

CHAPTER 8: RESOURCE UTILIZATION ACTIVITIES

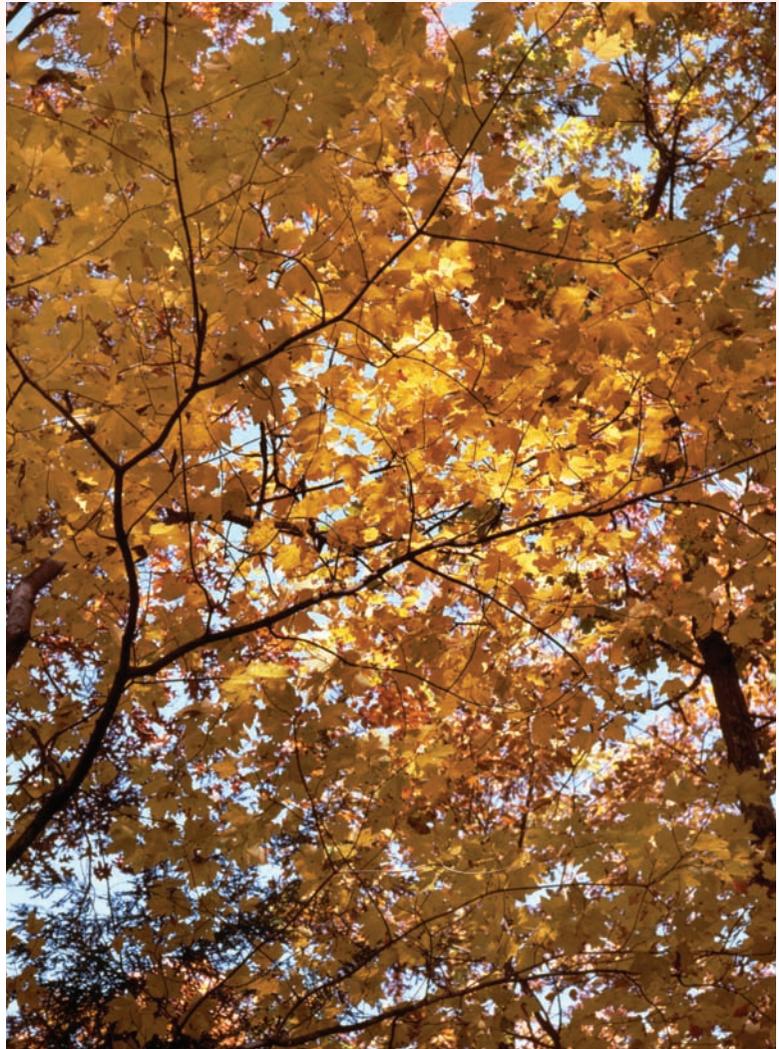
The Chesapeake and Atlantic Coastal Bays watersheds are characterized by a variety of natural resources, and utilization of these resources is an integral part of Maryland's heritage, culture, and economy. Forestry and agriculture are two of the largest industries in Maryland, and these uses predominate many of the scenic landscapes around Maryland's Bays. Maryland's Critical Area Program recognizes these land uses as protective uses that should be encouraged and properly managed so that they continue to provide economic, habitat, and water quality benefits. While surface mining does not utilize resources in the same way as forestry and agriculture, it is a part of Maryland's economy that is directly linked to its physiography. Prudent management and good stewardship are essential to preserving their respective roles in sustaining Maryland's resource-based traditions and ensuring the economic viability of all these activities.

Forestry

One of the goals of the Critical Area Criteria is to provide for the beneficial use of forests while protecting the water quality and wildlife habitat values they provide. In order to promote the continued economic viability of forested lands, hunting, recreational activities, and timber harvesting are permitted activities. However, these activities must be managed in order to avoid adverse effects on streams, wetlands, and significant plant and wildlife habitats and to maintain or enhance the healthy functioning of these resources. The Critical Area Program includes the following goals for forests and developed woodlands:

- Maintain and increase forested vegetation.
- Conserve forests and developed woodlands and provide for expansion of forests.

- *The Critical Area Criteria allow the harvesting of timber as a means to promote the continued economic viability of forested lands.*



Forestry and agriculture are two of the largest industries in Maryland, and these uses predominate many of the scenic landscapes around Maryland's Bays.



