

II. PROPOSED UPPER MANISTEE RIVER NATURAL RIVER PLAN

A. GOALS AND OBJECTIVES

1. GOAL OF DESIGNATION

The goal of Natural River designation of the Upper Manistee River system is to protect, preserve and enhance the integrity and natural values of the Upper Manistee River system for present and future generations, while ensuring proper management of public and private lands and preserving the rights and privileges of owning and developing private property using sound conservation practices.

2. OBJECTIVES OF DESIGNATION

The objectives of Natural River designation of the Upper Manistee River system include:

- 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 that may damage the ecologic, aesthetic or historic values of the river and adjacent lands.
- c. To ensure that development that occurs has a minimal impact on the natural and cultural values and aesthetic qualities of the river system.
- d. To ensure that a varied and quality recreational experience that is harmonious with the natural values and aesthetic qualities of the stream is maintained.

B. RIVER SEGMENTS PROPOSED FOR DESIGNATION

To qualify for designation as a Natural River, river segments must possess one or more natural or outstanding values such as a free-flowing condition or fisheries, wildlife, boating, scenic, aesthetic, floodplain, ecologic, historic and recreational values. If a river meets this broad criteria, it may then be classified in one of three Natural River categories; Wilderness, Wild-Scenic or Country-Scenic. Criteria for classification include the natural character of the river corridor, degree of river corridor development, number of paralleling roads and road crossings, type and density of streamside vegetation, water quality, aesthetic qualities of the corridor, and others.

Wild-Scenic rivers should have mostly wild or forested borders exhibiting light development, with high water quality, but near development and relatively accessible. The wild aspect may be relatively broad or confined to a narrow corridor. Any impoundments should have outstanding aesthetic and recreational characteristics to offset the interference with the free-flowing condition of the stream. Roads may occasionally lead to or cross the river. The rivers may include small communities and/or concentrations of development limited to relatively short reaches of the total designated area.

The following portions of the Upper Manistee River system are recommended for designation as "Wild-Scenic Rivers" under authority of Natural Rivers Part 305, 1994 PA 451 (some identified stream names are local in origin, particularly for streams not named on USGS topographic maps). Unless otherwise noted, all lakes, ponds, impoundments or other surface water bodies not traditionally considered rivers, streams or creeks are included in the following designated areas if they are a contiguous part of the stream system, i.e. if the stream flows into and out of the water body.

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Upper Manistee River area

Manistee River mainstream from its sources in Sections 1 and 12 of Mancelona Township, T29N, R5W to the Wexford/Missaukee county line (78 miles).

Frenchman's Creek from the Lake Elizabeth Dam in section 30 of Hayes Twp., T29N, R4W to its confluence with the Manistee River (3.3 miles).

Lost Lake Outlet from the outfall of Lost Lake in Section 6 of Frederic Township, T28N, R4W to its confluence with the Manistee River (0.4 miles).

Unnamed stream from its source in Section 13 of Blue Lake Township, T28N, R5W to its confluence with the Manistee River (3.4 miles).

Goose Creek from Cameron Bridge Road in section 27 of Blue Lake Twp., T28N, R5W to its confluence with the Manistee River (7.6 miles).

Portage Creek from the control structure near the outfall of Lake Margrethe, section 8 of Grayling Twp., T26N, R4W to its confluence with the Manistee River, including all braided channels (6.6 miles).

All perennial tributaries to Portage Creek from their sources to their confluence with Portage Creek (approximately 3.3 miles).

Clear Creek from its source at Boiling Springs in section 28 of Bear Lake Twp., T26N, R5W to its confluence with the Manistee River (0.7 miles).

Black Creek from the outfall of South Black Lake in section 21 of Bear Lake Twp., T27N, R5W to its confluence with the Manistee River, including all braided channels (8.3 miles).

All perennial tributaries to Black Creek from their sources to their confluence with Black Creek.

Dempsey Creek from its source in section 19 of Bear Lake Twp., T26N, R5W to its confluence with the Manistee River (2.4 miles).

Big Devil Creek from its source in Section 18 of Garfield Township, T25N, R5W to its confluence with the Manistee River (5.1 miles).

Big Cannon Creek from its source in section 5 of Norwich Twp., T24N, R5W to its confluence with the Manistee River (14.4 miles).

North Branch of the Manistee River from County Road 612 in section 3 of Excelsior Twp., T27N, R6W to its confluence with the Manistee River (19.6 miles).

Unnamed stream from Tower Road in section 25 of Coldsprings Twp., T28N, R6W to its confluence with the North Branch of the Manistee River (5.6 miles).

Morrison Creek from its source in section 28 of Excelsior Township, T27N, R6W to its confluence with the North Branch of the Manistee River (2.8 miles).

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Collar Creek from its source in section 33 of Excelsior Township, T27N, R6W to its confluence with Morrison Creek (0.6 miles).

Unnamed stream from its sources in section 26 of Excelsior Township, T27N, R6W to its confluence with Morrison Creek (3.5 miles).

All other perennial tributaries to the North Branch of the Manistee River from their sources to their confluence with the North Branch of the Manistee River (approximately 4 miles).

Willow Creek from its source in section 14 of Orange Twp., T26N, R7W to its confluence with the Manistee River (6.1 miles).

Pierson Creek from its source in section 12 of Orange Township, T26N, R7W to its confluence with Willow Creek (4.8 miles).

Maple Creek from its source in section 22 of Orange Twp., T26N, R7W to its confluence with the Manistee River (4.2 miles).

Little Cannon Creek from multiple sources in sections 29, 31 and 32 of Garfield Twp., T25N, R6W to its confluence with the Manistee River (12.1 miles).

Silver Creek from its source in section 1 of Pioneer Twp, T24N, R7W to its confluence with Little Cannon Creek (1.6 miles).

Waterhole Creek and all tributaries from their multiple sources in Garfield Township, T25N, R7W to the confluence with the Manistee River (3.9 miles).

Babcock Creek from its sources in section 33 of Garfield Township, T25N, R 7W to its confluence with the Manistee River (0.5 miles).

Filer Creek from its source in Section 4 of Pioneer Township, T24N, R7W to its confluence with the Manistee River (1.9 miles).

Nelson Creek from its sources in Section 30 of Garfield Township, T25N, R7W to its confluence with the Manistee River (0.9 miles).

Spring Creek from its sources in section 22 of Springfield Twp., T25N, R8W to its confluence with the Manistee River (2 miles).

Bourne Creek from its sources in section 29 of Springfield Twp., T25N, R8W to its confluence with the Manistee River (1.7 miles).

Ham Creek from its source in Section 24 of Bloomfield Twp., T24N, R8W to its confluence with the Manistee River, **including two tributaries** with sources in Sections 3 and 9 (7.5 miles).

Gravy Creek from its source in section 5 of Bloomfield Twp., T24N, R8W to its confluence with the Manistee River (0.5 miles).

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Haynes Creek from its source in section 31 of Springfield Twp., T25N, R8W to its confluence with the Manistee River (0.5 miles).

Hopkins Creek from its source in Section 17 of Forest Twp., T23N, R7W to its confluence with the Manistee River (13.7 miles).

Fisher Creek (“Hopkins Creek” on the USGS topographic map) from its source in section 31 of Springfield Twp., T25N, R8W to its confluence with the Manistee River (1.8 miles).

Total designated Upper Manistee River Wild-Scenic mileage – 234 miles (78 mainstream, 156 tributaries).

C. NATURAL RIVER DISTRICT

The Upper Manistee River Natural River District includes the stream channel of all designated mainstream and tributary segments and all lands within 400 feet of the ordinary high water mark (river's edge) on each side of all designated streams. This district defines the area within which various use and development standards will apply. **This does not establish a 400-foot building setback or non-development zone. Establishment of this district in no way implies a “taking” of these lands by the state, nor does it open private lands for public use. Private lands remain subject to the rights of private property ownership.**

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(Map)

D. PRIVATE LAND DEVELOPMENT STANDARDS

The following standards apply to all portions of any lot or parcel within 400 feet of the river's edge or any lot or parcel completely within 400 feet of the river's edge on each side of all designated rivers. Mainstream standards apply to the mainstream of the Manistee River from its sources in Antrim County to the Wexford/Missaukee County Line. Tributary standards apply to all designated tributaries.

1. PERMITTED USES

The type of land use adjacent to a river has a major impact on the natural values of the river system. Uses that result in high human and vehicle traffic, dense development, large non-residential structures with impermeable parking areas, use or storage of chemicals or other activities that are not compatible with the river environment will not be permitted in the Natural Rivers District. Three categories of uses are permitted in the Natural River District, as follows:

Exempt uses in the Natural River District are uses that are allowed by right and DO NOT require a Natural River zoning permit. They include the following:

- a. Private, noncommercial recreation such as camping, boating, fishing, hunting and other similar activities that do not require permanent structures;
- b. Reforestation and other accepted forest management practices landward of the native vegetation buffer that do not require permanent structures;
- c. Agricultural activities, such as plowing, disking and planting of crops, including general and specialized farming such as Christmas tree farms, provided that all new activities occur landward of the native vegetation buffer. Construction of residential and farm-related structures and appurtenances are classified as principal uses (see below) and are subject to zoning permit requirements. New aquaculture facilities, expansion of existing aquaculture facilities, and concentrated animal feeding operations are not permitted within the Natural River district.
- d. Operation of licensed motor vehicles on public or private roads that are designed to provide access to a permitted use;
- e. Off-road operation of emergency and public utility vehicles;
- f. Cutting of vegetation in the native vegetation buffer to create a private footpath leading from outside the native vegetation buffer to a single point on the river's edge or to trim or prune vegetation for a filtered view of the river.

