

ARTICLE XVI NATURAL RIVER DISTRICT, NRD

The provisions of the Natural River District are enacted to implement public objectives embodied in the AuSable River Natural River Plan adopted by the Michigan Natural Resources Commission on July 10, 1987.

SECTION 16.01 – GOAL

The goal is to preserve, protect and enhance the river environment in a natural state for the use and enjoyment of present and future generations, as well to promote the public health, safety and general welfare of Grayling Township and the state as a whole.

SECTION 16.02 – OBJECTIVES

- A. To maintain water quality consistent with the designated classification of the river and adhere to the concept of non-degradation of water quality.
- B. To prohibit development or activity which may damage the ecological, aesthetic or historic values of the river and adjacent lands.
- C. To ensure that any development which may occur shall be done in an orderly manner consistent with the natural environment and aesthetic qualities of the stream.
- D. To ensure that recreational uses, which occur, be done in an orderly manner consistent with the natural environment and aesthetic qualities of the stream, and that a quality recreation experience is maintained.

SECTION 16.03 – DESIGNATION

The following portions of the AuSable River are designated as a wild-scenic river under the authority of the Part 305 of Act 451, P.A. of 1994, formerly Act 231, P.A. of 1970, the Natural Rivers Act.

- A. MAINSTREAM – from the confluence of Kolka and Bradford Creeks (T28N-R4W) downstream to the Loud Dam (Iosco County).
- B. EAST BRANCH – from the outfall of Barnes Lake (T28N-R2W) to its confluence with the AuSable River, and including other flowing bodies of water that ultimately drain into the mainstream.

SECTION 16.04 – NATURAL RIVER DISTRICT

The AuSable River Natural River District includes an area beginning at the middle thread of the river and extending in a perpendicular direction to the high water mark of adjacent river banks, and continuing away from the high water mark to a distance of four hundred (400) feet wide on each side of and parallel to all channels of the mainstream and East Branch. Land elevations, including river bank heights, are not to be used in calculating the outside boundaries of the NRD. This district establishes a definable area within which local zoning may guide future development and use. ESTABLISHMENT OF THIS DISTRICT IN NO WAY IMPLIES A

"TAKING" OF THESE LANDS BY THE TOWNSHIP OR OPENING THEM UP TO PUBLIC USE. PRIVATE LANDS REMAIN PRIVATE AND ARE SUBJECT TO THE RIGHTS OF PRIVATE OWNERSHIP.

Within the Natural River District, dimensional and use variances/permits apply to individual project requests and each new project requires subsequent variances from the Grayling Charter Township Zoning Board of Appeals or Planning Commission. **Example #1:** A variance granted for the construction of a home within any required setback, does not apply to the later construction of a garage at the same setback if it wasn't part of the original request. **Example #2:** A variance granted for the construction of a home within any required setback, does not apply to the later construction of a second floor on that same home if it wasn't part of the original request. **Example #3:** A special use permit granted for a bed and breakfast does not allow the property owner to automatically expand the business to include small conferences or dinner meetings of unregistered guests. A second special use permit is required.

SECTION 16.05 – RESIDENTIAL HOUSING

- A. Unplatted lots and new subdivisions in the Natural River District shall accommodate the building setbacks as set forth in Section 16.07 and shall have a minimum riverfront lot width of two hundred (200) feet on the mainstream and a minimum of one hundred fifty (150) feet wide on the East Branch and other flowing bodies of water that ultimately drain into the mainstream.
- B. Lots or property of record that are non-conforming at the time of the effective date of these regulations because of lack of size to accommodate building setbacks from the water's edge shall be allowed to be built upon and variances shall be allowed for required setbacks upon such reasonable terms as set forth by the Zoning Board of Appeals, provided that structures be placed to best meet the objectives of the Natural Rivers Act.
- C. One single-family dwelling will be permitted on each lot or parcel within the Natural River District subject to the building setbacks as set forth in Section 16.07. A single-family dwelling is defined as a detached building designed for or occupied exclusively by one family and containing housekeeping facilities.
- D. Accessory Buildings and Structures:
 - 1. Whether or not any structure falling into this group is attached to a main building, it SHALL BE SUBJECT TO AND MUST CONFORM WITH front yard regulations applicable to principal structures.
 - 2. NO ACCESSORY BUILDING SHALL BE LOCATED BETWEEN THE MAIN STRUCTURE AND THE WATER'S EDGE except existing boathouses. New boathouses shall not be allowed. Existing boathouses may be repaired and maintained on the existing site. Existing boathouses shall not be enlarged (MDNR/MDEQ permits are required for boathouses) or used for any purpose other than the storage of boats and boating accessories.
 - 3. IN NO INSTANCES shall more than two (2) accessory buildings be located on a single lot.
 - 4. Accessory buildings may not occupy MORE THAN twenty five percent (25%) of a required rear yard provided that, IN NO INSTANCE, shall the ground floor area of accessory building(s) exceed the ground floor of the residence.