Seedling

Bare-root

Containerized

Balled-and-Burlapped

- A variety of tree stock types can be used to replace forest and trees that are removed for development activities or for timber use.
- Forests provide opportunities for a variety of passive recreational activities including hiking, bird-watching, bicycling, and photography.

- Minimize the removal of trees associated with development activities and provide mitigation when trees are removed.
- Recognize forests as a protective land use that should be managed to maintain the maximum value for wildlife, water quality, timber, recreation, and other resources, even though, in some cases, these uses may be mutually exclusive.



Timber harvesting occurring within any one-year interval and affecting one or more acres of forest and developed woodland in the Critical Area must be accomplished under a Forest Management Plan approved by the District Forestry Board in cooperation with the Department of Natural Resources. These plans must include measures to protect surface and ground water quality, as well as any designated Habitat Protection Areas that may be disturbed or otherwise affected.



- *Maryland's farms vary widely and may involve breeding and raising livestock, growing row crops, and raising vegetables.*

An Erosion and Sediment Control Plan is required for all harvests of 5,000 square feet or more in the Critical Area. In accordance with an approved plan, some commercial harvesting of trees may be permitted within the landward 50 feet of the 100-foot Buffer. For these types of harvests, a Buffer Management Plan is required to: avoid disturbance of stream banks and shorelines, include provisions for replanting or regeneration that reestablishes the wildlife corridor function of the Buffer, and ensure that logging roads and skid trails are located outside the Buffer.

Agriculture

From the neatly fenced horse pastures in Charles County across the Bay to the rolling hills of dairy farms in Kent County to the carefully tilled rows of corn in Dorchester County, and the vibrant and productive vegetable fields in Worcester County, agriculture is a predominant land use throughout much of the Critical Area. Agriculture is a protected land use that provides immeasurable economic, aesthetic, and open

space benefits in the Critical Area; however, farming practices must be designed and implemented to protect water quality and natural habitats. Therefore, the Critical Area Criteria mandate that farmers work cooperatively with local Soil Conservation Districts to develop and implement Soil Conservation and Water Quality (SCWQ) Plans. These plans, most of which were put in place in the early 1990s, promote the use of Best Management Practices (BMPs) to prevent runoff of soil, nutrients and other harmful materials into waterways. SCWQ Plans include detailed information relating to all aspects of the protection of water quality, such as the location and type of water quality control structures, the type and rate of fertilizer and pesticide application, and the location and type of stream protection measures to avoid adverse water quality impacts from grazing livestock.

In order to ensure that agricultural lands are maintained in agricultural use to the greatest extent possible and that agricultural operations generally



■ *The Critical Area Criteria require farmers to work with local Soil Conservation Districts to design and implement Best Management Practices to protect water quality.*

comport with the goals of Maryland’s Critical Area Program, the Criteria specify that:

- Agricultural activities shall use BMPs in accordance with an SCWQ Plan approved by the local Soil Conservation District.
- New agricultural lands cannot be created by diking, draining, or filling nontidal wetlands unless appropriate mitigation is provided. Clearing of forests or woodlands on steep slopes or erodible soils, clearing of existing natural vegetation within the Buffer, and clearing that will adversely affect water quality or designated Habitat Protection Areas cannot be undertaken to create new farmland.
- The drainage of nontidal wetlands for agricultural purposes must be performed in accordance with an approved SCWQ Plan.
- Agricultural BMPs for the control of nutrients, animal wastes, pesticides, and sediment runoff shall be used to protect the productivity of the land base and water quality. These practices shall minimize contamination of surface and groundwater, as well as any adverse effects on fish, wildlife, and plant resources.
- Animal feeding operations, including retention and storage ponds, feed lot waste storage, and manure storage, shall minimize the contamination of water bodies.
- Agricultural activities are permitted in the 100-foot Buffer, but a minimum 25-foot vegetated filter strip must be provided adjacent to tidal waters, tidal wetlands, and tributary streams. The filter strip must be expanded four feet for every 1 percent of slope for slopes greater than 6 percent.
- Clearing of existing natural vegetation within the Buffer is not permitted.
- Farming activities, including the grazing of livestock, shall be managed to avoid disturbance to stream banks, tidal

shorelines, and other designated Habitat Protection Areas as described in Chapter 4.

