

LOCAL PROTECTION OF BIODIVERSITY RESOURCES

Important resources for which local measures provide the most effective protection, and some ways to achieve that protection.

Tools available to municipalities include comprehensive plans, zoning ordinances, conservation overlays, stormwater management regulations, local water resource protection laws, subdivision regulations, site plan review requirements, conditions attached to subdivision plat approvals or site plan approvals, and public education.

WHAT TO PROTECT	HOW TO PROTECT
WATER RESOURCES	
Aquifers	<p>Maintain and restore groundwater recharge capability Minimize impervious surfaces. Maintain & restore infiltration of precipitation (include retrofitting of existing roads and other infrastructure).</p> <p>Prevent contamination of groundwater Within aquifer protection zones: Prohibit hazardous land uses, such as service stations, motor vehicle repair shops, storage/use of hazardous materials. Elsewhere: Regulate/monitor hazardous land uses. Install and maintain oil/water separators in parking lots and other vehicle concentration areas.</p> <p>Prevent over-exploitation of groundwater Tailor zoning densities and lot sizes to conserve baseflows in streams. Regulate water extraction industries. Base land use decisions on cumulative impact studies (re: well water extractions) of effects on stream baseflows.</p>
Streams	<p>Maintain and restore floodplains and riparian corridors. Maintain forested watersheds as much as possible. Minimize impervious surfaces throughout watersheds. Maintain pre-construction volumes and patterns of surface water runoff at development sites. Prohibit applications of pesticides & fertilizers within [100] ft. Prohibit discharge of turbid or otherwise untreated runoff from construction sites into streams, lakes, ponds, or wetlands.</p>
Lakes, Ponds	<p>Protect stream and groundwater sources (see above). Maintain broad buffer zones of undisturbed soils and vegetation. Upgrade and maintain nearby septic systems. Prohibit applications of pesticides and fertilizers within [100] ft. Design stormwater systems throughout the watershed that maximize groundwater infiltration. Install and maintain oil collectors/separators under parking lots and other vehicle concentration areas.</p>

(continued)

LOCAL PROTECTION OF BIODIVERSITY RESOURCES (cont.)

WHAT TO PROTECT	HOW TO PROTECT
<p>SIGNIFICANT HABITATS & SPECIES</p>	<p>Avoid or minimize habitat fragmentation. Maintain and restore links between significant habitat patches. Establish and maintain broad buffer zones around sensitive areas. Maintain natural disturbance processes (floods, seasonal draw-downs, natural fires, ice scour, wind, landslides). Create no additional runoff of rainwater or snowmelt on development sites; retrofit existing stormwater infrastructure. Identify and protect habitats and species of conservation concern Prevent or minimize pollution from noise, lights, and contaminants Design any new physical hazards—wind turbines, communication towers, roads, culverts, fences, storm drains —to minimize harm to sensitive species (and retrofit existing hazards).</p>
<p>FARMLAND SOILS & FARMLAND VIABILITY</p>	<p>Prohibit or minimize new development on Prime Farmland Soils, or Farmland Soils of Statewide Importance (excepting development for agricultural purposes). Avoid fragmentation of contiguous farmland by new roads, driveways, and other non-agricultural uses. Support the economies of active local farms.</p>
<p>CARBON BALANCE</p>	<p>Maintain forested landscapes and other natural vegetation and undisturbed soils as much as possible, to promote carbon sequestration. Concentrate new development near existing residential/commercial/industrial/transportation centers to help minimize vehicle usage. Establish education programs for town agencies, businesses, and residents on reducing carbon emissions in our daily lives.</p>
<p>DIVERSE LANDFORMS</p>	<p>Conserve lands representing the full range of elevations, and surficial and bedrock geology types occurring in the town.</p>