5. No detached accessory building shall be located closer than fifteen (15) feet to any main building. An accessory building shall not be located closer than thirty (30) feet from a side or rear lot line, except on corner lots, where the minimum side yard setback along the street is fifty (50) feet.
 6. No detached accessory building shall exceed fifteen (15) feet in height, except a private garage, which in no case shall exceed twenty five (25) feet in height.
- E. A home occupation, guest house, or bed & breakfast may be allowed by special use permit according to the provisions of Article XVIII.

SECTION 16.06 – INDUSTRIAL AND COMMERCIAL USES AND STRUCTURES

- A. New industrial and/or commercial uses and structures or expansion of existing industrial or commercial uses are prohibited.
- B. New canoe liveries, expansion of existing liveries, or expansion of commercial launching or retrieval of watercraft in the designated portions of the river system shall be prohibited. In considering rezoning, special use permits or variance requests, either within or outside the four hundred (400) foot Natural River District, local units of government should examine closely the effects such use will have on the natural qualities of the AuSable River system, the needs for additional local governmental services and the safety and enjoyment of riparian landowners and other river users.

SECTION 16.07 – BUILDING SETBACKS

- A. On the AuSable River mainstream, new buildings and appurtenances will be required to be setback a minimum of two hundred (200) feet from the ordinary high water mark¹. The setback may be decreased one (1) foot for every one (1) foot rise in bank height to a minimum of one hundred fifty (150) feet from the ordinary high water mark.
1. New buildings and appurtenances must be setback at least twenty five (25) feet from the top of a bluff² on the non-cutting edge of the stream.
 2. New buildings and appurtenances must be setback at least fifty (50) feet from the top of the bluff on the cutting edge of a stream³.
 3. No building shall take place on land that is subject to flooding⁴.
- B. On the East Branch and other flowing bodies of water that ultimately drain into the mainstream, new buildings and appurtenances will be required to setback a minimum of one hundred (100) feet from the ordinary high water mark of the tributary provided that no building shall take place on land that is subject to flooding. The setback may be decreased one (1) foot for every one (1) foot rise in bank height to a minimum of seventy five (75) feet from the ordinary high water mark.

SECTION 16.08 – BUILDING DESIGN AND SCREENING

- A. Property owners are encouraged to use natural materials and natural unobtrusive colors in the construction of new or remodeling of existing buildings. Upon request to the Department of Natural Resources, individual property owners will receive technical advice on location and design of structures and management of their lands. Such requests and the Department's response should be channeled through the local zoning administrator.

- B. Property owners of new or existing buildings visible from the river are encouraged to screen them with native vegetation. The Department of Natural Resources Area Forester and Natural Resources Conservation Services will advise on planting stock, etc., on request. When available at state nurseries, recommended planting materials will be supplied to property owners at cost.

SECTION 16.09 – DOCKS

The construction of docks along the AuSable River system is discouraged. However, if necessary to provide safe and ecologically sound access for the riparian landowner, docks may be constructed not to exceed four (4) feet in width nor more than twelve (12) feet in length with no more than four (4) feet of the dock extending over the water. Property owners located on the impoundments affected by fluctuating water levels will be allowed to construct a dock large enough to provide safe and reasonable access to the water. Docks require a permit from the Department of Environmental Quality and must be constructed in accordance with rules of Part 301 of Act 451, P.A. of 1994, formerly Act 346, P.A. of 1972. The use of "natural" materials and camouflaging is encouraged. Property owners are encouraged to build "logsod covered" docks. Upon request from the property owner, the Department will supply plans and specifications for this type of dock or assist in the siting and location of a dock so as to blend in with the natural surroundings and best meet the objectives of natural river designation.

