

SHORELAND MANAGEMENT PROGRAM

RIVER CLASSIFICATIONS

This handout gives a short summary of the method and guidelines used in mapping these classifications; procedures for reviewing the maps and lists; and justification needed to change a preliminary classification.

MAPPING GUIDELINES

-The revised shoreland rules established six new river classifications [Part 6120.3000, Subp. 1a.]. All of the river classes except Tributary consist of watercourses that have been identified as being recreationally significant on a statewide basis. Each watercourse in this group of significant rivers was divided into individual segments averaging five river miles. Data was collected from all 140 acre parcels touching an individual segment. Two cultural labels, relating to land use and development patterns, landscapes, cover types, and road accessibility, were applied to each segment of these outstanding rivers. Computerized mapping methods were developed to couple the cultural labels with the defined river classifications. The assigned classification was then transferred to a DNR protected waters inventory base map with the use of highlighting colors.

-Only DNR protected watercourses were assigned classes. River classification lists which accompany the classification maps are similar to DNR's protected waters inventory (PWI) lists in that the classification description begins at the upstream end and proceeds downstream. The lists also correspond to PWI lake names and PWI end points of watercourses.

-Classification for each segment of the river was assigned based on a plurality of a certain characteristic's occurrence. For example, although a segment may be classified as agricultural, it may have had transitional land uses in 40-acre parcels occurring somewhere in the segment. However, since the frequency of their occurrence may not have been as high as the agricultural use occurrence, the segment was properly labeled agricultural.

-We have used a practical approach in determining where to best end one class and start another class on those rivers with more than one classification. Most of the time a class began or ended at a section line to ease administrative burdens; less often at the nearest road crossing or a state or federal management unit boundary. If the computer-generated maps ended a class in the middle of a section, aerial photographs and topographic maps were reviewed and the most appropriate class assigned to the whole section.

-Public ditches shown as dashed lines on protected waters maps are shown as dashed colors on the river classification maps. The shoreland standards will only apply if the public ditch is administered as a ditch system.

-Most segments cover a minimum of 5 river miles. There are exceptions, particularly on rivers flowing into another county and those segments adjoining a Wild and Scenic River .

-Wild and Scenic Rivers are shown as a separate program and color, since the Wild and Scenic River rules apply.

-Those segments which may be affected by the Mississippi Headwaters Board plan and the Project Riverbend plan have been "red-flagged" on the list and by the use of a double color on the map.

-Please remember that all protected watercourses on the river classification map that are not highlighted with color are still classified as Tributary. They are sometimes easily overlooked.

PROCEDURES/JUSTIFICATION

Using the preliminary classification maps and lists, DNR regional staff will attempt to negotiate the river classes with communities within six months of notification to adopt. It is anticipated that negotiation will focus on classification of particular segments and starting and ending points of the various classes. Starting and ending points should reflect administration ease and cultural, physical and development characteristics, while still protecting the watercourse.

