What is NEMO?

NEMO (Nonpoint Education for Municipal Officials) is an educational program for local land use decision makers focusing on the relationship between land use and natural resource quality. The program emphasizes land use planning that allows economic growth while conserving a community's highest quality natural resources.

NEMO's philosophy:

- Natural Resource Protection is the Goal: (no further elaboration needed)
- Land Use is the Issue: We believe that a good framework for making land use decisions is the key to protecting the natural resources, community character, and long-term economic health of our communities.
- Local Officials are the Target Audience: Because land use is the issue, the people making land use decisions are our key target audience. City Council members set the vision and policies that guide development and city operations.
- Education is the Method: We give communities information about how their decisions affect natural resources – how they proceed is up to them. Our educational approach is research-based, non-advocacy, and professional.

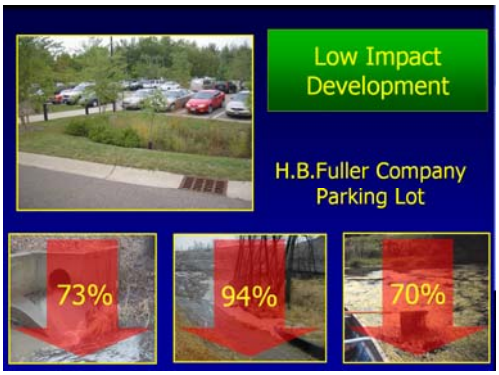
Northland NEMO is a member of the National NEMO Network, a group of 32 similar programs across the country that share expertise and materials.

NEMO recommends communities take a three-tiered approach to conserving natural resources:

1) Natural Resource Based Land Use Planning

Planning is the most powerful natural resource protection tool available to communities. A solid plan, based on good natural resource inventory information, encourages development in appropriate areas while conserving the community's natural resources. The plan sets out goals and policies for natural resource conservation and water quality protection, and provides the basis for changes to the community's ordinances.

2) Better Site Design / Low Impact Development



Good planning is the best way to protect natural resources, but any development will cause water quality impacts downstream. Better site design and low impact development provide the tools to prevent runoff pollution by reducing impervious surfaces, disconnecting runoff pathways, and using plants and soil to filter and treat polluted runoff.

3) Good Housekeeping and Restoration

Even in the best planned and designed communities, polluted runoff still happens. Properly maintaining stormwater management facilities, using best practices for road maintenance, keeping drainage pathways working is still critical.

How does the program work?

Once a community expresses interest in NEMO, they may choose to schedule a workshop with a NEMO trainer. Workshops consist of a Power Point® presentation followed by a question and answer session. Ideally, all local officials (city council, planning commission, parks commission, and any other commissions/committees), city staff, and consultants attend the workshop.

We recommend starting with the basic NEMO workshops 'Linking Land Use to Water Quality' or 'Linking Land Use to Lake Quality' to introduce the key NEMO concepts. Subsequently, NEMO trainers can return with more specialized information depending on the community's needs (see below for available workshops).

We strive to incorporate local photos into the presentations and to customize the presentation to fit local issues while still maintaining the integrity of the overall message.

The NEMO coordinator can recruit from a local pool of professionals (e.g., SWCD staff, DNR area hydrologists, watershed district staff) to answer questions and to serve as a follow-up resource professional if the NEMO trainer is unable to help in a follow-up capacity.

NEMO trainers are generally natural resources staff that are trained in educating and that have a good knowledge of the materials.

What workshops are available?

Northland NEMO offers a variety of training options for communities at all stages of development; each workshop addresses one or more of the 'tiers' in the three tiered approach described above. Supporting materials (printed, web, etc.) are available for all presentations, either locally or through the National NEMO Network. *Materials developed by Northland NEMO and its partners are listed here.

Linking Land Use to Water Quality (Basic NEMO)

The Linking Land Use to Water Quality workshop addresses the relationship of land use to natural resource protection with an emphasis on water quality. It explains the concepts of nonpoint source pollution and watersheds as well as reviewing the impacts of land use on water resources and the pollutants found in runoff. Natural resource-based planning is introduced as a framework for dealing with land use issues.

Linking Land Use to Lake Quality (Basic NEMO for Lakes)

The Linking Land Use to Lake Quality workshop explores the impacts of development on the habitat and water quality of the lake ecosystem, and ultimately on the economic, aesthetic, and recreational values associated with lakes. The presentation offers numerous things local officials and lakeshore residents can do to protect and enhance lakes.

*Minnesota's Lakes at Risk, Twin Cities Public Television and MN Lakes Association (30 minute television program available on DVD early 2006)

Natural Resource Based Planning: The Key to Your Community's Future!

Planning, when done well, is among the most powerful tools available to communities. This workshop emphasizes the importance of placing the community's natural resource base at the forefront of the planning process. The presentation outlines key steps in the process, provides a framework of open space functions, and gives local examples of how Minnesota communities have used natural resource inventories to implement conservation initiatives.

*Guide to Using Natural Resource Information in Local Decision Making, MN DNR 2004 (12 page booklet and CD-ROM)

Linking Local Ordinances to Water Quality

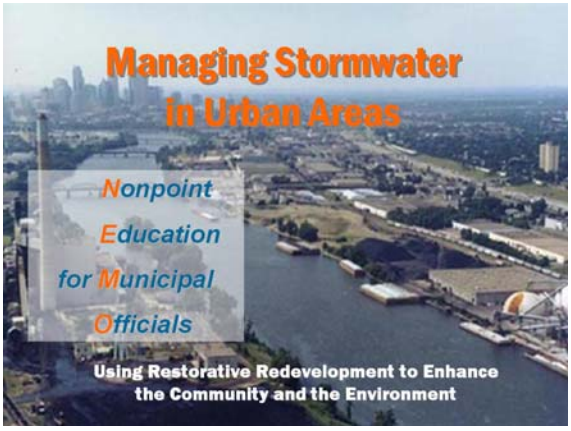
The Linking Local Ordinances to Water Quality workshop introduces the concept of ordinances: how they fit with a community's plan and other implementation tools (like education and incentives), basic ordinance structure, and the importance of enforcement. The presentation then highlights key elements from four model ordinances for water quality: stormwater, erosion and sediment control, shoreland, and subdivision. After the presentation, annotated model ordinances are given to the community for their adaptation.

*Annotated model ordinances for stormwater, erosion and sediment control, shoreland, and subdivision, Northland NEMO 2004.

Reducing Impervious Surfaces to Improve Water Quality

Impervious surfaces like asphalt, concrete and rooftops create polluted runoff and are a major indicator of the impacts of development on water resources. This workshop goes over planning and site design options to reduce both the amount and the impact of impervious surfaces. It also includes information on road and parking lot designs and alternative materials that promote infiltration.

Managing Stormwater in Urban Areas



Even in already developed areas, there are many opportunities to incorporate the NEMO approach. This presentation presents the concept of 'restorative redevelopment, which takes advantage of the free services nature provides (filtration, evaporation, cooling). The program offers restorative techniques and local examples for every element of the built environment including green roofs, vegetated parking lots, sidewalk trees, stream daylighting, and wetland restoration.