SECTION 16.10 – ON SITE SANITATION SYSTEMS

- A. All habitation within the Natural River District must contain sanitary waste disposal facilities conforming in type to those required by health specifications of the State of Michigan and the District Health Department. The facilities provided may be for either water borne waste disposal by the septic tank absorption tile field method or for non-water borne disposal by the use of a health department approved or other state approved sanitary system.
- B. New septic tanks and absorption tile fields or other approved sanitary systems within the Natural River District shall be located not less than one hundred fifty (150) feet from the ordinary high water mark nor within land that is subject to flooding. The absorption field shall be located in a well-drained area and the bottom of the field shall be at least four (4) feet above the known high groundwater table. No absorption field shall be closer than one hundred (100) feet from any surface or subsurface drainage system, including sump pumps discharging into the river or its tributaries.

SECTION 16.11 – SIGNS

Only those signs necessary for identification, direction, resource information, regulation of use and related to permitted uses, shall be placed along the designated river and tributaries. Within the Natural River District signs for the sale of products or services shall be prohibited. Signs within the Natural River District must be:

- A. Non-illuminated.
- B. In conformance with the following standards:
 - 1. Signs may not be larger than one (1) square foot in area posted no more than one (1) sign per one hundred (100) feet or one (1) sign posted at upstream and downstream corner of the lot. However, one (1) temporary real estate "For Sale" sign per parcel of

land not to exceed four (4) square feet in area shall be allowed inside of the natural vegetation strip as described in Section 16.19.

2. Signs posted by public agencies must be kept to a minimum, of rustic design, no larger than ten (10) square feet in area, not attached to any tree or shrub, and placed to best meet the objectives of the Natural River Act. (Note: Signs by public agencies may need to be larger or within the four hundred (400) foot Natural River District to provide for public safety, such as warning of impending dangers in the river, or for an interpretive or historic sign.)

SECTION 16.12 – SOIL EROSION AND SEDIMENT CONTROL MEASURES

- A. All earth changing activities, other than normal landscaping or maintenance, undertaken within five hundred (500) feet of a lake or stream, must be conducted in accordance with the requirements of Part 91 of Act 451, P.A. of 1994, formerly Act 347, P.A. of 1972, its administrative rules and those procedures established by the local enforcing agency.
- B. Development along the river involving earth moving shall provide for water disposal and/or protection of the soil surface during and after construction.
- C. Practical combinations of the following will provide effective erosion control when skillfully used in planning and construction:
 1. The development plan should be fitted to the soils and topography so as to create the least erosion potential. Local office of the Natural Resources Conservation Service can provide detailed information on the soil characteristics of a given site and on the suitability of such soils for various uses.
 2. Whenever feasible during construction, natural vegetation shall be retained and protected. Where adequate vegetation does not exist, temporary or permanent vegetation shall be established where possible.
 3. Where it is necessary to remove vegetation for construction, limit the exposed area to the smallest practical size at any one time.
 4. Limit the duration of exposure to the shortest practical time.
 5. Critical areas exposed during construction should be protected with temporary vegetation and/or mulching.
 6. Permanent vegetation and improvements, such as roads, storm sewers and other features of development capable of carrying storm runoff in a safe manner, shall be installed as early as possible.
 7. Provisions should be made to accommodate the increased runoff caused by changed soil and surface conditions during and after construction.
 8. Sediment basins to remove suspended soil particles from runoff water from land undergoing development should be constructed and maintained wherever erosive conditions indicate their need to prevent sediment damage to the river.
 9. Diversions, grassed waterways, grade stabilization structures and similar mechanical measures required by the site shall be installed as early in the development as possible.

SECTION 16.13 – MINERALS

New development, exploration or production of oil, gas, salt brine, sand and gravel or other minerals except groundwater are not permitted within three hundred (300) feet of the designated river or tributaries. On new leases on state land, Natural Resources Commission policy prohibits drilling for gas or oil within one fourth (1/4) mile of any major stream.

