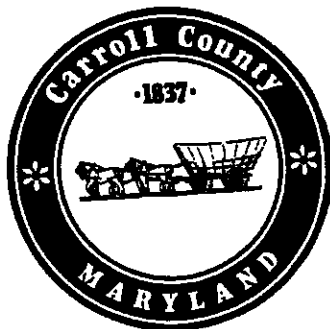


IMPLEMENTATION MECHANISMS



I. Introduction

No long-range planning effort is effective without mechanisms to implement the plan's policies and recommendations. As a long-range plan the Carroll County Mineral Resources Plan has implementation mechanisms to achieve its goals and set into motion the actions which are put forth. The implementation mechanisms include setting up coordination between the State and County, performing a comprehensive rezoning, developing a Mineral Resource Overlay (MRO) which contains strategies for increased citizen involvement in the mining permitting process, writing an addendum to the Carroll County Landscaping Manual, instituting a proposed transfer development rights program, a citizen education process, and designating Villages of Historic Importance.

The Mineral Resources Overlay (MRO) is the primary mechanism implementing the Mineral Resources Plan. The "MRO" utilizes land use measures in reserving the mineral resource for future recovery. It also uses performance standards and regulations to protect surrounding citizens and land uses from potential negative impacts that may result from mineral resource recovery operations. Each site where mineral recovery is being permitted is unique, performance standards allow for enough flexibility to permit the differences of each site to be considered in the recovery permitting process. This technique will allow for the maximum protection of the citizenry, and yet be equitable to the mineral resource recovery industry.

The addendum to the landscape manual provides for screening and buffering between resource recovery operations and surrounding land uses. Through requirements for berms, tree planting, and ground cover the noise, dust, and visual intrusion problems can be reduced.

A Transfer Development of Rights Program (TDR) will enable property owners in the "VRA", where residential development is not permitted, to receive equity from their property through the sale of development rights at the density permitted in the Agricultural "A" zone. These rights can then be transferred to another area in the "A" zone and cluster options in the "R" Zones where they will not preempt recovery of the mineral resource.

Of extreme importance are the notification and information mechanisms. The notification area will allow new homeowners to be aware, at the contract signing stage, that the house they are purchasing is near an existing or future mineral resource recovery site. The County will endeavor to foster communication between citizens and mining companies, and inform citizens in regard to groundwater issues, blasting, noise reduction, and landscaping.

By designating areas of historic importance the County can protect and maintain the integrity of its cultural heritage. Setback from these areas will allow resource recovery and historic areas to coexist.

As a package these mechanisms effectively implement the goals and recommended actions of the Mineral Resources Plan. Through these mechanisms citizens' concerns can be

addressed and mineral resource recovery operations can coexist with other land uses and remain a valuable part of the community.

II. Local/State Coordination

The State has broad responsibilities for the permitting of mineral recovery operations under Natural Resources Article 7-Subtitle 6A. However, Section 7-6A-31(c) provides for Counties to promulgate laws, which if as strict as the State laws, can preempt the States responsibilities in specific areas. Article 66B of the Annotated Code of Maryland gives comprehensive planning and zoning responsibility to the County. The objectives of State and County programs are similar in providing for mineral resource recovery while protecting the environment and the community.

The lead responsibility for coordinating different aspects of the permit and regulatory process should rest with that jurisdiction in the best position to accomplish the intent of both the State and the local regulations. For example, the geology, hydrogeology, and environmental investigations, as well as regulating the day to day operations of the industry, are primarily State responsibilities. Decisions which are land use in nature such as set-backs, landscaping, transportation issues, and placement of processing operations are more appropriately in the County charge.

To facilitate the permitting of mineral resource recovery operations it is important for the State and County to work together in a coordinated review and permitting process. Mineral resource recovery and processing has the potential of adversely impacting an area's physical environment as well as the existing agricultural and residential communities. A thorough review by both State and County technical personnel, with opportunities for public review and citizen input, will assure that all concerns are addressed. Concurrent reviews for the County site plan permit and the State permits should result in a timely, comprehensive review. The State and County should also meet to coordinate review of the reclamation plan so as to share information and perspectives.