Principal uses in the Natural River District are uses allowed by right but that require a Natural River zoning permit. They include the following, subject to all permit requirements and development standards outlined in this plan:

- a. Single family residential and detached rental dwellings (other than short-term rental cabins), farm and other accessory buildings and appurtenances such as fences, decks, patios, pedestrian bridges (tributaries only), satellite dishes, low-profile boardwalks and river access stairways;
- b. Private docks;
- c. Private utility service lines;
- d. Individual on-site wastewater treatment systems and water supply wells;
- e. Mineral exploration and extraction activities;
- f. Land divisions;
- g. Home occupations;
- h. Limited land alteration;

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- i. Forest management activities in the native vegetation buffer.

Special uses in the Natural River District (uses allowed upon approval by the Upper Manistee River State Zoning Review Board or appropriate local zoning authority) include the following, subject to all permit requirements and development standards outlined in this plan:

- a. Detached rental cabins
- b. Campgrounds
- c. Vehicle bridges (tributaries only)

SUMMARY OF STANDARDS – Following is a summary of selected private land development standards for the Upper Manistee River system.

Native Vegetation Buffer All Segments	Building Setback Mainstream	Building Setback Tributaries	Bluff Setback Mainstream	Bluff Setback Tributaries	Minimum Lot Area All Segments	Minimum Lot Width All Segments
75 feet	100 feet	100 feet	50 feet	25 feet	80,000 square feet	200 feet

- All setbacks and native vegetation buffer widths are measured horizontally from the Ordinary High Water Mark (OHWM), a.k.a. the river’s edge.

2. NATIVE VEGETATION BUFFER

A restricted vegetative cutting area encompassing the river, tributaries and all lands within 75 feet of all mainstream and tributary segments is required.

The presence of native vegetation adjacent to the river is a critical element in maintaining the natural characteristics of the river corridor. A buffer that includes native shrubs, trees and grasses filters runoff, provides wildlife habitat in critical migration corridors, provides the large woody debris and leaf litter in the stream channel important for fish and invertebrate habitat, shades the river to maintain cool water temperatures and screens development from the river user. Manicured, maintained lawns perform none of these functions.

Natural Rivers Part 305 limits the establishment of a vegetative buffer standard on private land subject to State zoning rules to a maximum width of 100 feet from the river’s edge. Most research concludes that a 75-100 foot-wide vegetative buffer is necessary to minimally provide for the functions mentioned above. Research also indicates that wider buffers better provide for many of those functions. If a local unit of government feels that a larger vegetative buffer is appropriate for their area of jurisdiction, that unit of government is encouraged to incorporate a larger buffer zone standard in their local zoning ordinance.

Within the native vegetation buffer, trees and shrubs may be pruned over no more than a 50-foot width for a filtered view of the river, but clear-cutting in this native vegetation buffer is prohibited. The native vegetation buffer is also subject to the following provisions:

- a. Unsafe trees and noxious plants and shrubs such as poison ivy and poison sumac may be removed.
- b. The selected removal or trimming of trees for forest management practices or disease and insect control, and clearing of vegetation to the minimum width required for public utility

- primary electric distribution lines and service lines for permitted uses is permitted upon approval of the zoning administrator in consultation with the local Soil Conservation District Resource Professional, if the activity is in keeping with the goals and objectives of the Natural River Plan.
- c. Camping other than low-impact tent camping is not permitted in the native vegetation buffer.
 - d. Mowing is prohibited in the native vegetation buffer except in areas that had been maintained in a mowed condition prior to adoption of rules or ordinances implementing this plan, or to establish a footpath to the river not to exceed four feet wide.
 - e. In the Manistee River mainstream vegetation may be selectively pruned to allow for safe navigation and to alleviate flooding that threatens a dwelling. This may include pruning of a maximum eight-foot wide section of vegetation. Portions of trees, logs and other natural material imbedded in the stream channel may not be disturbed.
 - f. A boardwalk constructed in conjunction with the footpath described in d. above is permitted upon approval of the zoning administrator if it is placed only in areas that are generally too wet to be traversed without significant disturbance of the soils, the boardwalk and supports are constructed of wood, the boardwalk is no more than three feet wide and does not include railings, and the top of the boardwalk lies no more than twelve inches above grade.
 - g. All islands in all stream segments are subject to the native vegetation buffer standards.
 - h. A wider native vegetation buffer may be required for certain commercial uses.

These recommended standards are the minimum required to provide some meaningful protection for the river. Local units of government are encouraged to retain or incorporate more restrictive standards if it is determined that the recommended standards may not adequately protect the unique features of the river within that unit of government. Also, although not required it is highly recommended that property owners re-establish native vegetation in areas in which streamside vegetation has been removed and lawns have been established.

3. BUILDING/STRUCTURE SETBACKS

A "Structure" is defined as anything that is constructed, erected or moved to a property and that is located on, above or below the ground, including temporary recreational facilities such as travel trailers, fifth wheels and tents that are on site for more than 30 days per year. Keeping structures a reasonable distance from the river's edge helps keep the river corridor in as natural state as possible while still allowing construction of new residences and associated structures. Structural setbacks help to:

- a. Lessen the impacts of construction, reducing the possibility of sedimentation of the stream.
- b. Keep impervious surfaces such as driveways, sidewalks and rooftops away from the river. This helps ensure that precipitation filters through the soil, enters the groundwater and then enters the stream instead of running overland to the stream. (Water entering the stream through the groundwater contains fewer contaminants and is cooler, preserving water quality and benefiting the stream's fishery. Water entering the stream through the groundwater also enters at a slower rate, resulting in more stable year-round flows).
- c. Keep yard areas that are compacted by construction equipment and everyday activity further from the stream, resulting in the same benefits as in b. above.
- d. Lessen the visual impacts of new structures for the river user.
- e. Reduce fragmentation of critical wildlife migration corridors adjacent to the stream.

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To accomplish the above goals, minimum structural setbacks for new construction and the above-mentioned temporary facilities are required as follows:

- NOTE:**
- i. *Structures in existence at the time of adoption of rules or ordinances implementing this plan, but that do not meet these standards, do not need to be moved;*
 - ii. *For the purposes of this plan, on private land a “bluff” is defined as a bank rising at a slope of 33degrees or greater from within 10 feet of the river’s edge. The “crest” of a bluff is the first river-ward facing area at least 100 feet long (approximately parallel to the river) that breaks to a slope of less than 18degrees for a distance away from the river of at least 25 feet.*

Mainstream - 100 feet from the ordinary high water mark and 50 feet from the crest of a bluff.

Tributaries - 100 feet from the ordinary high water mark and 25 feet from the crest of bluff.

All areas

Structures may not be placed or erected on lands that are within the 100-year floodplain (the area with a 1% chance of flooding within any given year), or in any wetland area.

Structures in areas of concentrated development

Some areas of the watershed contain groups of small, nonconforming lots or parcels, most of which contain structures that do not meet the new building setbacks. In these areas, the following building setback standard will apply in State-zoned areas of the watershed and in areas in which local zoning ordinances contain this provision:

- IF:**
- a. A vacant legal nonconforming lot or parcel is between and adjacent to two lots or parcels that contain legal single family dwelling that do not meet the building setbacks above, and,
 - b. The adjacent non-conforming single family dwelling are within 300 feet of each other,

THEN: The minimum building setback for new single family dwellings on the vacant lot or parcel is equal to the distance from the river of the adjacent single family dwelling that is farthest from the river’s edge, **or** the minimum required width of the native vegetation buffer, whichever is greater. However, single family dwellings may not be placed or erected on lands that are within the 100-year floodplain or in any wetland area.

The above recommended standards are the minimum required to provide some meaningful protection for the river. Local units of government are encouraged to retain or incorporate more restrictive standards if it is determined that the recommended standards may fall short in protecting the unique features of the river within that unit of government.

4. MINIMUM LOT OR PARCEL SIZES

Controlling the density of structures has many of the same benefits as structural setbacks from the river’s edge. Impervious surfaces are separated, allowing better infiltration of precipitation. Septic

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systems serving individual structures are isolated, lessening the impact of effluent on the stream. More native vegetation within and landward of the native vegetation buffer tends to be preserved. The visual impact of structures for the river user is also minimized.

For these reasons, all newly established separate lots or parcels created in the Natural River District are subject to the standards listed below. All of the standards listed below must, for each lot or parcel created, exist on at least one side of the stream that is accessible by a public road or legal easement. No new lot or parcel will be created that would require reaching the only buildable area by constructing a road/stream crossing.

Each new lot or parcel in the Natural River District must:

- a. Have at least 200 feet of river frontage (unless a riverfront “common area” subject to a conservation easement is established, or the parent lot or parcel does not have river frontage, in which case this dimension will be measured at the point of the lot or parcel closest to the river) and be at least 200 feet wide at the minimum building setback line, and;
- b. Contain at least 1/2 acre of existing contiguous upland buildable area (non-wetland, non-floodplain) landward of the minimum building setback line, and;
- c. Contain at least 80,000 square feet of area within the Natural River District (any “common area” created or any bottomlands will not be used in any calculations related to minimum lot or parcel area), and;
- d. Have sufficient depth to accommodate the required building setbacks.