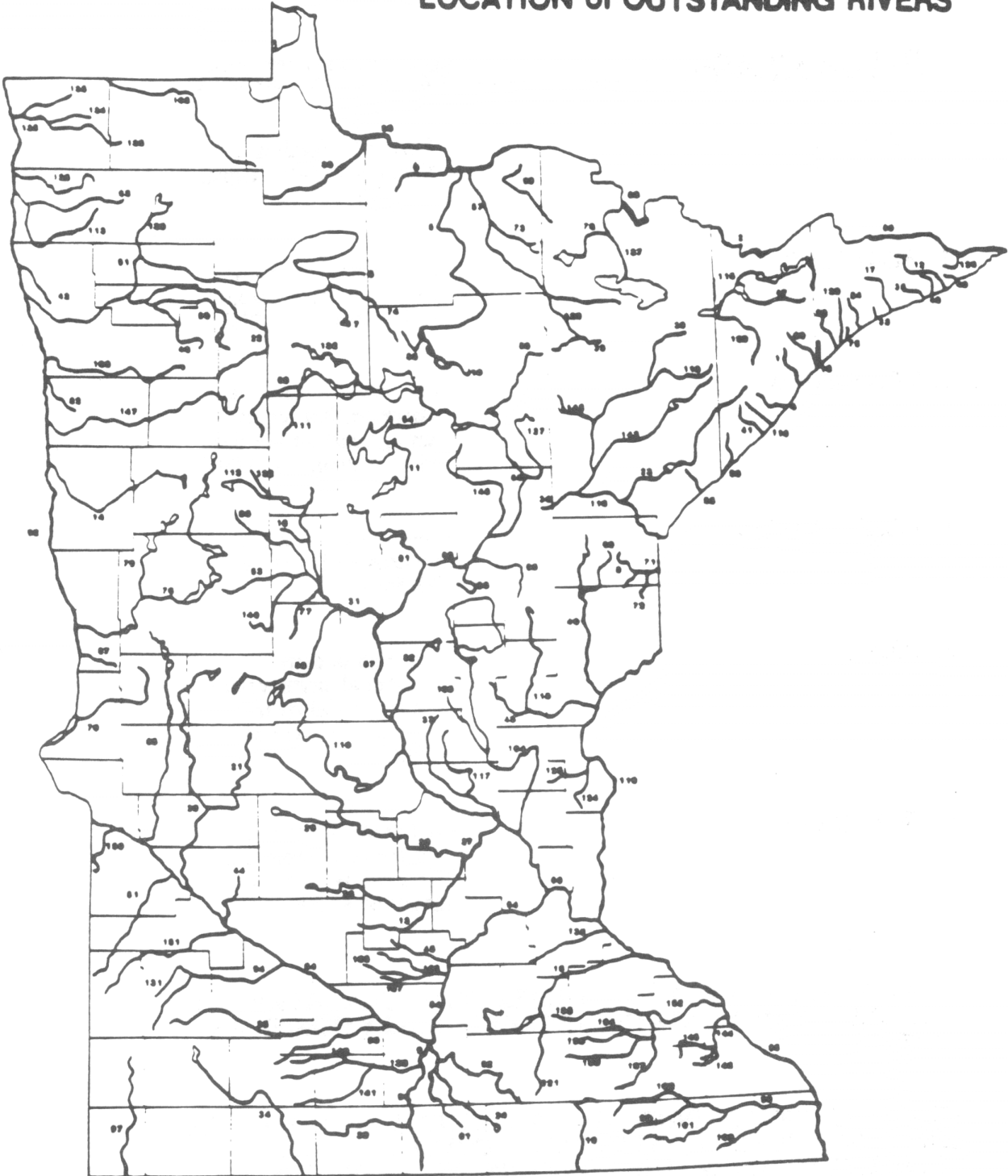
New or more accurate data on physical characteristics and development patterns can be used to modify preliminary river classifications as long as management objectives and the classification criteria are fulfilled. Justification for changing a particular segment's class can be based on accurate cultural, physical and development data from field investigations, aerial photographs, DNR reports, water use planning studies, and comprehensive planning studies. It is not acceptable to change a classification in order to obtain lesser development standards.

One possible exception is that a proposed class may be insensitive to small areas of concentrated and intensive development, because the class was assigned on the basis of the simple majority land use within the segment. In these cases, application of certain of the "use" or "performance" criteria of a particular river class may be overly restrictive or highly incompatible. It is preferable for the community to use an appropriate land use district for the developed area or request reduced performance standards under the flexibility clause rather than actually assigning a different river classification. In segments where the developed area actually occupies a large minority of the total river shore land area, an Urban river class may be the only prudent and justifiable management decision. Adequate justification and accurate documentation of the boundaries of the alternate river classification are extremely important.

Following negotiation with the local unit of government, DNR regional staff will submit a recommended "final" community river classification list to the central office for approval.

More information concerning the methodology and classification of the watercourses can be obtained from the revised shoreland rules; Shoreland Update Report Number 5, A River Classification System and DNR staff.

LOCATION of OUTSTANDING RIVERS



Source: MN DNR.

RIVER CLASSIFICATION SUMMARY

RIVER CLASS	DISTRIBUTION
1. Remote	-Primarily Northeast, North and East Central (16.5%)
2. Forested	-Northeast, North and East Central, portions of Southeast (22.0%)
3. Transition	-Primarily Central areas where neither forests nor agriculture are dominant land uses (13.0%)
4. Agricultural	-Southwest, West and portions of Southeast (46.5%)
5. Urban	-Any high density residential, commercial and industrial river frontage around the state (2.0%)
6. Tributary	-Statewide, all streams and rivers in Protected Waters Inventory not classified above

-CLASS NAMES DEVELOPED TO REFLECT NATURAL RESOURCE CONDITIONS ALONG STAT'S RECREATIONALLY SIGNIFICANT RIVERS.

CLASSIFICATION OF INDIVIDUAL SEGMENTS BASED ON EXISTING LAND USES, ROAD AND VEGETATIVE COVER CONDITIONS ADJACENT TO RIVER THE PREDOMINANT CONDITIONS IN A SEGMENT WERE BASIS FOR CLASS NAME FOR THAT SEGMENT.

MANAGEMENT OBJECTIVES BY RIVER CLASS

RIVER CLASS	MANAGEMENT OBJECTIVES
1. Remote	-Preserve wilderness and near wilderness settings.
2. Forested	-Maintain existing levels of development densities; preserve natural settings.
3. Transition	-Protect remaining natural shore areas from agricultural encroachment and impacts.
4. Agricultural	-Protect shore areas from adverse impacts of agricultural uses.
5. Urban	-Minimize environmental impacts of intensive urban land uses.
6. Tributary	-Maintain or establish vegetated buffer strips to improve water quality.