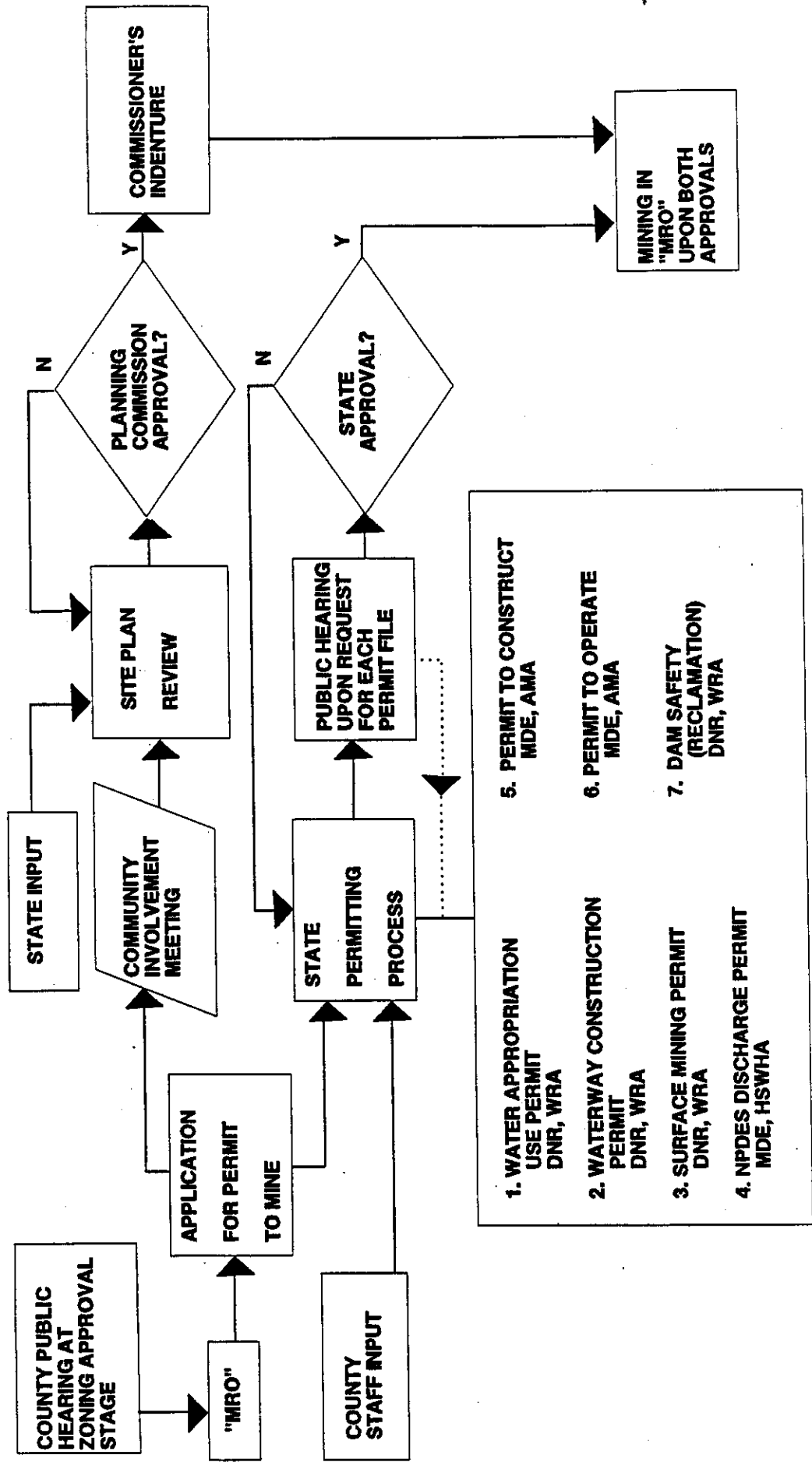
The County has the authority, under Article 66B of the Annotated Code of Maryland, to prepare a comprehensive plan and make zoning text and zoning map amendments to implement the plan. The Carroll County Comprehensive Mineral Resource Plan and Implementation Mechanisms provide for the placement of a Mineral Resource Overlay (MRO) Designation in selected areas of the Wakefield Valley and for a mechanism for a landowner to petition for a "MRO" to be placed on their property. A parcel is required to have a zoning designation which permits mineral resource recovery and processing before being eligible for local and State permits.