NOTE: For all stream segments, if the parent parcel or lot does not have river frontage, and the front (riverward) line of any newly created lot or parcel is greater than 150 feet from the river’s edge at all points, then section c. does not apply, and the minimum lot or parcel width will be measured at the front lot or parcel line.

A zoning permit, special use permit or variance will not be granted for any activity on a lot or parcel that is created after the effective date of rules or ordinances implementing this plan if the new lot or parcel does not meet all of the above standards.

A method of development that has gained favor in recent years is “clustering.” Clustering involves concentrating new structures in a small area while preserving larger areas in open space. The relatively small area encompassed by the Natural River District limits the use of clustering techniques. However, clustering of structures is allowed if the provisions outlined in section II.D.6., **NUMBER OF RESIDENTIAL STRUCTURES PER LOT OR PARCEL**, are followed.

5. IMPERVIOUS SURFACES

Stormwater runoff from impervious surfaces, such as rooftops, driveways, patios and other surfaces that do not allow rapid infiltration of water into the soil, can have a significant impact on the health of the stream due to its effect on flow stability, stream temperatures, erosion and sedimentation and other impacts. Therefore, the maximum percentage of impervious surface permitted on a lot or parcel will be as follows:

- a. For lots or parcels with less than 10,000 square feet of area, no more than 35% of the land surface may be covered by impervious surfaces.
- b. For lots or parcels with between 10,000 square feet and 40,000 square feet of area, no more than 25% of the land surface may be covered by impervious surfaces.

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- c. For lots or parcels with more than 40,000 square feet of area, no more than 20% of the land surface may be covered by impervious surfaces.

6. NUMBER OF RESIDENTIAL STRUCTURES PER LOT OR PARCEL

In general, one single-family, permanent or seasonal residence, along with appurtenances, such as garages, storage sheds, decks, etc., per lot or parcel are permitted. However, to discourage fragmentation of large properties into smaller ones, more than one single-family residence and appurtenances per lot or parcel may be permitted if the parent lot or parcel contains sufficient square footage, width and buildable area to meet the requirements for two or more individual lots or parcels, and;

- a. The property owner develops a site plan for the parent lot or parcel showing theoretical property lines for individual lots or parcels based on Natural River development standards, and locates any additional residences and appurtenances as if the property were divided into those separate lots or parcels, **or**;
- b. For each single-family residence placed so that the requirements in a. are not met, i.e. in a cluster-type setting, a portion of the parent lot or parcel containing square footage, width, depth and buildable area equal to a newly created separate legal lot or parcel is made subject to a permanent conservation easement or deed restriction that prohibits construction of any structures on that portion of the lot or parcel, **or**;
- c. For each single-family residence placed so that the requirements in a. are not met, i.e. in a cluster-type setting, the development rights to a portion of the parent lot or parcel containing square footage, width, depth and buildable area equal to a newly created separate legal lot or parcel are sold, donated or otherwise conveyed in perpetuity to a land conservancy, local unit of government or the State. The agency acquiring the development rights will agree in writing to refrain from development of the land in perpetuity.

7. ON-SITE WASTE TREATMENT SYSTEMS

All individual on-site waste treatment systems require a permit from the appropriate local health department. Local health departments in the watershed have established septic system setbacks from surface water bodies of 50 to 100 feet, depending on the county in which the system is constructed. It is acknowledged that these setbacks are adequate to effectively treat septic system effluent for bacteria-related human health concerns. However, the effectiveness of a 50-foot setback in preventing nutrient movement to the stream is not as clear. It is possible that additional phosphorus removal may be achieved in saturated soils as effluent moves a greater distance towards the river, particularly in areas with soils such as clay loams or sand with high iron or other metal content. A setback greater than 50 feet may also result in lower concentrations of nutrients reaching the river simply by the additional dilution factor.

For the above reasons, all new and replacement septic systems must be constructed so that:

- a. No part of the drain field is less than 100 feet from the river's edge or any surface or subsurface drain, and;
- b. The drain field and septic tank are not located within the 100-year floodplain, a wetland area or the native vegetation buffer, and;
- c. The bottom of the drain field is at least 4 feet above the seasonal high groundwater table.

If it is feasible to construct an on-site system with innovative treatment technology that will result in a higher level of waste treatment than from a conventional system, the setback from the river's edge may be reduced to 75 feet (the landward edge of the native vegetation buffer) provided no part of the system is located in the 100-year floodplain or a wetland.

Drywells (seepage pits) or earth privies are prohibited unless they are permitted by the local health department and site conditions do not allow proper installation of a septic tank/soil adsorption system. If a drywell or privy is installed, it must be a minimum of 100 feet from the river's edge. The bottom of the pit must be at least four feet above the seasonal high groundwater level. If this is not feasible, a water-tight vault to receive waste will be installed.

8. OTHER WASTE DISPOSAL

No unsightly or offensive material, including trash, junk cars, junk appliances, garbage, tires or other refuse shall be dumped, disposed of or stored in the Natural River District. Landfills and disposal of any solid or liquid waste, other than subsurface disposal of effluent from individual waste treatment systems related to normal operation of the systems, are prohibited in the Natural River District. Disposal of sludge from wastewater treatment facilities or individual on-site waste disposal systems is prohibited in the Natural River District.

9. DOCKS

Construction of docks along streams in the Upper Manistee River system is strongly discouraged, especially on streams not large enough to require watercraft access, due to the visual impact, potential for debris collection, likelihood of damage and downstream movement of the structure due to high water or ice and potential hazards presented to anglers and watercraft users. However, if necessary to provide safe and ecologically sound access for the riparian landowner, docks may be constructed not to exceed 48 square feet in size with no more than 4 feet of the dock extending over the water. Docks require a permit from the Department of Environmental Quality. The use of natural materials and camouflage is encouraged. Property owners are encouraged to build "log-sod covered" docks if conditions allow (see Appendix D).

10. HEIGHT OF STRUCTURES

The height of a structure can have a significant visual impact, both for the river user and surrounding property owners. Therefore, new structures must be no more than 2 1/2 stories and/or 35 feet high, whichever is less. Walkout or other basements are not included in the minimum story/height requirements.

11. LAND ALTERATION

Alteration of sensitive areas such as wetlands and floodplains can severely alter the natural character of the river corridor, drastically change the flood storage capacity of the area, reduce the pollutant filtering capability of the river corridor and destroy valuable wildlife and fisheries habitat. Therefore, dredging, filling or other land alteration activities within the 100-year floodplain or in wetlands within the Natural River District is prohibited. Draining wetlands in the Natural River District is also prohibited.

Ponds may be constructed within the Natural River District if:

- a. The pond is not constructed in a wetland or the 100-year floodplain.

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- b. The pond meets the building setback established for the area.
- c. Spoils are placed in a non-wetland, non-floodplain area landward of the native vegetation buffer.
- d. The pond is not connected to the river by any surface or subsurface drainage system.

Alteration of bluffs can have a negative visual impact and in some cases can result in increased potential for erosion of a previously undisturbed bluff. Therefore, alteration of the natural contour of the face of a bluff or the land from the crest of the bluff to the minimum bluff setback line is prohibited, except for minor landscaping activities between the crest of the bluff and the minimum bluff setback line. In some cases, reduction of the slope of an eroding bluff for erosion control purposes may be necessary and is permitted upon approval of the appropriate zoning authority.

12. STAIRWAYS

Stairways to provide access to the river on a steep slope where no other access is feasible can help prevent creation of an erosion problem. Therefore, stairways for river access are permitted upon approval of the zoning administrator, if:

- a. There is no other safe, feasible access to the river; and;
- b. Stairways are low-profile, no more than four feet wide and constructed without cutting into the streambank, slope or bluff, unless site and soil conditions dictate that a recessed stairway better meets the goals and objectives of Natural River designation, and;
- c. There are no landings associated with the stairway.

A single handrail may be permitted if necessary to provide safe access for the property owner. Only one river access stairway per lot or parcel will be permitted. Other stairways that meet the minimum building setback requirement are permitted

13. SIGNS

Signs for identification, direction, resource information, regulation of use and those related to permitted uses are allowed. Signs for the sale of products or services are prohibited, unless related to a permitted use, located on the site of the permitted use, not located in the native vegetation buffer and not visible from the river. Illuminated signs are prohibited. Signs may be no more than 2 square feet in area. Exceptions include one real estate sign no more than 4 square feet outside the native vegetation buffer, and public agencies' signs no larger than 10 square feet, of rustic design and not attached to vegetation. Some public agency signs may need to be larger to warn of impending danger or for interpretative or historic reasons.

14. DAMS

Construction of new dams on designated river segments is prohibited. Dams are in direct conflict with many of the goals of Natural River designation. They drastically alter the free-flowing condition of the stream and can severely impact fish populations by blocking fish migration, warming water temperatures over preferred levels and blocking downstream movement of woody debris.

Failure of an existing dam can have devastating effects on habitat and species for miles downstream of the failure. However, since dams existing at the time of designation are considered legal non-conforming structures, reconstruction of dams destroyed by a catastrophic event such as a major

flood event may be permitted. However, reconstruction of a dam that fails due to lack of maintenance or other negligence by the operator or owner of the dam is prohibited. Such owner/operators have demonstrated themselves to be poor stewards of the resource, and should not be given the opportunity to construct another dam that may fail again due to poor maintenance.

Reconstruction of a dam that failed due to a catastrophic event must comply with construction standards in effect at the time of application for replacement. Application for reconstruction must be received within one year of destruction. A reconstructed dam must be rebuilt with a height no greater than the original dam height. A bottom discharge and fish passage facilities must be provided where appropriate. A request for replacement of a dam will be handled as a request for reconstruction of a destroyed, non-conforming structure. Reconstruction of a dam also requires a permit from the Department of Environmental Quality.

