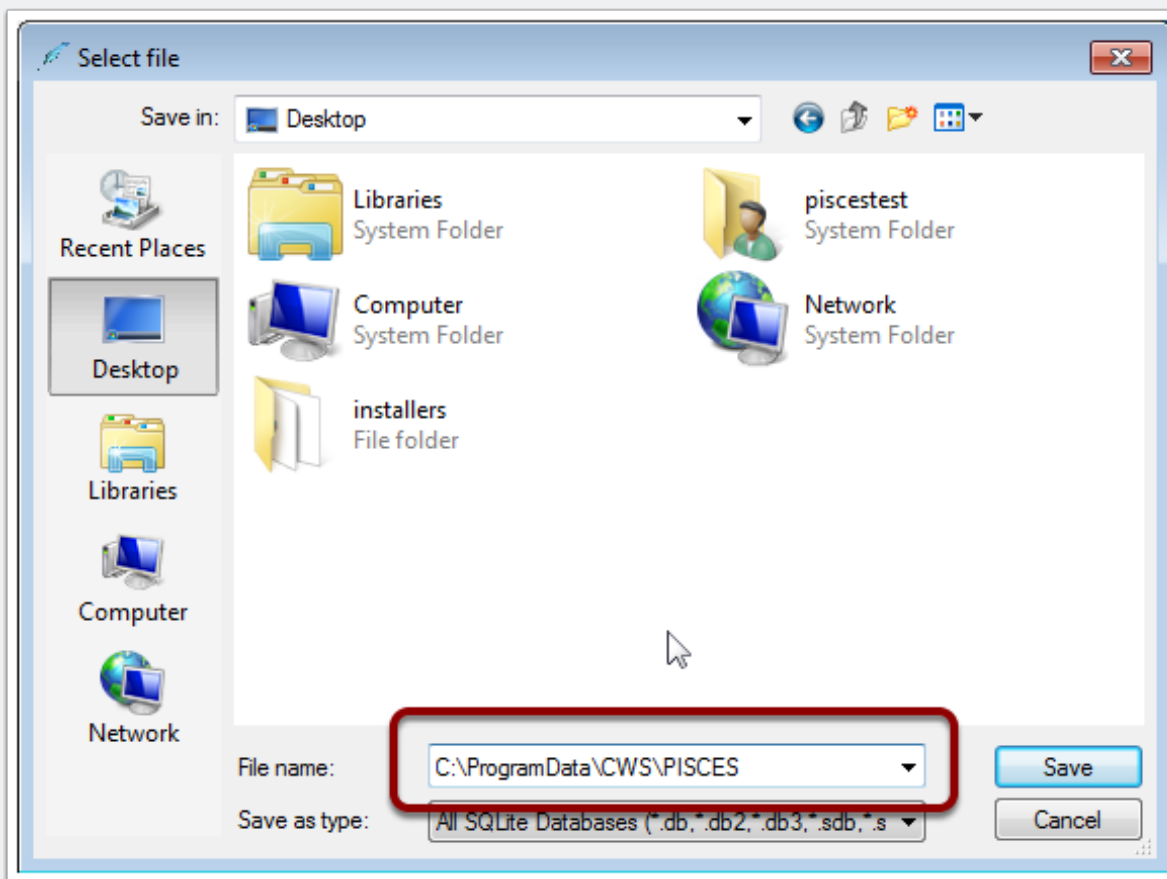




# PISCES Installation and Getting Started

## 4.3 Browsing to the database

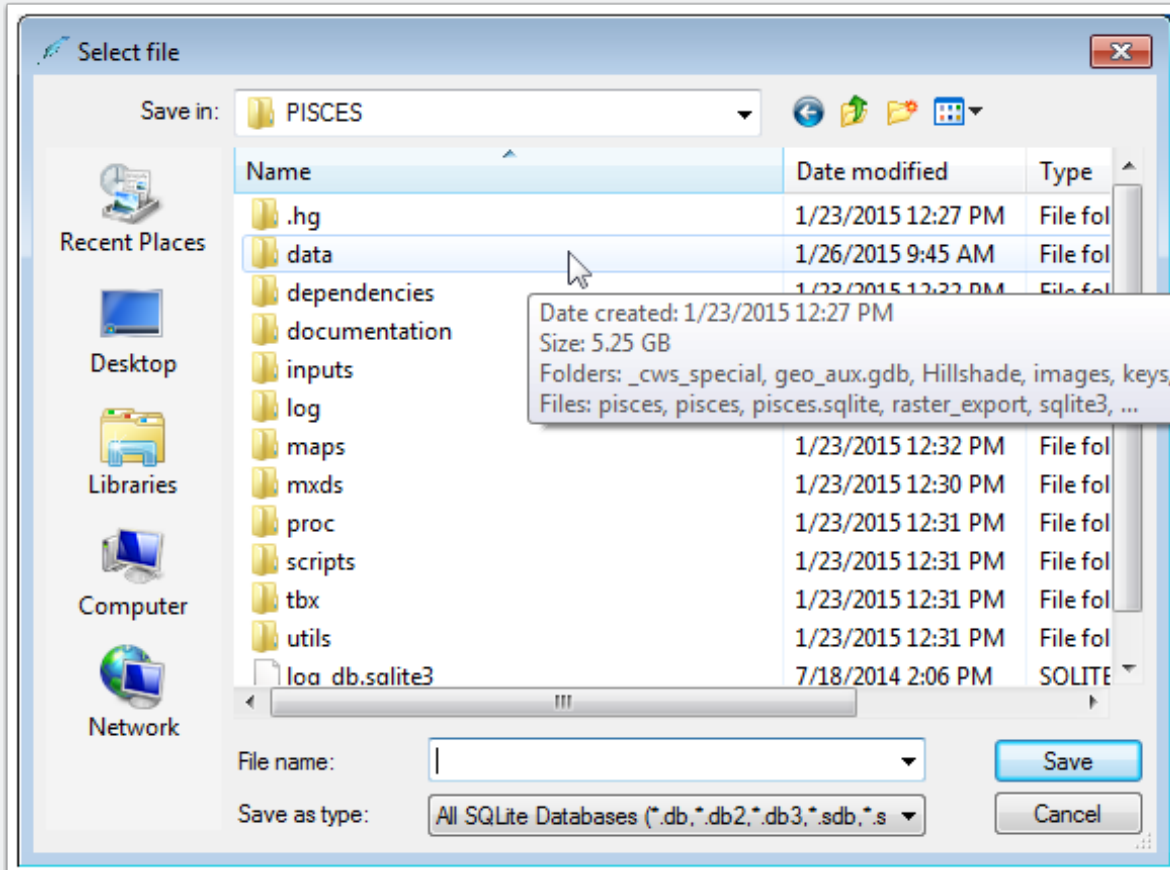
In the *Select file* prompt that appears, type C:\ProgramData\CWS\PISCES (the path to the PISCES installation, change this if you installed to a different folder) in the *File name* box. Press the *Enter* or *Return* key on your keyboard and it will load that folder.



