# How to install and run the R package SPG (Sewage Pattern Generator v1.01)

Prepared by Christoph Ort and Andreas Scheidegger for SEWPROF Training Course TC2 at NIVA (9/10 Sep 2013)

### 1. Download and install the free statistical computing software R

WINDOWS: <a href="http://cran.r-project.org/bin/windows/base/">http://cran.r-project.org/bin/windows/base/</a></a>
b) OS X: <a href="http://cran.r-project.org/bin/macosx/">http://cran.r-project.org/bin/macosx/</a>

## 2. Optional: Install the free software RStudio (user-friendly interface to R)

WINDOWS and OS X: <a href="http://www.rstudio.com/ide/download/">http://www.rstudio.com/ide/download/</a>

### 3. Install the SPG package (SPG\_1.01.zip) either...

- a) WINDOWS users
- ... either in R by following the menu:

Packages  $\Rightarrow$  Install Package(s) from local ZIP files ...  $\Rightarrow$  browse to the folder with the SPG\_1.01.zip and follow the instructions.

... or if RStudio is installed through the lower right panel:

Packages  $\Rightarrow$  Install Packages  $\Rightarrow$  maybe you have to choose a location (pick any)  $\Rightarrow$  select Install from: Package Archive File (.zip) and browse to the folder with the SPG\_1.01.zip  $\Rightarrow$  click install and follow the instructions.

You only need to open RStudio; this opens R automatically.

- b) Mac users
- ... either in R by following the menu:

Packages & Data  $\Rightarrow$  Package Installer  $\Rightarrow$  in the field "CRAN binaries' choose 'Local Source Package'  $\Rightarrow$  click 'Install...'  $\Rightarrow$  browse to SPG\_OS\_X.tar.gz, click open.

... or if RStudio is installed through the lower right panel:
As described for windows user above but chose SPG\_OS\_X.tar.gz.

### 4. Run the example

Once steps 1. to 3. are successfully completed you can open the file SPG\_v1\_01\_example.R with the commented code in RStudio. It can be ran line by line by pressing Ctrl+Enter or execute highlighted code pressing Ctrl+Enter. You can also copy paste the code from any text editor into your R-console (less convenient). Everything after a # is a comment for the user only and is ignored by R.