15. BRIDGES

For the purposes of this plan, a bridge is defined as a structure of any span length designed to provide a pedestrian or vehicle stream crossing.

Bridges have beneficial as well as negative impacts. They provide access to a property owner's land that might not otherwise be accessible, and can prevent streambank erosion at sites where crossing the stream might be accomplished by wading or driving a vehicle through it in the absence of a bridge. Conversely, even properly constructed bridges are a major visual intrusion on the natural character of a river corridor, require removal of a portion of the native vegetation buffer to access the bridge, can result in wetland and floodplain fill and can result in sedimentation of the stream during construction. If not properly designed and installed, bridges can create long-term erosion problems, block fish passage, cause flooding problems, collect debris, and severely alter the integrity of the streambed and the free-flowing condition of the stream.

Therefore, the following standards apply when constructing new or replacement bridges:

All Designated Segments

- a. **All new or replacement bridges** must meet all provisions of 1994 PA 451, Inland Lakes and Streams Part 301, Wetlands Protection Part 303, Floodplain Regulatory Authority Part 31 and Soil Erosion and Sedimentation Control Part 91.
- b. **All existing bridges that are destroyed** by any means, whether on a tributary or mainstream segment, may be replaced. On mainstream segments, destroyed pedestrian bridges may not be replaced with vehicle bridges. Destroyed bridges must be replaced within 18 months of destruction or the replacement bridge will be subject to new bridge standards.
- c. **New bridges are not permitted on any lot or parcel that is created after the effective date of rules or ordinances implementing this plan.**

Mainstream

- a. **New bridges are not permitted on mainstream segments.**
- b. All replacement bridges on mainstream segments must span the base flow channel, have a minimum clearance of 5 feet between the ordinary high water mark and "low steel" (the bottom of the bridge deck and/or deck supports other than abutments), and be a structure with a natural bottom, i.e. no pipe, box or arch culverts.

Tributaries

- a. **New pedestrian bridges are permitted on all tributaries**, upon receipt of a permit from the appropriate zoning authority, provided the lands connected by a new bridge were, at the time of adoption of the rules or ordinances that will implement this plan, and continue to be, collectively owned by a single party (or parties in the case of joint ownership of the entire land area on both sides of the river).
- b. **New permanent vehicle bridges on tributaries may be allowed by special use permit**, if:
 - i. No legal access to the land by public road or legal easement exists within one mile of the portion of the lot or parcel that is currently accessible by road or legal easement, and;
 - ii. The lands connected by the new bridge were, at the time of adoption of the rules or ordinances that will implement this plan, and continue to be, collectively owned by a single party (or parties in the case of joint ownership of the entire land area on both sides of the river - see c. below for exceptions), and;
 - iii. The purpose of the bridge is to gain access for timber management, agricultural activities, house construction when no other buildable site exists, or other activity where the need can be demonstrated and applicable development standards can be met, and;
 - iv. A suitable crossing site exists where sediment delivery to the stream and wetland fill can be minimized.

NOTE: Temporary vehicle bridges on tributaries for the purpose of access for timber harvest may be permitted without a special use permit upon approval of the appropriate zoning authority, provided they are constructed in a manner that minimizes disruption of the stream and are removed immediately after harvesting activities. Disturbed areas in the native vegetation buffer must be re-vegetated, any fill placed must be removed and the land must be returned to its original grade as soon as possible after removal of the bridge. Proper erosion/sedimentation control methods must be used during placement and use of the bridge.
- c. New bridges linking properties in separate ownership will not be permitted except in areas where construction of such a bridge to access a permitted building site will result in less resource damage than construction of another type of permitted access. The exception will only apply to lots or parcels that were created before the effective date of rules or ordinances implementing this plan.
- d. Only one bridge is permitted to access a portion of land that is otherwise inaccessible from the owner's contiguous property.
- e. Permanent new bridges on tributaries must:
 - i. Span the base flow channel and be a structure with a natural bottom, i.e. no pipe, box or arch culverts, and;
 - ii. In the case of pedestrian bridges, be constructed such that use by any motorized vehicles, including dirt bikes, ATVs, etc., is excluded.
- f. Permanent bridges replacing bridges that have natural bottoms on tributaries must:
 - i. Span the base flow channel and be a structure with a natural bottom, i.e. no pipe, box or arch culverts, and;
 - ii. In the case of pedestrian bridges, be constructed such that use by any motorized vehicles, including dirt bikes, ATVs, etc., is excluded.
- g. Permanent bridges replacing bridges without natural bottoms on tributaries must:
 - i. Span the base flow channel, and;

- ii. In the case of pedestrian bridges, be constructed such that use by any motorized vehicles, including dirt bikes, ATVs, etc., is excluded.

16. NEW COMMERCIAL USES IN THE NATURAL RIVER DISTRICT

Commercial uses such as gas stations, motels, retail stores, etc., often result in very intense use and include large areas of impermeable surface such as rooftops and parking lots that channel stormwater runoff to the stream. These type uses are not generally compatible with a Natural River setting. To maintain the natural character of the river corridor, development in the Natural River District will generally be restricted to residential uses. However, **certain commercial uses that are compatible with the natural setting desired in the river corridor may be permitted upon receipt of a special use permit.** Commercial uses that are permitted must not conflict with the goals and objectives of Natural River designation. A commercial use may only be permitted if the property owner demonstrates that there is a compelling reason to locate the use within the Natural River District if contiguous property under the same ownership is available outside the District. **Commercial uses that may be allowed within the Natural River District include:**

a. Rental cabins

Rental cabins may be permitted in the Natural River District, subject to the following development standards:

1. The number of cabins permitted shall be based on the rate of 1 cabin per 200 feet of frontage. Clustering of rental cabins is permitted and encouraged, however the ratio of 1 cabin per 200 feet of river frontage will not be exceeded. For each cabin placed in a cluster-type setting, a portion of the parent lot or parcel containing square footage, width, depth and buildable area equal to a newly created separate legal lot or parcel as described in the “**MINIMUM LOT OR PARCEL SIZES**” section of this plan will be made subject to a permanent conservation easement or deed restriction that prohibits construction of any structures within that portion of the lot or parcel, or the development rights to a portion of the parent lot or parcel containing square footage, width, depth and buildable area equal to a newly created separate legal lot or parcel as described in the “**MINIMUM LOT OR PARCEL SIZES**” section of this plan will be sold, donated or otherwise conveyed in perpetuity to a land conservancy, local unit of government or the State. The agency acquiring the development rights will agree in writing to refrain from development of the land in perpetuity.
2. The size of each cabin shall not exceed 900 square feet and one story in height. The cabin shall not contain sleeping accommodations for more than eight people.
3. Each cabin shall be set back a minimum of 200 feet from the ordinary high watermark. All associated buildings and structures shall be located outside of the Natural River District.
4. Temporary recreational facilities, including tents, camper trailers and recreational vehicles shall be located outside of the Natural River District.
5. Each cabin shall be a minimum of 75 feet from the property line of adjacent riverfront properties.
6. Establishment of vegetative buffers along side or back lot or parcel lines may be required for rental cabins that are adjacent to existing residential uses. Buffers shall consist of plant material that is indigenous to the area in a strip at least 20 feet wide composed of deciduous trees interspersed with coniferous trees to be spaced not more than 10 feet apart. Deciduous trees shall be a minimum of 8 feet in height and coniferous trees a minimum of 5 feet in height at the time of planting. The buffer shall also include dense

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shrubs placed not less than 5 feet apart having a minimum of 3 feet in height when planted. The entire buffer shall be maintained in at least as healthy a condition as when planted.

7. Docks may be constructed for the private use of occupants of the rental cabins. Permanent and seasonal docks shall comply with the general standards for docks and all of the following provisions:
 - i. Docks shall be no larger than 4 feet X 12 feet, with no more than 4 feet of the dock extending into the water.
 - ii. Docks may be constructed at the rate of 1 dock per 1000 feet of frontage. If the property in question contains less than 1000 feet of frontage, one dock will be permitted.
 - iii. Docks will be constructed of natural materials that blend with the natural surroundings.
 - iv. Access to a dock or docks will be along a single designated footpath no more than 4 feet wide to minimize disruption of the native vegetation buffer.
 - v. Any steps or stairs necessary on the streambank to access the dock shall be constructed without cutting into the streambank, unless site and soil conditions indicate that a recessed stairway will better meet the goals and objectives of designation.

b. Campgrounds

In order to direct use to specific locations in the river corridor, thereby alleviating the litter and erosion problems associated with uncontrolled dispersed camping, new campgrounds may be permitted in the 400-foot Natural River District, provided a special use permit is obtained. New campgrounds will comply all of the following standards:

1. Commercial buildings associated with the campground are prohibited in the District.
2. All non-commercial permanent structures shall be at least 200 feet from the river's edge.
3. Campsites are permitted at a density of no more than 4 sites per acre of land that is located in the District and landward of the native vegetation buffer.
4. A 100 foot-wide native vegetation buffer along the river will be maintained.
5. Campsites that accommodate wheeled motor vehicles will be at least 200 feet from the river's edge.
6. Walk-in campsites will be landward of the native vegetation buffer.
7. Docks may be constructed at the rate of one 48 square foot dock for each 200 feet of river frontage, accessed by a single footpath no more than four feet wide.
8. No motorized vehicle access to the river is permitted.