# PISCES Installation and Getting Started

## 4.4

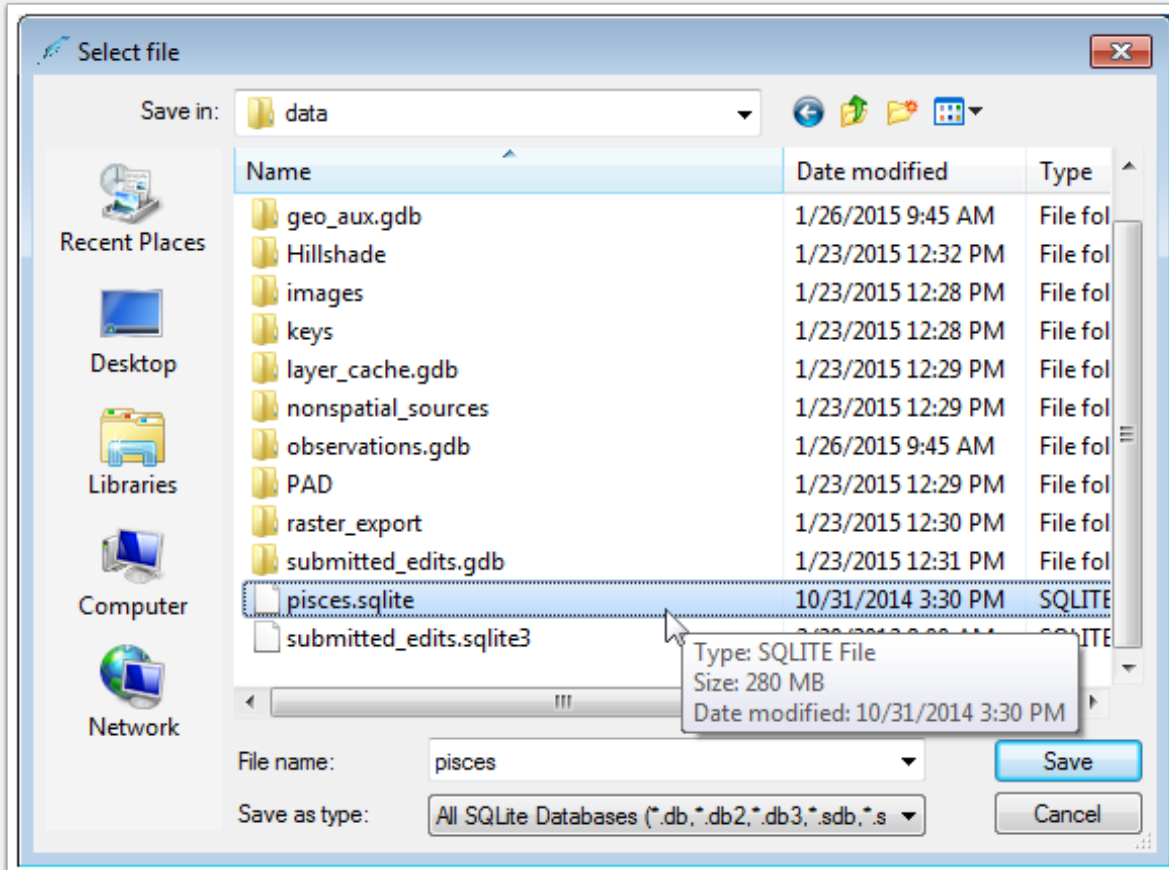
You will then see the full PISCES installation. Feel free to look around a bit, but when you're done, the database is in the *data* folder. Double click it to open it up.



# PISCES Installation and Getting Started

## 4.5

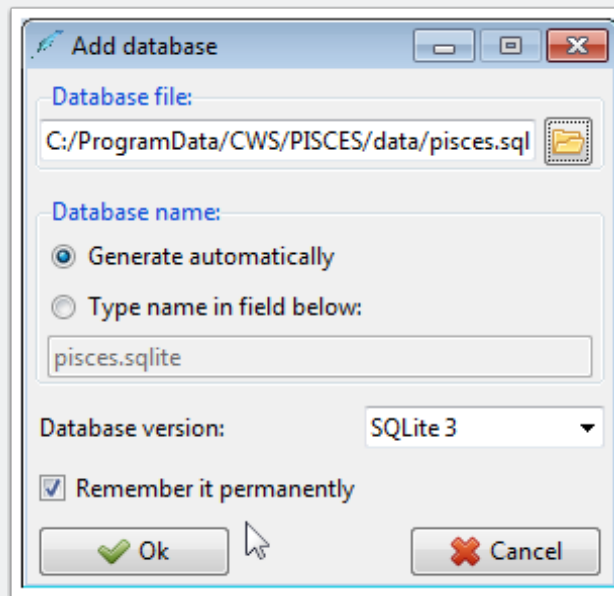
Select *pisces.sqlite* and click the *Save* button to return to the main *Add database* screen.