The County will not issue the final zoning certificate for a mineral resource recovery operation until the State permitting process is complete and the applicant provides the Carroll County Commissioners with a copy of the permits or letters of certification from each State agency that it has completed its review and is prepared to issue its permit.

An applicant for mineral resource recovery permits should meet with both County and State agencies before preparing the permit application and supporting documents, to assure that all requirements and aspects of the permitting process are understood and followed.

The County mandated Community Involvement Meeting and site visit at the concept stage of the site planning process should be completed before final designs for the proposed operation are submitted to the State. The State will be invited by the County to participate in these initial community meetings. This early coordination of the review process should assure that conflicts do not occur between State and County requirements.

MINING PERMITTING PROCESS



III. "MRO" Criteria Justification

R. E. Wright and Associates, Inc. (REWAI) contracted with the County in July 1991 to develop criteria for establishing a mineral resource overlay. The consulting firm was chosen because of their broad based experience in mineral exploration, and hydrogeology, as well as their familiarity with Carroll County.

REWAI met with the Mineral Resources Advisory Committee on July 23, 1991 to initiate the process of developing criteria for establishing a Mineral Resource Overlay. The result of this meeting was the development of a planning concept based on an ecological planning method to establish the mineral resource overlay criteria. This method includes seven steps. Step one is the definition of the objective of the study; in this case, it is the development of criteria that will be used to define the limits of mineral resources that can be economically mined. The second step of the process is an inventory of the county which defined the component parts of the system. This included such things as roads, historic structures, demographic data, etc. The third part of the process is an analysis of the region that shows the interrelationship of the various working parts. Step four is a synthesis of the inventory and data and its effect on the system. The fifth step is to evaluate the alternatives. Step six is to define the limits of the mineral resource. The last step, a future step, is the evaluation of the results of the concept over time as elicited from the community and the users of the system.

The criteria had to be capable of being integrated with existing and proposed zoning in the county and supplement, not supersede or replace, the State of Maryland mining regulations. The criteria had to reflect community concerns, which include such things as esthetics, property values, mining interests, and previous work performed for the county. The specific objective is to permit mining where a mineral resource occurs, with minimum negative impact, including social, economic, and physical impacts. Four concepts were initially proposed and evaluated, and included an overlay concept, a compatibility matrix, a grid system, and a dimensional criteria concept.

Within each of these concepts, a variety of specific criteria were identified and evaluated. The criteria were evaluated to determine if its application would be useful in delineating the limits of a mineral resource.

During this evaluation process, it became apparent that many of the criteria were redundant with respect to the definition of a limit. These redundant criteria were eliminated. After the elimination of the redundancies, it was found that only some of the criteria were necessary to accomplish the definition of the mineral resource limit. A further refinement was the definition of a notification zone. This zone would be adjacent to the area where mineral extraction activity is permitted, and in which future property owners must be notified of the existence and distance to the mining activity, and in which the underlying uses are permitted.

REWAI recommended a notification area of 1300 feet based on potential blasting and noise impacts. The Mineral Resource Committee, after a review of citizen comments,

decided that a one-half mile notification area was more appropriate if areas of aesthetic impact are included.

The choice of the criteria evolved over several meetings between REWAI and staff of the Carroll County Planning Department. The concept proposed uses an overlay technique in combination with dimensional criteria. This concept was chosen because of the ease with which it can be applied, its inherent objectivity, and the facility with which the existing data base can be used.