Launching or retrieval of commercial watercraft, other than by registered campers on-site, is prohibited at any newly developed campground.

c. Agriculture

Agricultural activities, if located in close proximity to the river without adequate buffers, can result in degradation of water quality, removal of critical streamside vegetation and sedimentation of the stream. However, with proper location of these activities relative to the river's edge, most such concerns can be addressed. Therefore, agriculture, including general and specialized farming, is permitted in the Natural River District. New aquaculture facilities, expansion of existing aquaculture facilities, and concentrated animal feeding operations are not permitted within the

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Natural River district. New agricultural activities, including growing crops, grazing cattle and others, are not permitted within the native vegetation buffer. Such agricultural activities do not require a zoning permit. However, construction of any structure does require a permit. Structures, including residences, outbuildings, fences and other structures, must meet the minimum building setback standard described in “**BUILDING SETBACKS.**”

It is common agricultural practice to rotate the use of fields. Some previously used fields may be located within the native vegetation buffer. Therefore, the resumption of prior agricultural uses in the native vegetation buffer is permitted, provided the cessation of use was:

1. Within 10 years of resumption of use, or;
2. Due to implementation of a management plan written prior to adoption of rules or ordinances implementing this plan, or;
3. The result of written agreements with a governmental agency or agencies entered into prior to adoption of rules or ordinances implementing this plan, or;
4. The result of written agreements with a governmental agency or agencies entered into after adoption of rules or ordinances implementing this plan, where the term of cessation of use specified in the agreement is for 10 years or less, or;
5. Required or imposed by a governmental agency or agencies.

d. Home occupations

Home occupations, such as beauty shops, real estate offices, insurance businesses, etc., are permitted, subject to the following provisions:

1. The use of the dwelling unit, or related structure, for the home occupation must be clearly incidental and subordinate to its use for residential purposes.
2. Equipment, supplies or a process will not be used in a home occupation if it creates noise, vibration, fumes, odors or electrical interference that is detectable off the premises.

Businesses that are considered “home-based occupations,” i.e. the actual business is conducted off-site but some equipment such as logging trucks or a water well drilling rig is stored at the home site, are permitted. However, activities that would result in effects such as listed in 2. above, are not permitted on-site.

e. Mineral extraction

Extraction of minerals is necessary for human existence. However, activities associated with mineral extraction can have significant negative impacts on a river environment, including habitat destruction, ground and surface water contamination, fragmentation of forests, stream sedimentation and others. Therefore, new development, exploration or production of oil, gas, brine, sand and gravel or other minerals that requires disturbance of the surface is not permitted within 300 feet of any designated river segment (this is the maximum private land setback for this activity authorized by Natural Rivers Part 305). Companies involved in such activities are encouraged to coordinate exploration and extraction activities and location of access roads to minimize habitat disruption.

f. Forest management

New commercial forest management activities are allowed without a permit landward of the native vegetation buffer. Any permanent structures related to forest management activities and all structures placed on-site for more than 30 days must meet building setbacks. Forest management activities within the native vegetation buffer require a permit from the appropriate zoning authority and are subject to the standards outlined in the “**NATIVE VEGETATION BUFFER**” section of this plan.

g. Prohibited new commercial uses

New golf courses, or expansion of existing golf courses, are prohibited within the Natural River District.

New watercraft liveries, expansion of existing liveries, or expansion of commercial launching or retrieval of watercraft in the designated portions of the river system is prohibited.

New or expanded diversions of water from a designated river for commercial purposes is prohibited if it is determined that such a diversion will negatively impact aquatic life or other riparian owners.

All other new commercial uses are prohibited in the Natural River District.

17. NEW INDUSTRIAL USES IN THE NATURAL RIVER DISTRICT

New industrial uses are prohibited in the Natural River District.

18. LEGAL NONCONFORMING LOTS, STRUCTURES AND USES

NOTE: In this section, the term “lot” means lot or parcel.

Legal nonconforming lots, structures and uses are those that were legal before designation of the Upper Manistee River system as a Michigan Natural River, and that will become or remain nonconforming upon adoption of local zoning ordinances or State zoning rules based on the use and development standards in this plan. They are commonly known as "grandfathered" lots, structures and uses. It is the long-term goal of any zoning ordinance to reduce the number of or mitigate the impact of these structures, lots and uses, thus better realizing the goals of establishing the zoning district. All local zoning ordinances should have provisions in effect for addressing these non-conforming situations. Accordingly, the following provisions will be in effect in Natural River District areas subject to State Zoning Rules.

a. Nonconforming lots

Legal nonconforming lots are those that were legally established before the adoption of ordinances or rules implementing this plan, and that now do not meet one or more dimensional standards such as minimum lot width or minimum lot area. These lots are subject to all of the following:

1. When the combination of 2 or more contiguous nonconforming lots owned by the same person results in greater conformance with the dimensional requirements in the Natural River zoning ordinance or rule, the lots must be combined prior to erection of a structure on those lots by that property owner. This provision does not apply to lots in a plat established prior to adoption of rules or ordinances implementing this plan if more than 50% of the lots

- in the plat contain a single-family residence. A property owner may sell any legally established nonconforming lot that has not been combined with another lot.
2. Establishment of a principal use such as a single-family residence on a legal nonconforming lot will be permitted without the need for a variance, if:
 - i. The principal use meets all development standards except the minimum lot width and/or minimum lot gross square footage requirements, and;
 - ii. The owner of the nonconforming lot does not own other contiguous properties that, if combined with the nonconforming lot, would result in increasing the conformity of the lot, as described in 1. above.
 3. Establishment of a principal use will not be permitted on a nonconforming lot that does not comply with the provisions of 2. above without a variance from the appropriate zoning authority.

b. Nonconforming uses

Legal nonconforming uses are types of use, such as industrial or intense commercial use, that were legally established before adoption of ordinances or rules implementing this plan, but that are currently not permitted in the Natural River District. Legal nonconforming uses may be continued, subject to all of the following:

1. The nonconforming use may not be enlarged, increased, or extended to occupy a greater area of land than was occupied on the effective date of the applicable zoning ordinance or rule without a land use variance. This does not apply to uses allowed by special use permit. Uses allowed by special use permit may be expanded upon receipt of a special use permit if the increased use is in compliance with the standards for special uses in this plan.
2. Structures associated with a legal nonconforming use may not be moved to any other portion of the lot that is occupied by the use unless the move would result in greater conformity with the applicable development standards.
3. If the legal nonconforming use of land ceases for any reason for a period of 12 months, any subsequent use of the land must conform to the development standards for that land in the appropriate zoning ordinance or rule.
4. A previously established lawn in an area subject to native vegetation buffer standards is considered a nonconforming use, and is subject to standards applying to nonconforming uses.

c. Nonconforming structures

A legal nonconforming structure is one that was legally built prior to adoption of ordinances or rules implementing this plan, but that now does not meet one or more dimensional standards. Legal non-conforming structures are subject to all of the following:

1. A legal nonconforming dwelling may not be enlarged or altered in a way that increases its nonconformity, such as expanding toward the river's edge or increasing the height above the maximum height standard. However, the ground floor area of any legal nonconforming dwelling may be increased by up to 50% (or 75% for a minor variance) of the existing enclosed ground floor living area cumulative from the date of nonconformance, or to the minimum extent necessary to comply with local standards for minimum legal floor area for dwellings, whichever is greater, through alterations, repairs, and additions, if the increase does not increase the nonconformity of the dwelling. An addition of a second story requires a variance. Any enlargement of a legal nonconforming dwelling must, to the extent possible, be in compliance with all setback and other building requirements.

2. **Expansion of a nonconforming dwelling may be permitted by the zoning administrator, without the need for a variance, if:**
 - i. When any part of the expansion is located within the native vegetation buffer, expansion of the dwelling is to the landward side of the existing dwelling and is less than a 50% increase in enclosed ground floor living area, and the height of the expansion is no greater than the height of the original dwelling, and is not located within the 100 year floodplain or a wetland area or:
 - ii. When the expansion is located completely outside the native vegetation buffer, expansion of the dwelling is no closer to the river than the closest point of the existing dwelling and is less than a 50% increase in enclosed ground floor living area, and the height of the expansion is no greater than the height of the original dwelling, and is not located within the 100 year floodplain or a wetland area.
3. All other expansions of a legal non-conforming structure that do not meet the criteria in 2. above shall be treated as a variance.
4. **If any nonconforming structure is destroyed** by any means, other than by willful destruction by the property owner, to an extent that is more than 50% of its replacement cost, restoration of the structure may be approved by the zoning administrator without the need for a variance if the follow standards are met:
 - i. The building or structure is not located on land subject to flooding (the 100-year floodplain), and;
 - ii. The presence of the nonconforming structure will not lead to accelerated bank erosion or other material degradation of the river resource, and;
 - iii. The reconstructed structure occupies the same building area, i.e. "footprint," and contains the same square footage as the original structure, and;
 - v. Application for permission to restore a damaged structure is made within 12 months of the time of damage. An extension may be granted if the property is held in probate, an insurance settlement related to the damage is in dispute or a criminal investigation related to the damage is in progress.If the above standards cannot be met, restoration will require a variance.
5. If a structure is willfully destroyed by the property owner to an extent that is more than 50% of its replacement cost, and the property contains sufficient depth to accommodate a similar structure significantly farther from the river than the location of the destroyed structure, paragraph 4. above does not apply. The property owner shall be required to meet the building setback requirement to the greatest extent possible when constructing any new or replacement structure.
6. A nonconforming structure may not be moved, in whole or in part, to any other portion of the lot or parcel that is occupied by the structure unless the move would result in greater conformity with the applicable zoning standards. Moving a nonconforming structure requires a zoning permit and may require a variance.

