# Appendix F

# **Examples of Noteworthy Section 319 Funded Grant Projects**

(1990 – 2011)

#### National Monitoring Project Designated by EPA (1992-2000)

A nine year effort involving three small watersheds in Franklin County assessing the water quality improvement effectiveness of livestock exclusion and associated practices. A three-way paired watershed project that showed the positive water quality effects associated with livestock exclusion.

#### **Crop Management Service Projects (3)**

Efforts to train personnel at 2 Natural Resources Conservation Districts plus one other non-profit group, under 1992 - 1995 funding, to provide crop management and nutrient management services for area farm producers. 319 grant funding provided seed money to establish programs enabling personnel to charge farmers for services rendered.

# Youth Watershed Restoration (many)

Funding to Vermont Youth Conservation Corps to hire youth for summer and/or fall employment in order to work on a variety of water quality related project sites across Vermont. YCC program also involves reading and writing elements concerning environmental and conservation education. Occurring over 1994, 1997–2001, 2003-2011. Youth based work by YCC remains an ongoing element of annual work funded by DEC.

# Elizabeth Mine Hydrologic Assessment (1997)

Project resulted in further information and data concerning mine site, creation of local citizens group and, ultimately, placement of site on Superfund list which lead to eventual (and recent) remediation and clean up.

#### **Local Roads Erosion Control (many)**

Starting in 1997 until 2001 then 2003 and continuing until 2006, 319 funding was used to create and deliver a small grants program to address erosion and runoff issues at town road sites. Resulted in the institutionalization of the effort and development into a larger expansion to program now known as Better Backroads Program.

#### **Logging Portable Skidder Bridges (2007)**

Project created the ability for loggers to rent portable skidder bridges for use on logging operations. Project also provided some hands on training when fabricating portable skidder bridges. Resulted in the development of a larger program overseen by DFPR and Conservation Districts.

#### Trees for Streams (2009-2011)

Envisioned and created by the Lamoille Natural Resources Conservation District to plant native vegetation in privately owned riparian areas along streambanks deemed as "stable." Resulted in expansion of Trees for Streams and appreciation for "stable" banks by other NRCDs on a statewide basis.

# Implementing Lake Carmi Phosphorus Reduction Plan (2008–2011)

As an outgrowth of the phosphorus-based Lake Carmi TMDL (2007), 319 funding was provided to Franklin Watershed Committee and helped to identify and carry out a number of discrete projects to

reduce sediment and phosphorus contributions to the Lake. Resulted in a jump of local donations for projects and increased capacity of the FWC plus higher awareness by citizens and lake users of runoff issues affecting the Lake.

#### Detecting & eliminating illicit discharges to waters impaired by indicator bacteria (2008)

Focusing on certain tributary areas in central Vermont, led to the development of a sampling protocol and an illicit discharge detection methodology being used by groups throughout Vermont.

#### **Grazing for Clean Water (2004-2007)**

The UVM Center for Sustainable Agriculture targeted certain water quality priority watersheds to inform and educate interested agricultural landowners about the water quality and soil (and other) benefits associated with management intensive grazing (aka rotational grazing). 319 funding efforts resulted in helping to create Vermont Pasture Network, a technical and educational assistance effort encouraging livestock farmers throughout Vermont to better manage pasturelands leading to improved forage quality and reduced surface runoff.

# Sucker Brook (Williston) Restoration (2001, 2003-2006)

The discovery of an avulsion in the brook's headwaters area, resulted in 319 funding which assisted with the design, permitting and eventual implementation of restoration techniques and measures to stabilize the brook and significantly reduce sediment and other pollutants from reaching Shelburne Pond. Project provided an important understanding/appreciation for stream channel and stream bank restoration approaches.

#### Not as Easy as Rye: Alternative strategies to increase cover cropping (2006)

UVM Extension System used 319 funding under this project to promote use of cover cropping, an important NPS vegetative practice to reduce erosion and runoff after corn harvest and to improve soil health. Resulted in wider acceptance and re-adoption of cover cropping by farm community. Also resulted in ongoing demonstrations of shorter day corn, tillage and cropping equipment, including use of helicopters to apply winter cover crop seeds much earlier in the growing season.

# Impaired Stream Habitat NPS Treatment Project (1994)

DEC used 319 funding to take a comprehensive look at stream channel and riparian conditions of Millers Run, a tributary of the Passumpsic River. Project resulted in some early lessons learned about methods of protecting stability of streams and streambanks and exposed project staff to stream geomorphic assessment training. Project played a role in the formation, development and evolution of Vermont Rivers Program.