SECTION 16.14 – UTILITIES AND TRANSPORTATION SYSTEMS

- A. Except on existing rights-of-way, new gas or oil pipelines, highways, roads or electric transmission lines shall not be permitted in the Natural River District or to cross the designated river and tributaries without prior written consent of the Department of Natural Resources. Plans for these transmission lines which include crossing the river district or the river and designated tributaries shall be done in accordance with the rules entitled Utilities and Publicly Provided Facilities in Natural River Areas.
- B. New distribution lines shall not cross the designated portions of the river or housing setback zone unless they are placed underground, unless overhead lines are less disruptive to the environment. Plans for distribution lines which are to be placed under the river shall be approved by the Department of Environmental Quality and all construction shall meet the requirements under the Soil Erosion and Sedimentation Control Act (Part 91 of Act 451, P.A. of 1994) and the Inland Lakes and Streams Act (Part 301 of Act 451, P.A. of 1994). Local service lines to private dwellings shall originate from the landward side of the dwelling insofar as practical.
- C. When replacing an existing bridge or culvert, or constructing a new road crossing over a designated natural river, a structure to accomplish the road crossing shall be designed to maximize the purpose and objectives of the Natural Rivers Act. In reviewing an application, the Department shall consider the anticipated effects of the structure on any portion of the natural river area.
- D. Management of trees, shrubs and other vegetation for maintenance of rights-of-way shall be done manually in the natural vegetation strip. However, hand application of herbicides to stumps of selectively cut trees will be allowed in the natural vegetation strip where it is the objective to establish and maintain a low growing shrub community in this area. The Department may authorize application of selected pesticides to control insect or disease infestation.

SECTION 16.15 – AGRICULTURE

- A. Grazing within the natural vegetation strip shall be prohibited. Livestock must be fenced out to protect the river banks. Cattle crossings and watering areas shall be constructed according to accepted methods after the landowner has consulted with the local Natural Resources Conservation Service, County Extension Service and/or the Department of Natural Resources.
- B. Water withdrawal for irrigation will not be affected by natural river designation, but will continue to be permitted in accordance with the riparian doctrine of reasonable use.

SECTION 16.16 – DISPOSAL OF SOLID WASTE

No unsightly or offensive material, including but not limited to: trash, refuse, junk cars, junk appliances or garbage shall be dumped or stored within the Natural River District.

SECTION 16.17 – STREAM ALTERATION

- A. To protect the natural character of the river and the natural flow of its waters, no damming, dredging, filling or channelization of the stream channel will be permitted in those portions of

the AuSable River or tributaries designated under the Natural Rivers Act unless approved by the Department of Environmental Quality under authority of Part 91 of Act 451, P.A. of 1994, formerly Act 346, P.A. of 1972.

- B. Natural materials should be used to construct stream bank stabilization project to control erosion or to enhance fisheries habitat. These structures should be camouflaged and the local Conservation Officer or District Fisheries Biologist contacted in order to protect existing fisheries habitat. Consideration should be given to maintaining reasonable watercraft passage on the river.

SECTION 16.18 – LAND ALTERATION

Cutting or filling for building, including appurtenances, on the flood plain and filling for buildings on the upland within four hundred (400) feet of the river's edge where the highest groundwater table is within four (4) feet of the surface, shall be prohibited. Dredging or filling for the construction of fish or wildlife ponds within five hundred (500) feet of the river requires a permit under Part 91 of Act 451, P.A. of 1994, formerly Act 346, P.A. of 1972 and Act 347, P.A. of 1972.

SECTION 16.19 – NATURAL VEGETATION STRIP ON ADJACENT SHORELINES

Trees, shrubs and other vegetation types native to the area shall be maintained and enhanced on each side of the river to retain the river's natural values. The presence of the natural vegetation strip is to help stabilize the river banks, prevent erosion, provide shading which will help maintain cool water temperatures, absorb nutrients from surface water runoff, provide screening of manmade elements, enhance fisheries and wildlife habitat and maintain the aesthetic natural quality of the river.