E. PUBLIC LANDS/PROGRAMS AND UTILITY MANAGEMENT

The following use and development standards apply to public lands adjoining the designated segments of the river system, the river channel bordered by those public lands and to utilities and publicly provided facilities. In many cases, the Rules for Utilities and Publicly Provided Facilities adopted under provisions of section 30514 of Natural Rivers Part 305 of 1994 PA 451 also apply (see Appendix B).

1. NATIVE VEGETATION BUFFER

Maintenance of native vegetation on public lands along streams is a critical tool in protecting water quality, preventing soil erosion and sedimentation, cooling stream temperatures, protecting and enhancing fisheries habitat, supplying energy for the river system, providing wildlife migration corridors and habitat, particularly for many sensitive species, and screening development from the river users' view. Therefore on publicly owned land along designated streams in the Upper Manistee River system, a restricted vegetative cutting zone ("native vegetation buffer") will be maintained.

The native vegetation buffer on public lands on Manistee mainstream segments and the North Branch of the Manistee River includes:

- a. All lands within 175 feet of the river's edge, and;
- b. The entire face of a bluff where the toe of the bluff is within 175 feet of the river's edge, and;
- c. The lands within 50 feet of the crest of a bluff.

NOTE: b. and c. above may result in a native vegetation buffer that extends more than 175 feet from the river's edge.

The native vegetation buffer on public lands on all other tributaries includes:

Slope of land adjacent to stream Minimum native vegetation buffer width

0-10%	100 feet
11-20%	115 feet
21-32%	135 feet
33+%	155 feet, plus the entire face of any bluff where the toe of the bluff is within 155 feet, plus the land within 50 feet of the crest of a bluff.

All distances are measured horizontally from the ordinary high water mark (river's edge).

For the purposes of this plan, on public land a bluff is considered to be any slope that rises at a slope of 33 degrees or greater to a height of at least 25 feet above the toe of the bluff. The crest of a bluff is considered to be the first riverward facing slope (roughly paralleling the river for at least 100 feet) that breaks to a slope of less than 18 degrees for a distance of at least 25 feet away from the river.

Cutting in the native vegetation buffer is prohibited, unless permitted for the following reasons, subject to review by the MDNR Northern Michigan Rivers Administrator in consultation with Management Unit staff for MDNR Forest, Minerals and Fire Management Division, Wildlife Division and Fisheries Division and/or US Forest Service staff. Cutting of vegetation in response to unique, unforeseen situations other than the following, or for wildlife habitat restoration and management activities on state-owned lands, may be permitted upon approval of the MDNR Director:

For all designated areas:

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- a. Harvest of “row trees,” such as those in pine plantations, in order to harvest available timber and accelerate conversion of the stand to a more natural state. Such harvest should be done in several stages, leaving enough trees after each cut to avoid windthrow of the remaining trees, and leaving a minimum number of properly-spaced, healthy trees after the final cut. Native species should be planted in the harvested areas to accelerate conversion to a more natural state.
- b. Disease and insect control.
- c. Fire suppression (for obvious reasons, no prior approval is necessary for fire suppression activities).
- d. Maintenance of existing trails, campgrounds and public access sites (minor vegetation cutting to maintain existing trails, campgrounds and access sites does not require prior approval).
- e. Establishment of any new non-motorized foot trail (see “Roads and Trails” section);
- f. Providing footpath access to the river for a new, walk-in access site, campground or cabin.
- g. Establishment of low-impact walk-in campsites associated with a campground.
- h. Maintenance of existing public road and utility corridors according to provisions of the Natural River Rules for Utilities and Publicly Provided Facilities. These rules allow mechanical cutting of tall-growing vegetation within the native vegetation buffer in utility corridors, but do not allow clear-cutting or removal of lower growing species.

For Big Cannon Creek and Hopkins Creek:

In addition to the above standards, selective cutting for wildlife habitat or timber management may be performed no closer than 100 feet from the river’s edge, subject to seasonal, wetland and topographic restrictions.

For Goose Creek:

In addition to the above standards, selective cutting for wildlife habitat or timber management may be performed no closer than 75 feet from the river’s edge, subject to seasonal, wetland and topographic restrictions.

For all other tributaries:

In addition to the above standards, selective cutting for wildlife habitat or timber management may be performed no closer than 50 feet from the river’s edge, subject to seasonal, wetland and topographic restrictions

For all areas:

The use of wheeled, tracked or other heavy equipment is prohibited in the native vegetation buffer.

Wetlands contain some of the most diverse, productive and important habitats within river corridors. Many of the functions and values of wetlands are determined by the vegetation present in the wetlands. Therefore, although not required, it is recommended that vegetation located in a wetland that is contiguous to the required native vegetation buffer be left in its natural state.

Vernal pools (small, ephemeral ponds that result from spring rains and snowmelt but “disappear” as the season progresses) have been shown to be of great value to a wide variety of species at a critical time of the year. Particular attention should be paid to leaving vegetation within these areas and in a vegetated buffer of up to 100 feet wide around these ponds. For ponds that are located entirely outside the required native vegetation buffer, a connecting corridor of natural vegetation at

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least 100 feet wide should be left between the pond and the native vegetation buffer whenever possible.

2. VEGETATION IN THE STREAM CHANNEL

Vegetation in the stream channel, particularly large woody debris, provides critical fish habitat, maintains complex stream channel morphology, creates a diversity of water velocities and provides substrate for aquatic invertebrates. For these reasons, it is important to leave as much vegetation in the stream channel as possible. However, larger stream segments are multiple use areas, with watercraft use being an important recreational component of some areas. Therefore, subject to review by the MDNR Northern Lower Michigan Rivers Administrator in consultation with MDNR Fisheries Division and Forest, Minerals and fire Management division staff, and/or USFS staff, the following standards for removal of vegetation in the stream channel will apply:

- a. On the mainstream of the Manistee River, vegetation in the stream channel may be selectively pruned to allow clearance of a passage generally no more than 8 feet wide for safe navigation and to the extent necessary to alleviate flooding that threatens buildings. It is recommended that a portion of vegetation no more than 4 feet wide be removed, if necessary for the above reasons, in the braided channel areas of the mainstream of the Manistee River between County Road 612 and Cameron Bridge Road.
- b. Portions of trees, logs and other natural material imbedded in the stream channel will not be disturbed.

3. CAMPGROUNDS

Well-designed, properly located and constructed campgrounds in proximity to the river can provide the recreating public a rewarding camping experience and serve to foster appreciation of the river environment. They can also function to concentrate use in controlled areas, thereby helping to prevent resource damage associated with dispersed camping by large groups. However, campgrounds along the river can generate intense use over short periods of time. Such use can result in many of the same impacts as residential use, such as streambank erosion, vegetation removal and increased runoff to the stream.

Therefore, the following standards will apply for new public campgrounds in the Natural River District:

- a. New public campgrounds will be primitive in nature and designed for low intensity use.
- b. Campsites that accommodate wheeled motor vehicles will be placed landward of the native vegetation buffer.
- c. Walk-in campsites may be placed within 100 feet of the river's edge when it is possible to establish these sites with a minimum of woody vegetation disturbance.
- d. Campsites will be at a density of no more than 4 sites per acre of land located between 100 feet and 400 feet from the river's edge.
- e. A single footpath, no more than four feet wide, from the campground to the river is permitted.
- f. Docks may be permitted for new campgrounds on the mainstream of the Manistee River downstream of Cameron Bridge Road. If a dock is necessary to provide safe access to the river or to prevent resource damage, the single permitted footpath mentioned above will lead to the dock. The dock will be no more than four feet wide and twelve feet long with

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- no more than four feet of the dock extending into the river. Docks will be located where they do not require a stairway leading to the river's edge.
- g. On all designated streams, camping is permitted only at designated campgrounds, or on State lands landward of the native vegetation buffer. However, walk-in or canoe-in low impact tent camping is permitted no closer than 75 feet from the water's edge on State lands.

The Department of Natural Resources will again solicit interest from the appropriate local units of government regarding re-opening of State Forest campgrounds at M-66 (Smithville). If there is sufficient interest from the units of government to re-open and manage the campground, the DNR will enter into cooperative agreements with them to re-open those campgrounds and maintain them in a satisfactory condition. The option of re-opening these campgrounds under contract with private interests may also be explored. If re-opened, modifications to reduce erosion, sedimentation and visual impacts of the campgrounds will be implemented if necessary.

4. PUBLIC ACCESS SITES

Adequate access to the river is critical to providing the public with an enjoyable river experience. However, erosion at some access sites is a leading contributor of sediment to the stream system.

The Upper Manistee River Access Site Committee has done an inventory of all existing formal and informal access sites on the mainstream from Mancelona Road to M-66 to determine the condition of the sites and form a basis for determining necessary site modifications or, in some cases, closure of sites or development of new sites, in order to protect the river's values and public safety. In conjunction with that inventory, Michigan State University conducted a user survey to determine the level and type of use of those access sites. Results of the inventory/survey will be available as an appendix to this plan.

Site modifications may include planting of additional native vegetation, repair of deteriorated and unsafe stairs and boat access areas and other measures. The Department of Natural Resources shall pursue cooperative agreements with area Soil Conservation Districts, river restoration committees and other groups to assist in implementing the necessary modifications to sites.