# PISCES Installation and Getting Started

## 4.6

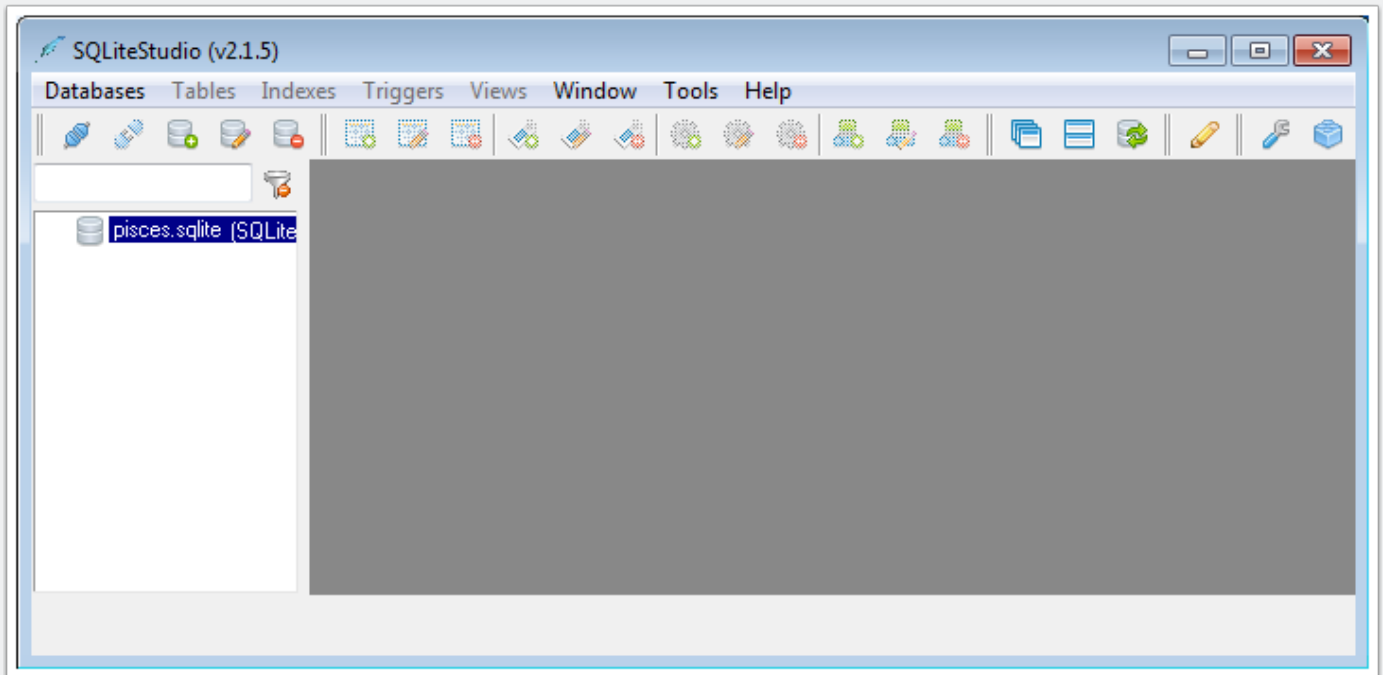
Double check that your options are set the way you want - leave *Remember it permanently* checked so that you don't have to set up the database again. Then Click OK.