A. Vegetation Strip:

1. Public Land. On all publicly owned land, one hundred fifty (150) feet minimum restricted cutting strip shall apply on each side of the mainstream and designated tributaries.
2. Private Land. On privately owned land, seventy five (75) feet minimum restricted cutting strip shall apply on each side of the mainstream, and on the East Branch and other designated tributaries a fifty (50) feet restricted cutting strip shall apply.
3. Distances of the natural vegetation strip are measured horizontally from the ordinary high water mark.

- B. Restricted Cutting and Removal of Vegetation. Restricted cutting of dead, diseased, unsafe or fallen trees is allowed. Property owners are encouraged to plant a new tree of at least 3-feet in height, and of like species, to replace each tree removed.

- C. Selective Cutting for Visual Access. Trees and shrubs may be selectively trimmed on private land over a fifty (50) feet width for a filtered view of the river upon approval of the Township Zoning Administrator. FILTERED VIEW OF THE RIVER MEANS MAINTENANCE OR ESTABLISHMENT OF WOODY VEGETATION OF SUFFICIENT DENSITY TO PARTIALLY SCREEN NEW DEVELOPMENTS FROM THE RIVER, PROVIDE FOR STREAM BANK STABILIZATION AND EROSION CONTROLL AND TO SERVE AS AN AID TO INFILTRATION OF SURFACE RUNOFF AND PROVIDE COVER TO SHADE THE WATER. It need not be dense as to completely block the river view. IT MEANS NO CLEAR CUTTING!

- D. Agriculture. (See Section 16.15.)
- E. Planting of Native Vegetation. Planting of native species is encouraged in the vegetation strip to enhance and protect the river's edge. The Department of Natural Resources or the Natural Resources Conservation Service may be consulted for selection of native plant species for purposes of erosion control and/or screening of existing developments within the Natural River District.

SECTION 16.20 – RECREATION

- A. Campgrounds and Picnic Areas.
 - 1. On public land, no new structures associated with a campground or picnic area, except those necessary to protect the river bank, will be permitted within three hundred (300) feet of the designated mainstream or tributaries. Such structures shall be designated and constructed in such a manner as to further the purposes of the Natural Rivers Act. It is also recommended that existing public campgrounds be relocated away from the river to meet the setback limits. Where possible, the recommended vegetation strip should be re-established and maintained.
 - 2. On public lands adjacent to the river, camping will be permitted only at designated camping areas.
- B. Fishing, Hunting and Trapping.
 - 1. Fishing, hunting and trapping will be permitted in the Natural River District in accord with current state laws and regulations.
 - 2. IT IS EMPHASIZED THAT NATURAL RIVER DESIGNATION OR ESTABLISHMENT OF A ZONING DISTRICT ALONG THE RIVER DOES NOT OPEN PRIVATE LANDS TO THE PUBLIC.
 - 3. Fisheries management practices will be done in conformance with the character of the area and objectives of the natural river designation. Emphasis will be placed on maintaining the high quality trout fisheries of the AuSable River system.
- C. Lakes. No lake shall be built within the Natural River District.
- D. Boating and Canoeing.
 - 1. Boating and canoeing is permitted.
 - 2. If public safety or compatible use of state waters is threatened in the future, local governmental units may wish to regulate the use or size of motorized watercraft. Such controls should be done in accordance with Part 801 of Act 451, P.A. of 1994, formerly Act 303, P.A. of 1967, the Marine Safety Act.
- E. Litter. In view of the special status of the AuSable River and its unique beauty and character, the Department of Natural Resources shall encourage and cooperate with private interest as well as other public agencies that have programs for river cleanup.
- F. Recreational Controls.
 - 1. It is recognized that recreational conflicts, misuse and overuse are occurring throughout the state, and particularly on the AuSable River. The limit of the statutory authority for controlling recreational uses of Michigan's waterways has not been clearly defined either through the judicial system or by the Michigan Legislature. If it is determined that the

Department of Natural Resources has such authority, the Department shall initiate such controls as necessary over the numbers, timing, location and conduct of river users.

2. The Department will make every effort to cooperate with local liveries, property owners, anglers and local governments in developing such guidelines and for the need for modification or relocation of existing public access sites.