If it is determined that new fishing/canoeing access sites are necessary in the future, sites will be "walk-in" only. All parking areas will be unpaved and, along with associated structures, be located landward of the native vegetation buffer. The parking areas should be designed to direct runoff away from the river. A single trail leading to a small streamside access area may be constructed to allow access by foot, and by persons with disabilities if site conditions allow, but no access to the river for motorized vehicles, except motorized wheelchairs or similar mobility aids for persons with disabilities, will be permitted.

If in the future it is determined that, because of increased intensity of use, a new vehicle-accessible boat access is needed, it shall be constructed so as to minimize erosion and sedimentation to the river, be limited in size and placed so as to be as unobtrusive as possible. All associated structures and parking areas shall be placed landward of the native vegetation buffer.

Camping will not be permitted at any State administered public access site in the watershed unless there are a limited number of primitive, designated campsites clearly identified at the site. Establishment of campsites at these access sites will be subject to the development standards in the public "Campgrounds" section of this plan. Camping other than at designated sites will not be permitted within 1/4 mile of any access site.

5. PUBLIC RENTAL CABINS

Publicly-owned cabins can result in resource impacts similar to residential construction. However, proper design and construction can alleviate many of those potential impacts and provide the river user with a different type of “camping” experience.

No construction of public rental cabins in the Upper Manistee River corridor is planned at this writing. However, future public cabins available by reservation only may be constructed under the following conditions:

- a. Cabins will be landward of the native vegetation buffer (see “**NATIVE VEGETATION BUFFER**” section).
- b. Cabins will be placed a minimum of 300 feet apart.
- c. Each cabin will be no more than one story in height and shall have no more than 900 square feet of floor area.
- d. Access roads, if necessary, will be developed landward of the cabins.
- e. Additional vegetative buffers may be required for cabin sites located near residential uses.

6. ROADS AND TRAILS

Construction of roads in the river corridor often results in introduction of impervious surfaces and increased runoff, vegetation removal, wetland and floodplain fill and habitat disturbance. Trails can provide an enjoyable recreational experience, but improperly located trails can also result in excessive erosion and vegetation removal.

Therefore the following standards will apply to construction of new roads and trails.

- a. Public roads that are an integral part of subdivisions, site condominium developments, planned unit developments or other concentrations of residential structures may be constructed provided they meet the minimum private land building setback requirement, with no reduction in setback based on bank height. All other new public roads, including all classes of county roads, State and interstate highways, forest roads and all other roads constructed and maintained by a public agency or utility, must be constructed outside the 400-foot Natural River District.
- b. New public road/stream crossings are prohibited
- c. To the maximum extent feasible, all replacement road/stream crossing structures must span the base-flow channel of the stream. Structures with natural bottoms are strongly recommended, particularly on mainstream segments. All public road/stream crossings must also comply with the provisions of the Natural River Rules for Utilities and Publicly Provided Facilities. All road/stream crossing projects will be reviewed by the appropriate Department of Environmental Quality and Department of Natural Resources staff before, during and after construction to ensure compliance with permit conditions. Public road agencies are strongly encouraged to improve road/stream crossings that are contributing sediment to the stream system.
- d. New ORV/ATV trails are prohibited in the Natural River District (within 400 feet of the river’s edge). Existing ORV/ATV trails within the Natural River District will be evaluated,

- an inventory of areas showing resource damage within the Natural River District performed, and measures to correct those problems implemented. Rehabilitation of damaged areas of such trails within the Natural River District will receive high priority for funding. If relocation of an existing trail is appropriate and feasible, the trail will be relocated outside the Natural River District.
- e. New equestrian trails, snowmobile trails or mountain bike trails are prohibited within the native vegetation buffer. The equestrian trail stream crossing at the Hopkins Creek Trail Camp will be modified to reduce erosion and sedimentation of the stream.
 - f. New, unpaved (except for occasional low-profile boardwalks to prevent damage to wetland areas), non-motorized trails designed for foot or cross-country ski traffic are permitted. They must be primarily located a minimum of 100 feet from the river's edge, but may include occasional loops to the river's edge, with generally no more than 50 feet of the side loop located within 10 feet of the stream. Such loops may be located as topography dictates, but will not be located more than one for every 1/4 mile of main trail. Loops near the river's edge will not be constructed in wetland areas. No docks or other structures will be constructed or placed in association with the loops. New trails may not cross a designated mainstream segment. Crossings of designated tributaries will be kept to a minimum, span the base-flow channel of the stream, have a natural bottom, be located in primarily upland areas and be constructed of timber.

7. MOTOR VEHICLES IN THE NATURAL RIVER DISTRICT

Uncontrolled access to the river's edge by motor vehicles can result in significant streambank erosion, compaction of soil, littering, trash dumping on public lands and vegetation removal. Therefore, use of any motor vehicle on State land within 400 feet of the river's edge is prohibited unless on a designated public road, access road to a designated campground, public access site or trail-head, or other road or trail posted "Open." Emergency vehicle use and vehicle use for official work duties by public employees is permitted within the District on roads other than those described above. Department of Natural Resources staff will consult with citizens to determine what traditional access roads should remain open and which should be closed.

8. MINERAL EXTRACTION

Extraction of minerals is a necessary part of human existence. Minerals provide fuel and other materials to allow people to conduct daily activities. However, mineral extraction activities can also be disruptive to surface and subsurface resources. Erosion and sedimentation, vegetation removal, surface and groundwater contamination and increased runoff are all potential impacts of some types of mineral extraction.

Therefore, the following standards will apply to new mineral extraction activities on public land:

- a. New mineral extraction activities, including gravel mining, oil and gas drilling and any other mineral extraction activity, are prohibited within 1/4 mile of the river's edge on public land, subject to variance procedures for activities on leases granted prior to adoption of this management plan.
- b. New State-owned mineral right leases for any parcel of land on which any portion of that parcel is within 1/4 mile of the river's edge will be granted as "non-development" leases only, prohibiting disturbance of the surface.
- c. No surface use permits will be granted for any mineral extraction activity within 1/4 mile of the river.

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- d. No new drilling permits will be granted on new leases for extraction of State or Federally owned minerals within 1/4 mile of the river's edge if such extraction would result in disturbance of the surface within 1/4 mile of the river's edge.
- e. Relatively non-disruptive exploration activities, such as seismic testing, will be allowed landward of the native vegetation buffer if there is a reasonable expectation that minerals discovered through this activity may be extracted using methods that will not disturb the surface within 1/4 mile of the river, i.e. directional drilling.

MDNR will pursue development of a Memorandum of Understanding with MDEQ Geological Survey Division to implement these standards.

9. PIPELINE AND OTHER UTILITY STREAM CROSSINGS

If properly performed, pipeline, electric or communication line and other similar underground stream crossings can be non-disruptive activities. Improper crossings, however, can be a major source of habitat disruption, erosion and stream sedimentation.

Therefore, pipeline, electric or communication line, or other similar crossings are subject to the following:

- a. **On public land**, all pipeline, electric or communication line or other similar crossings will be accomplished by boring under the streambed. The entry and exit point for the pipe or line shall be landward of the native vegetation buffer and not located in a wetland (the entry and exit points for the pipe or line may be closer than the landward edge of the native vegetation buffer if located in a road right-of-way and not resulting in significant disturbance of vegetation or wetlands, subject to approval by the MDNR Northern Michigan Rivers Administrator).
- b. **On private land**, with the exception of electric transmission lines referenced in the Rules for Utilities and Publicly Provided Facilities and electric service lines to permitted uses on tributaries, all pipeline, communication line, primary electric distribution line or other similar stream crossings will be accomplished by boring under the streambed. The entry and exit point for the pipe or line shall be landward of the native vegetation buffer and not located in a wetland (the entry and exit points for the pipe or line may be closer than the landward edge of the native vegetation buffer if located in a road right-of-way and not resulting in significant disturbance of vegetation or wetlands, subject to approval by the MDNR Northern Michigan Rivers Administrator).
- c. **On private land along tributaries**, overhead electric service line stream crossings are permitted upon approval of the appropriate zoning authority. In the native vegetation buffer beneath these lines, tall-growing tree species may selectively removed. Shrubs, low-growing tree species with a mature height of less than 20 feet and other native vegetation may not be removed.
- d. If an **alternative method of constructing a crossing** can be shown to be less disruptive to the resource than the method described in a. and b. above, it may be permitted by the Northern Michigan Rivers Administrator.
- e. Activities must comply with all applicable provisions of the Rules for Utilities and Publicly Provided Facilities developed under section 30514 of Part 305 of 1994 PA 451 for erosion and sedimentation control, blocking of damaging ORV access, cutting in the native vegetation buffer and others. Note: for the purposes of this plan and the above-referenced rules, the terms "native vegetation buffer" and "natural vegetation strip" are interchangeable.

10. LAND ALTERATION

Wetland and floodplain areas in the river corridor provide critical wildlife and fisheries habitat, maintain flood storage capacity, filter runoff, provide groundwater recharge areas and perform many other valuable functions. Protection of these areas is critical to maintaining the health, diversity and natural character of the river.

Therefore, land alteration on public lands is subject to the following:

- a. Excavation, draining or filling of wetlands and excavation or filling of 100-year floodplain areas within 400 feet of the river's edge is prohibited.
- b. Land alteration of any area within the native vegetation buffer is prohibited except for minor alterations associated with permitted activities such as establishing foot trails, minor alterations related to maintenance of existing facilities or bank stabilization activities.
- c. Land alteration of wetland/floodplain areas greater than 400 feet from the river's edge for wildlife habitat management or other purposes is permitted upon receipt of proper permits from the Department of Environmental Quality, but such activity is discouraged within 1/4 mile of the river's edge.