The rationale for the initial step of mapping the resource, using the Maryland Geological Surveys Mineral Resource Quadrangle Maps, is the availability of published information, plus the fact that there must be an identified resource. The first step also allows for modifications if other reliable information is available.

The edge of the MR designation can be no closer than 1,000 feet to a Village of Historic Importance. It is felt this will provide a spatial separation between these Villages and resource recovery operations. Also, this dimension is based on four criteria and maintain the integrity of these important cultural resources. The nature of the construction of historic structures. The age of the structure and the materials with which it was built may make the structure more sensitive to quarrying operations. The effects of blasting can be sufficiently attenuated to the point of being negligible. At 1,000 feet there is virtually no impact from blasting in average overburden, for up to 90 pounds of explosives (Hemphill, pages 141-150; Thoenen, et al., pages 60 ff). Noise from the normal mobile aspects of quarrying operations generally is reduced to 50 decibels at about 900 feet (Werth, Table 4, page 19). One-thousand feet is sufficient distance to allow for retention of esthetic values inherent with historic settings.

The 700-foot isolation dimension from residentially zoned areas and certain public uses use the same rationale, but is reduced because modern building construction techniques and materials are different; therefore, the potential impacts for these buildings are diminished. The proposed buffering requirements are also sufficient to permit this reduced isolation dimension. The intent is to minimize the impact of mineral resource recovery operations, while at the same time allowing the industry to be economically viable, both for the operators and the community. This dimension will contribute to the maintenance of the natural value of the area, its scenic value, attenuate noise and dust, and lengthen the time that significant changes in the landscape can be obscured from off-site.

A transportation criteria was evaluated and eliminated. The intent of the overlay is to determine where mining can economically occur. If it becomes necessary to construct or improve a highway to gain access to the mining activity, then that is more appropriately evaluated during the economic analysis of the viability of extracting the resource.

IV. Comprehensive Rezoning

As discussed in the Comprehensive Mineral Resources Plan, merely identifying and mapping mineral resources does not ensure the minerals will be available for recovery. In order to reserve the mineral resource, the Comprehensive Mineral Resources Plan recommends a comprehensive rezoning where there are clearly identified and recoverable resources.