SECTION 16.21 – PUBLIC ACCESS SITES

- A. No additional boat or canoe access sites shall be located on any streams in the AuSable River system. Because of the generally small size of the North Branch and the other tributaries, except the South Branch downstream of Roscommon, canoeing should be discouraged. No additional boat or canoe access sites are recommended. Existing sites may have to be modified to limit or control canoe access, control erosion or enhance aesthetic values. New or expansion of existing access sites will be provided only if it can be shown that there is a need for such access, and that development and use of such facilities will not adversely affect the objectives of natural rivers designation. Any development must be done in accordance with the setback and vegetative management provisions of this plan.
- B. Any additional fishing public access sites on the mainstream or tributaries must be walk-in only with parking facilities at least maintaining established setbacks. These should be located only where there are sufficient adjacent public lands so as to avoid trespasser conflicts on privately owned lands.
- C. To help control trespass, litter and other associated problems, water tight vault toilets and trash collection facilities at public access sites and rest areas may be located closer than the recommended setback.

SECTION 16.22 – MOTORIZED VEHICLES

- A. Operation of all motorized vehicles other than on designated public roads, access roads to permitted uses, will be prohibited within the Natural River District.
- B. Use of ORVs on publicly owned lands contiguous to the Natural River District shall be in conformance with guidelines and regulations of the agency administering such lands, and with state and federal noise level standards strictly enforced. Muffler requirements of the Michigan Vehicle Code-Section 707, Act 300, P.A. of 1949 shall be followed.

SECTION 16.23 – HISTORIC AND ARCHAEOLOGICAL SITES

Identification, preservation and interpretation of historical and archaeological sites along the designated portions of the AuSable River and tributaries by public agencies and local historical societies are strongly encouraged. It is illegal to disturb or dig in a designated site without prior written consent from the appropriate state and/or federal agency.

SECTION 16.24 – MILITARY USE

Generally, military use of any of the streams or land areas within the four hundred (400) foot Natural River District is not compatible with the goal and objectives of river protection. Unless specifically authorized in a written cooperative agreement between the departments of Natural Resources and Military Affairs and approved by the Natural Resources Commission, military use shall not be authorized within the Natural River District.

SECTION 16.25 – ADMINISTRATION

- A. Land Use Guidelines. Under Part 305 of Act 451, P.A. of 1994, zoning by local government units and/or the state shall be the chief means of protecting the AuSable River and its designated tributaries as a natural river.
1. Zoning shall be applied within the four hundred (400) foot Natural River District on both the designated mainstream and tributaries. Upon adoption of a local zoning ordinance, certified copies of maps and/or documents describing the Natural River District shall be filed with the local tax assessing officer and County Equalization Department. In establishing true cash value of property within the Natural River District, the assessing officer shall recognize the effect of use limits established by the ordinance (Section 30511, Part 305 of Act 451, P.A. of 1994).
 2. Local government units are urged to adopt building setbacks, vegetation management and septic system controls for other streams under their jurisdiction not within the natural river designation.
 3. Any property owner with undeveloped river frontage on the designated portions of the AuSable River or its designated tributaries may sign an open space development rights easement with the state under Part 361 of Act 451, P.A. of 1994, formerly Act 116, P.A. of 1974, the Farmland and Open Space Preservation Act, to obtain potential tax relief.
 4. Appeals: Under certain circumstances, strict adherence to this plan may create unreasonable hardships for the frontage owners. Such cases may be appealed to the Grayling Township Zoning Board of Appeals for a variance. Applications for a variance shall be based on a site plan⁵. The County Health Department, Natural Resources Conservation Service, appropriate staff and field personnel of the Department of Natural Resources and other experts should be consulted to recommend to the Zoning Board of Appeals a course of action which will have the least degrading impact on the character of the natural river. The Zoning Board of Appeals shall make final determination of the variance.
 5. Nonconforming uses. As stated in Section 30512 of Part 305 of Act 451, P.A. of 1994, "the lawful use of any building or structure and of any land or premise as existing and lawful at the time of enactment of a zoning ordinance or rule or an amendment thereof may be continued although such use does not conform with the provisions of the ordinance, rule or amendment. The ordinance or rule shall provide for the completion, restoration, extension or substitution of nonconforming uses upon such reasonable terms as may be set forth in the zoning ordinance or rule."
- B. Other laws and programs reinforcing natural river management objectives should be utilized to the extent necessary to protect the river in implementing the management plan for the river and tributaries.