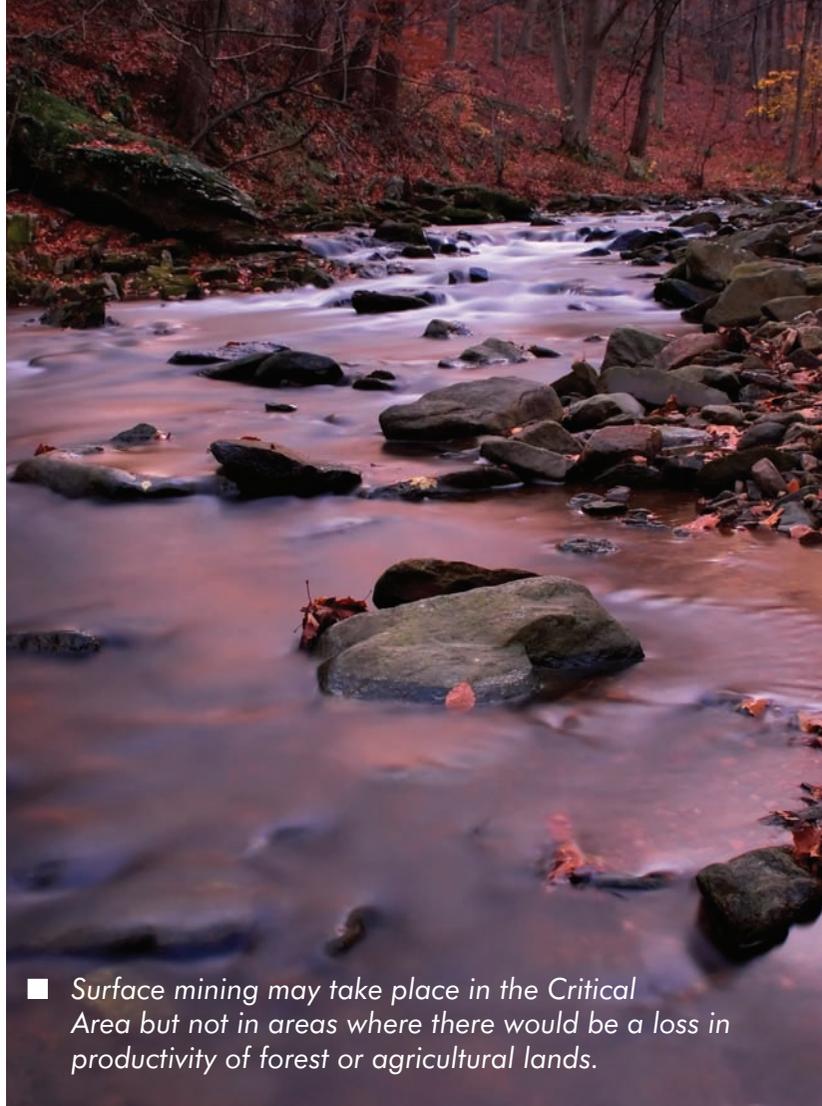
Maryland's farms vary widely in their size and type of operations. Farms in the Critical Area may be involved in the production of row crops, vegetables, nursery plants, and sod, as well as the feeding, housing, and management of cattle, dairy cows, sheep, goats, hogs, horses, and poultry. Because of the diversity of these activities, the SCWQ Plans designed and developed for each specific farm are essential to ensuring that the physiographic characteristics of the specific farm are addressed. These plans must be updated regularly to reflect changes in farmers' operations, crops, equipment, and livestock and to ensure the utilization of state-of-the-art practices that improve water quality and conserve habitat.

Surface Mining

Surface mining and mineral extraction, including the extraction of sand and gravel, may take place in the Critical Area under certain conditions. Local jurisdictions must ensure that mining activities are properly approved and authorized, that the mine operators protect water quality and natural habitat during the mining operation, and that reclamation of the site takes place as soon as possible following the completion of the mining activity.

Surface mining activities are prohibited under the following conditions or in the following areas that are unsuitable for sand and gravel extraction:

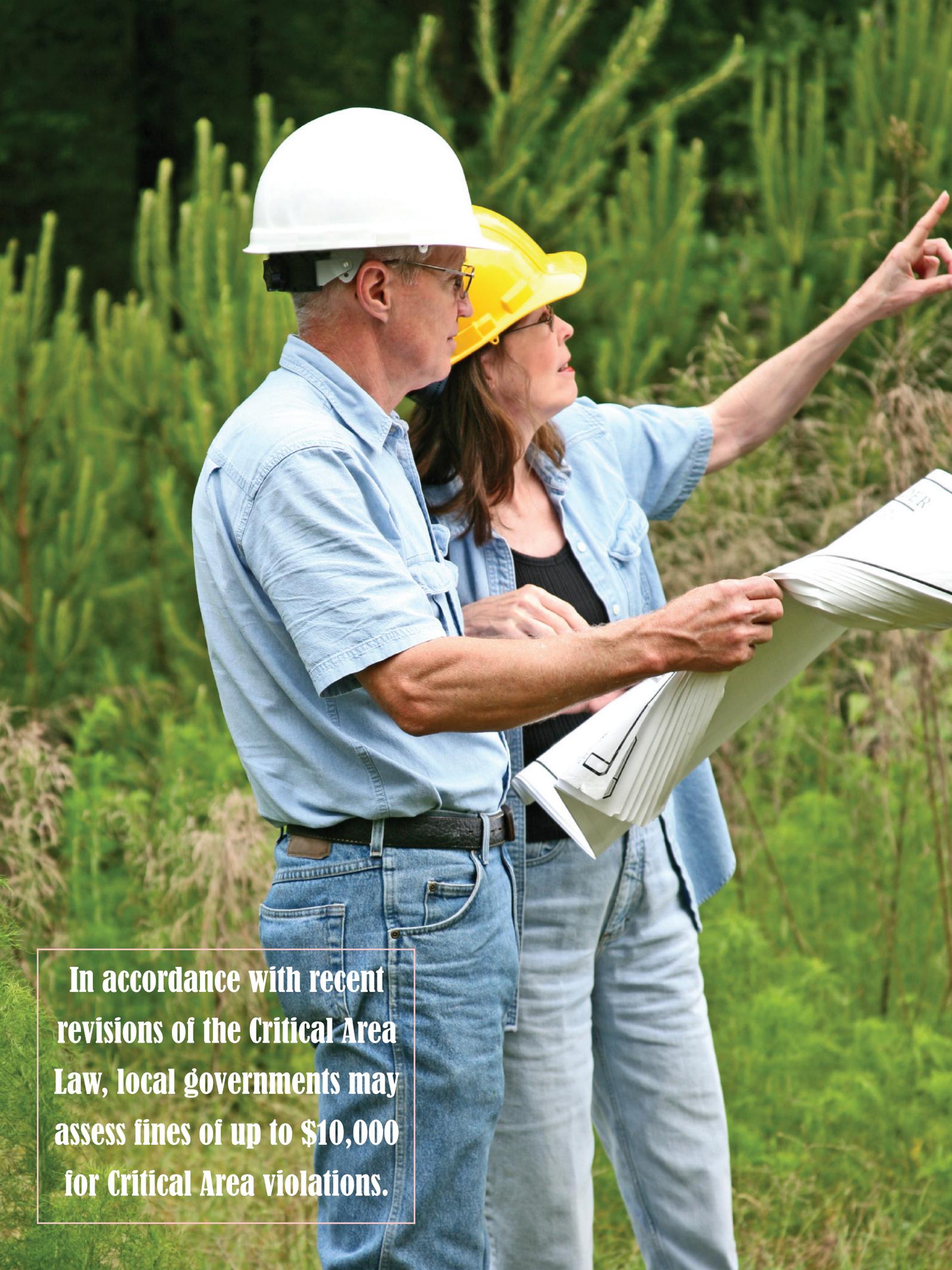
- Where threatened or endangered species, areas of scientific value, or rare assemblages of species would be adversely affected.
- Where soils are highly erodible.
- If mining activity would result in the substantial loss of long-term productivity of forest or agricultural lands.



■ *Surface mining may take place in the Critical Area but not in areas where there would be a loss in productivity of forest or agricultural lands.*

- If mining activity would result in the degradation of water quality or the loss of vital habitat.
- Within the minimum 100-foot Buffer from tidal waters, tidal wetlands, and tributary streams.

In addition to the prohibition of mining activities in these areas, certain aspects of mining operations must be carefully regulated to ensure that there are no permanent or catastrophic water quality problems. Wash plants, including ponds, spoil piles, and equipment, may not be located within the Buffer; wash ponds shall be reclaimed as soon as possible after the cessation of a mining operation; and extraction activities shall be conducted so as to provide a minimum 100-foot Buffer of natural vegetation between the mining activities and tidal waters, tidal wetlands, and streams.



In accordance with recent revisions of the Critical Area Law, local governments may assess fines of up to \$10,000 for Critical Area violations.