HOW TO USE THE MODEL ORDINANCE

Each section of the model ordinance is followed by a "boxed" comment section which provides additional information. These sections well help you understand how the ordinance fits together and why specific information was included. When modifying the ordinance to meet your community's needs please consider the comments provided.

The adoption of a limestone ordinance by your community will also avoid legal battles over what resource studies and engineering information is necessary when contemplating development over limestone bedrock. Our ordinance utilizes a check-list format for data submission. Also included is a table which outlines the general protocol for evaluating and designing different types of development projects. This pro-active, site specific design process ultimately provides the project owners with information on the economic costs associated with the limestone site constraints.

Issues your community should consider when modifying the ordinance:

1. Our ordinance regulates <u>all</u> types of development activities from small additions to large commercial projects. We feel our ordinance is legal in its scope and represents the broadest range of regulation possible. Your community should decide which development activities to include in your own ordinance. Projects which disturb large amounts of soil and alter the water runoff characteristics have the greatest risk of creating or exposing limestone hazards.

2. Scope of ordinance application beyond limestone areas.

   Our model ordinance not only regulates development over limestone formations but also regulates development projects which alter the surface water drainage into limestone areas. This extended area of regulation called the Carbonate (or limestone) Drainage Area (CAD) is necessary because of the adverse impacts on the limestone formations by:

   * directing polluted surface runoff into the solutioned limestone aquifers.

   * concentrating and increasing the amount of surface water draining onto limestone soils. This increases the risk of sinkhole collapse and sinkhole flooding on offsite properties.

   Projects in the Carbonate Drainage Area are evaluated to try to mitigate these impacts in the limestone areas. Your community should decide if you would like to regulate development projects in areas which drain into limestone bedrock areas.

3. Your municipal Master Plan should be modified to support and expand on the water quality concerns and public health and safety hazards related to sudden sinkhole collapse. Modification to your land use plan element and/or your conservation plan element should identify limestone regions in

your community. Information on how the natural hazards (groundwater pollution, structural sinkhole collapse) associated with limestone alter the development suitability of these areas should also be included.

Managing development activities over limestone formations presents a unique planning challenge for many communities in northwestern New Jersey. The dual goals of protecting your groundwater resources as well as protecting the public health and safety from limestone hazards are important issues to be considered. Communities can avoid the future costs of remediating improperly constructed public infrastructure associated with development projects.