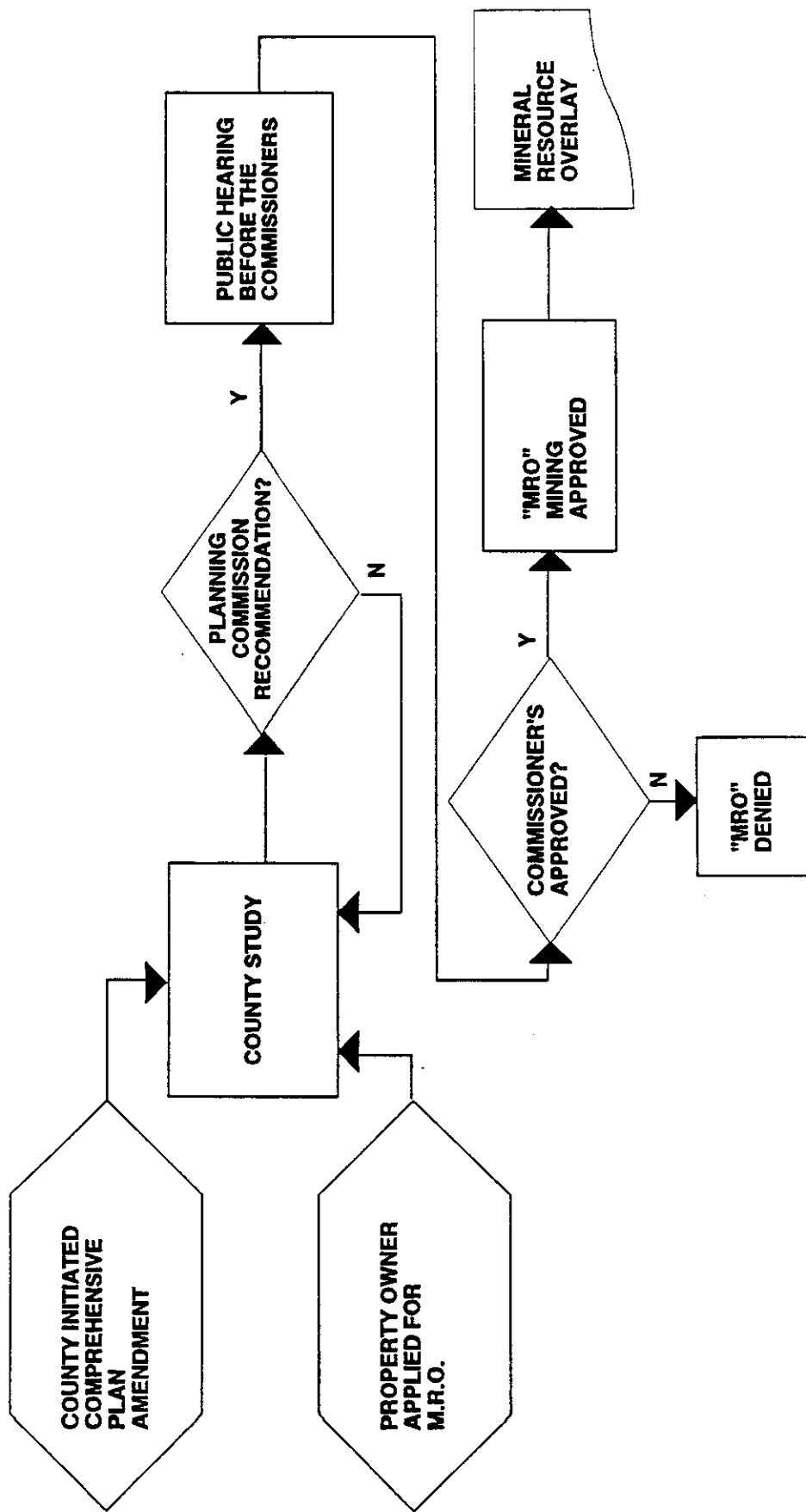
The comprehensive rezoning will apply the Mineral Resources Overlay, where mineral resource recovery is a permitted use, over certain areas in the "A", "IG", and "IR" Zoning Districts where:

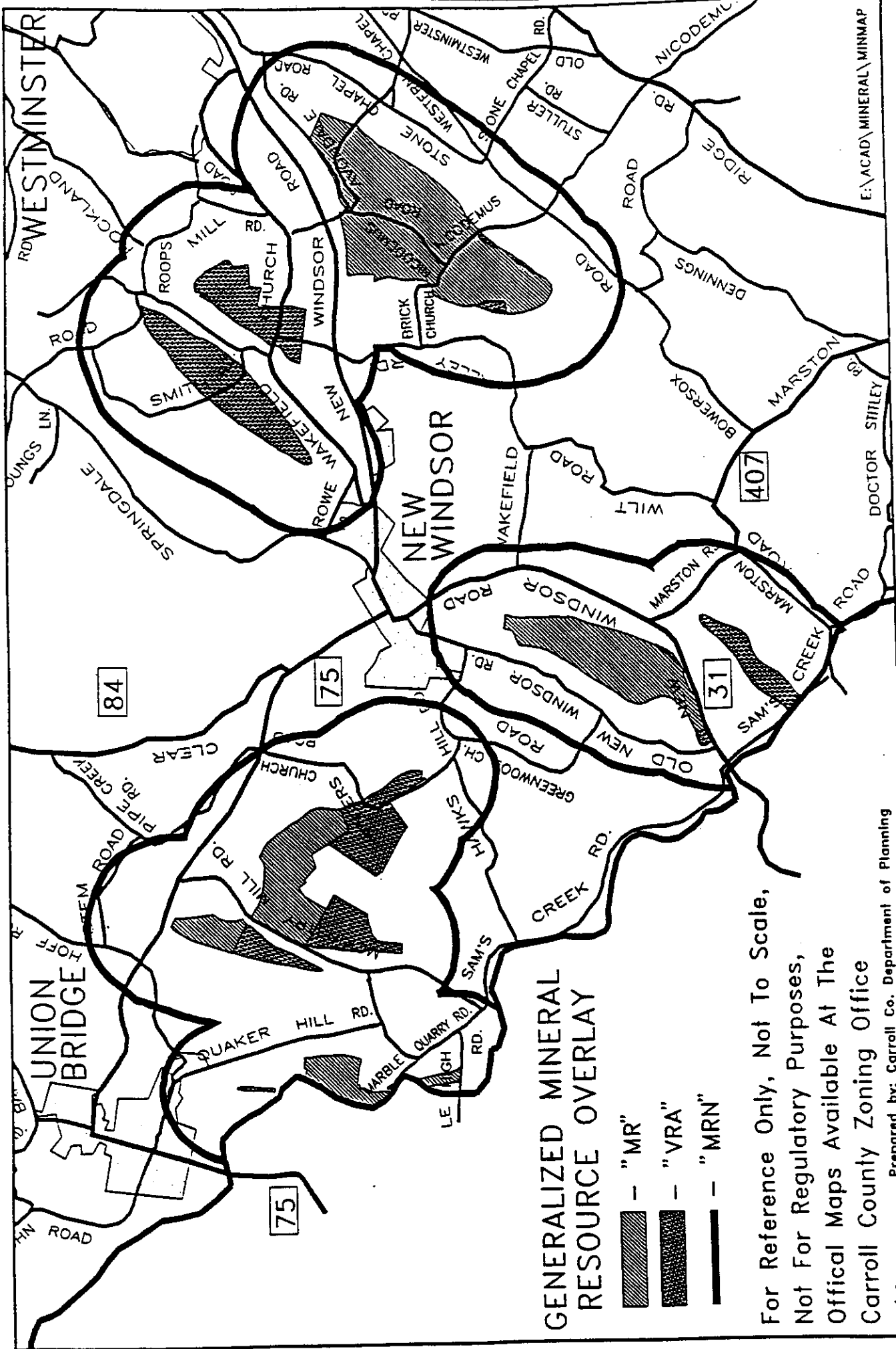
- mineral resources are well defined
- preemption of the mineral resources has not occurred
- distances from potentially affected properties and structures can be met.

Some Wakefield Marble deposits in the Little Pipe Creek Watershed are being proposed for a comprehensive rezoning. In the Watershed, the Maryland Geological Survey has conducted extensive field surveys and mapped the underlying mineral resource. Using this map as a base, the Planning Department staff, in consultation with representatives of the Maryland Geological Survey, determined which deposits have the economic potential for recovery. The limits of the "MR" was further reduced by the buffer dimensions required for "Villages of Historic Importance", residentially zoned areas and public facilities. The criteria proposed in the R.E. Wright report October, 1991 was used as a base for determining the boundary of the "MR" Portion of the "MRO". The Planning Commission, through a comprehensive rezoning, to protect the health, safety and welfare of the general public, as is its charge under Article 66B, may recommend the "MR" boundary to the County Commissioners in a way such that they feel it will protect surrounding land uses and serve the general population by increasing the distance between the "MR" and established land uses.

The proposed "MR" and "VRA" were mapped and an half mile notification area "MRN" was drawn around these areas. The combination of the "MR", the "VRA", and the "MRN" comprise the proposed Mineral Resource Overlay "MRO" designation.

TWO WAYS FOR "MRO" COMPREHENSIVE OR INDIVIDUAL PETITION





GENERALIZED MINERAL RESOURCE OVERLAY

- "MR"
- "VRA"
- "MRN"

For Reference Only, Not To Scale,
 Not For Regulatory Purposes,
 Official Maps Available At The
 Carroll County Zoning Office

Prepared by: Carroll Co. Department of Planning