SECTION 16.26 – MANAGEMENT OF AREAS BEYOND THE NATURAL RIVER DISTRICT

- A. Land use and water resources are closely related. What happens on the land beyond the Natural River District, but within the drainage area of the river, affects the river. Local units of government adjacent to the District through their powers to influence the location, timing and nature of development can have a positive effect on water resources.

- B. It is recommended that local governmental units zone adjacent to the Natural River District to maintain the integrity of the AuSable River and designated tributaries as a wild-scenic river.
1. By limiting residential development to low density single-family dwellings or medium density cluster developments. Medium density cluster developments are recommended because it is easier to provide services and control.
 2. By providing districts where industry which may produce noise, smoke, fumes, odor and the like will not affect the natural characteristics of the river area.
 3. By providing districts for commerce where heavy traffic, parking, automobile exhaust and noise will not create environmental intrusions.
- C. Further, it is recommended that local units of government incorporate water resource protection and/or management measures into their plans, programs and decisions involving land use. Such measures are of particular importance when dealing with lands in the stream corridor. A stream corridor essentially consists of lands contiguous to the stream, the alteration or development of which could potentially cause direct impacts on the stream and its environment. It is a composite of the following:
1. Soil types with severe limitations for development
 2. Vegetation along creek banks
 3. Wetlands
 4. Slopes
 5. Flood profiles when known
- D. Sensitive areas involving one or more of the above factors may occur within the drainage area of the river but outside of the Natural River District itself. Modification or development within such areas may adversely affect water resource benefits within the district or create problems requiring costly public investment to rectify.
- E. It is recommended that local units of government consider such measures as regulating changes in surface runoff from specific locations through use of the site plan review process and protecting sensitive areas outside of the Natural River District through use of special use permit procedures.
- F. On private lands adjacent to and within one quarter (1/4) mile of the Natural River District, it is recommended that the local Natural Resources Conservation Districts, local Soil Erosion and Sedimentation Control agencies, Cooperative Extension Service and the Department of Natural Resources cooperate with landowners to ensure that timber harvest, agricultural practices, housing, road building or other land use activities are compatible with the wild-scenic designation of the river and with maintaining the water quality of the river.

SECTION 16.27 – DEFINITIONS

Definitions pertaining specifically to the Natural River District are provided below:

¹**Ordinary High Water Mark** means “the line between upland and bottomland which persists through successive changes in water levels, below which the presence and action of the water is so common or recurrent that the character of the land is marked distinctly from the upland and is apparent in the soil itself, the configuration of the surface of the soil, and the vegetation. On an inland lake that has a level established by law, it means the high established level. Where water return to its natural level as the result of the permanent removal or abandonment of a

dam, it means the natural ordinary high water mark." (This definition is used for the administration of the Inland Lakes and Streams, Part 301 of Act 451, P.A. of 1994.)

²**Bluff** means the top of a steep bank rising sharply from the water's edge. Incline of at least seventy five degrees (75°) and a height of at least forty (40) feet.

³**Cutting Edge of a Stream** means the outside edge of a river or stream where water velocity has increased to the point where it may cause soil or stream bank erosion.

⁴**Land that is Subject to Flooding** means that the area of land adjoining the designated portions of rivers and tributaries which:

1. Will be inundated by a flood which has a one percent (1%) chance of occurring or being exceeded in any given year (intermediate regional flood), as determined by detailed hydraulic studies which are acceptable to the Michigan Water Resources Commission; or
2. In the absence of such detailed flood plain studies, have a history of flooding or are delineated by approximate methods such as USGS flood prone area maps or HUD's special flood hazard boundary maps.

⁵**Site Plan** means a surface view showing elevations or contours of the ground, including existing earth fills; generalized vegetation cover; size, location and spatial arrangement of all proposed and existing structures and uses on the site; location and elevations of streets, access roads, water supply and sanitary facilities.