# PISCES Installation and Getting Started

## 4.7 Using the database

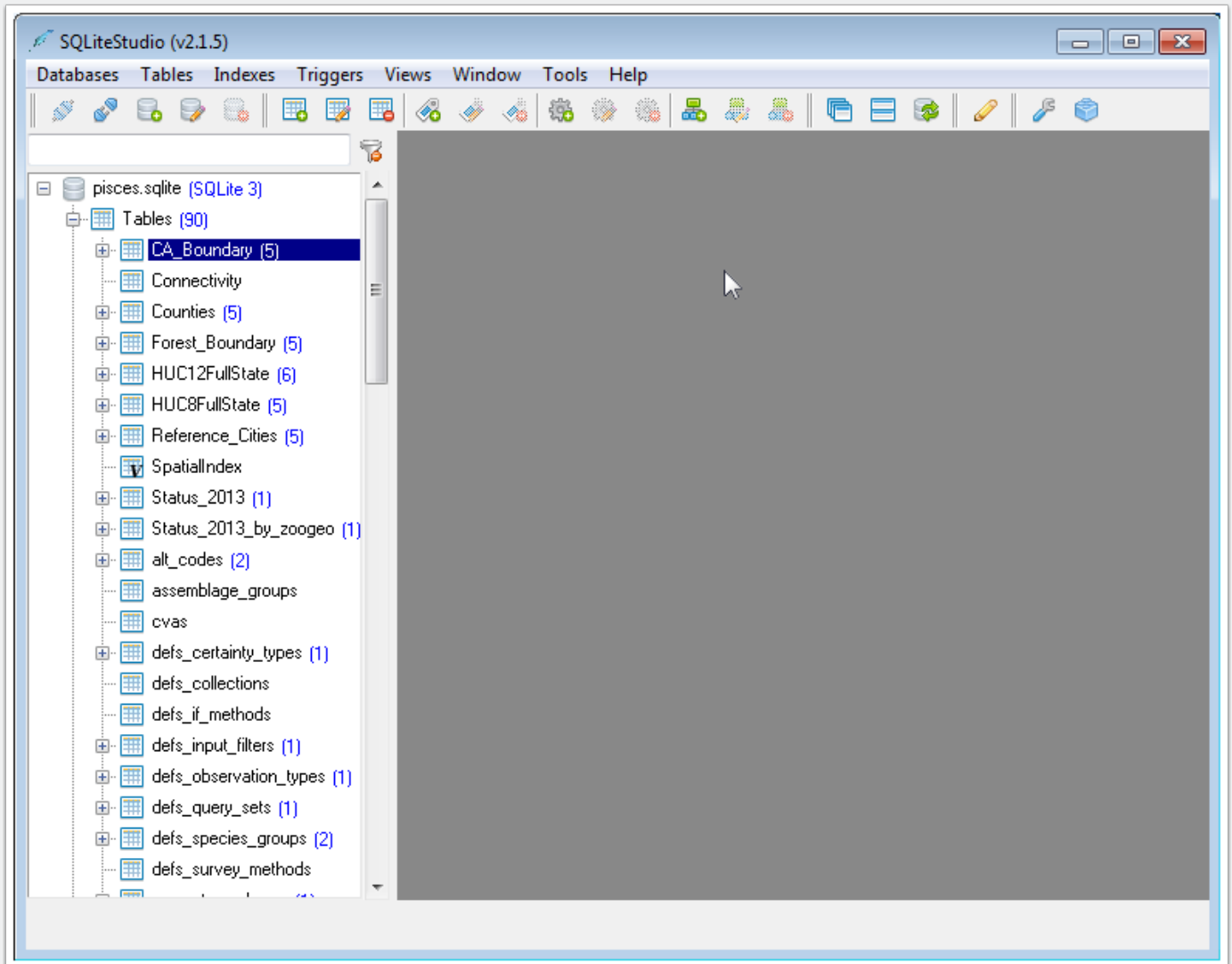
You'll now see *pisces.sqlite* in the lefthand column. Double click it to open it up.



# PISCES Installation and Getting Started

## 4.8

You'll see a short tree structure. Expand the *Tables* section by clicking on the plus sign in order to see the tables contained in the database.



# PISCES Installation and Getting Started

## 4.9 Loading the species table

As an example, let's open the *species* table to view it. Scroll down in the lefthand column until you see *species* appear. Double click it to open it and you'll see the main pane show information about the table. By default, it shows you the table's structure, but there is a tab to access and edit the data.

SQLiteStudio (v2.1.5)

Databases Tables Indexes Triggers Views Window Tools Help

species (piscis.sqlite)

Structure Data Indexes Triggers DDL

#	Name	Data type	P	F	U	H	N	C	Default value
1	objectid	INTEGER	🔑						NULL
2	fid	TEXT(6)							NULL
3	family	TEXT							NULL
4	genus	TEXT							NULL
5	species	TEXT							NULL
6	subspecies	TEXT							NULL
7	scientific_name	TEXT							NULL
8	taxonomic_unit	TEXT							NULL
9	common_name	TEXT							NULL
10	notes	TEXT							NULL
11	native	INTEGER							NULL
12	image_location	TEXT							NULL
13	TEMPORARY	INTEGER							NULL

Foreign key

# PISCES Installation and Getting Started

## 4.10 Data viewing and editing

Click the data tab and you'll be able to see the data in the table. You can scroll and view all the data in the table in this view. If you wish to edit any fields, you can double click in a box and change the value, but then click the orange check mark in the toolbar just above the table's data to *commit* the changes to the table. This workflow will feel somewhat familiar to you if you have used Microsoft Access in the past.

This database view is for raw data access and for certain types of modifications. For many modifications, use the Toolbox discussed in section 3. For more details on the database structure and modifications, [see the full PISCES documentation](#).



# PISCES Installation and Getting Started