11. RIVER RESTORATION/BANK STABILIZATION

Stabilization of eroding streambanks on designated Natural Rivers is a controversial practice. Over time, rivers naturally erode banks, change course and transport sediment. However, this process has been greatly accelerated by human activities over the past 150 years. These activities include catastrophic events such as dam failures and the logging boom of the last half of the 19th century, and more subtle activities such as unrestricted access by canoeists, anglers and other recreational users. Erosion has also been accelerated by removal of streamside vegetation during construction and maintenance of residences and businesses. This activity can also, over time, result in less stable flows in the river, leading to greater erosive velocities during high water periods. It is clear, therefore, that not all eroding streambanks are the result of naturally-occurring events.

Sedimentation as a result of excessive erosion leads to degraded fisheries habitat in the form of buried spawning beds and insect habitat, streams becoming wider and shallower and thus more susceptible to the sun's warming rays, and in rare cases, direct mortality of fish from excessive sediment. Eroding banks can also threaten buildings which, having been built too close to the river bank, are in danger of falling into the river.

In order to restore some of the historic fisheries habitat in the Manistee River system, and to protect structures on public and private property, stabilization of streambanks is permitted. However, certain restrictions must apply.

It is strongly encouraged that vegetative stabilization methods be used on all sites that are appropriate. The use of "soft armor" manufactured materials such as biodegradable erosion control blankets, pre-vegetated mats, rolled fiber logs and others should be evaluated where feasible. If riprap must be used to stabilize the toe of the slope, only natural fieldstone, i.e. glacial cobble, may be used. The minimum amount of riprap to stabilize the bank will be used, with vegetative methods

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used to stabilize the upper portions of the bank whenever possible. The top line of riprap should be varied in height to minimize the visual perception of a “lined channel.”

The Upper Manistee River Restoration Committee was formed in part to facilitate stabilization of large numbers of streambanks on the Upper Manistee River. Also, individual landowners with a significant amount of stream frontage occasionally desire to stabilize a great number of erosion sites on their property. Most of the erosion sites have historically been stabilized using rock riprap, sometimes in conjunction with other methods. In order to more naturally stabilize these areas, some sites should be stabilized by strictly vegetative methods, such as brush bundles, live staking, live fascines or “soft armor” materials described above in areas where site conditions are suitable for such techniques. Sites should be prioritized with respect to the amount of sediment delivered to the stream, with sites treated on a “worst first” basis.

When choosing erosion sites to be stabilized, groups or individuals should consider the potential negative effects of gaining access to the sites. If access to a critical erosion site is not possible without cutting a temporary access road through the native vegetation buffer, alternate methods of transporting equipment and riprap to the river’s edge should be used if at all possible. Any roads or trails that are created as a result of bank stabilization activity will be obliterated and restored with native vegetation immediately upon completion of the project.

Any bank stabilization project should also consider the impacts of this activity on non-fisheries species such as wood turtles or other species that may depend on eroded banks for nesting or habitation. If it is determined that the negative impacts of stabilization of a bank or banks on these species outweighs the positive impact on the fishery, the banks should not be stabilized. Particular attention should be paid to the effects of bank stabilization work on species listed as Threatened or Endangered.

12. STREAM ALTERATION

Maintaining and enhancing the free-flowing condition of the river is one of the goals of Natural Rivers Part 305. Alteration of the streambed and channel can result in loss of fisheries and wildlife habitat, increased erosion and sedimentation and increased flooding. Therefore, diversion of the stream from its existing natural channel is prohibited, except for minor alteration of the stream channel in conjunction with improving an existing road/stream crossing.

All work below the ordinary high water mark of the stream requires approval from the Northern Michigan Rivers Administrator and a permit from MDEQ under provisions of the Inland Lakes and Streams Part 301 of 1994 PA 451.

Minor streambed alteration for placement of small docks and necessary erosion control measures is permitted. Sediment traps designed to capture excessive sand bedload as part of a stream restoration effort are permitted. The width of the sediment trap may not exceed the natural stream width at that location. Spoils must be placed on an upland site landward of the native vegetation buffer. Dredge pads will be seeded and mulched immediately after construction of the trap and after clean-outs. When the trap is no longer in service, the access road, dredge pad and other disturbed sites will be restored and stabilized with native vegetation.

Extensive alteration of the streambed to create stream characteristics that were not historically present in the stream is not permitted. Fisheries habitat structures are permitted, provided they do not interfere with navigation, are constructed primarily of natural materials, do not pose a hazard to

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wading anglers and are unobtrusive and generally unrecognizable as artificial structures. Habitat structures will be maintained in a safe, functioning, non-erosive condition or be removed.

13 COMMERCIAL USE OF STATE LANDS

The Department of Natural Resources is committed to addressing the many issues related to commercial use of State lands, including use of public access sites by commercial watercraft liveries. The DNR will develop a strategy to address the issue on a State-wide basis.

Commercial use of public access sites on the Upper Manistee River system is an important issue for area residents and river users. Commercial watercraft liveries and drift boat operations are an important part of the local economy. They provide an opportunity to experience a river environment to people who would not normally have the option to do so. However, overcrowding of the river and access sites, and resource damage caused by large groups of watercraft users who exit the river at uncontrolled sites, can be a problem at times.

When a state-wide policy addressing commercial use of access sites is developed, it is recommended that it include provisions for requiring permits for use of public access sites by commercial watercraft liveries, fishing guides and other commercial users. The DNR should determine a maximum number of special use permits to be allocated per day to commercial users of the access sites. If fees are to be charged for these special use permits they should be earmarked for activities in the watershed where the fees were generated, such as maintenance and improvement of existing access sites, signing and other educational efforts, re-establishment of native vegetation buffers on public lands and cost sharing with county road commissions for improved road/stream crossing replacements.

14. DAMS

Dams have a generally negative impact on a river environment, including blocking migration of fish, warming of water temperatures, blocking movement of large woody debris and fragmenting habitats. Therefore, new dams are not permitted on any designated stream segment. Also, in order to enhance the free-flowing condition of the river system, a long-term goal of Natural River designation is removal of existing dams that are no longer economically viable, have negative impacts on the streams' fishery that are not outweighed by other factors or that are structurally unsound.

There are several dams owned by MDNR Wildlife Division that impound areas for waterfowl and other wildlife habitat. Some of these impoundments may now or in the future be creating marginal wildlife habitat while interfering with the streams' free-flowing condition and negatively affecting the streams' fisheries by warming water temperatures and blocking fish passage. MDNR Wildlife Division periodically reviews the costs and benefits of its dams in conjunction with required dam safety inspections. If, during the course of this analysis, it is determined that a dam is not providing sufficient wildlife habitat or other benefits, the dam will be considered for removal, returning the stream to its free-flowing condition. Dams providing wildlife benefits that outweigh the negative impacts on other Natural River values will be maintained. Those dams may be modified to enhance those other values by construction of fish passage structures, bottom draw discharges and other management methods as feasible and appropriate.

Fish barriers such as weirs will not be constructed unless necessary to block sea lamprey or other harmful exotic species from migrating into a stream, and only if constructed so as to have the

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minimum impact on the free-flowing condition of the stream. Low-head dams and other similar barrier structures are not permitted. Electric or similar type weirs will be allowed only if demonstrated to be effective and necessary, and to have negligible impact on the free-flowing condition of the stream.

The FERC re-licensing agreement with Consumers Energy addresses the provision of fish passage around hydropower projects such as Tippy and Hodenpyl Dams. This could have a major impact on the resident fishery of the Upper Manistee River. Fish passage facilities will not be constructed unless it is identified in a river management plan developed with public input to be appropriate in those locations. The plan must be approved by the Natural Resources Commission and must not be opposed by the US Forest Service, the US Fish and Wildlife Service and the Federal Energy Regulatory Commission. The DNR Fisheries Division is developing a procedure to evaluate the appropriateness of fish passage at individual dam sites. The evaluation will take into account social, economic and resource impacts. This procedure will be used to evaluate the appropriateness of constructing fish passage facilities at Tippy and Hodenpyl Dams. Such facilities will not be constructed unless all the above conditions are satisfied.

15. LAND ACQUISITION AND DISPOSAL

The State may purchase private lands in the Natural River District only with the consent of the landowner. **Natural Rivers Part 305 does not authorize condemnation of private lands in the Natural River District.** Condemnation of land is not a management tool associated with the Natural Rivers Program.

In order to provide the best possible recreational experience for Michigan residents, and to protect the State's finest river resources, acquisition of waterfront land is a high priority for the MDNR. Streamfront lands in the Upper Manistee River system acquired by MDNR will not be developed except for possible campgrounds and public access sites subject to development standards discussed above. If lands are acquired, every effort will be made to acquire all rights associated with the land, including mineral rights. All buildings within the 400-foot-wide Natural River District that are acquired with those lands will be removed or destroyed. Lands within the native vegetation buffer will be allowed to revert to their natural state. Planting of native vegetation in previously disturbed areas is encouraged.

It is recommended that no public streamfront lands be transferred to private parties. However, if such lands are sold, traded or otherwise conveyed to a private party, the State will retain the development and mineral rights to the portion of land within 1/4 mile of the river's edge, and the right of public access along the river bank.

16. SIGNS

Education of the public regarding the purposes and benefits of designation is key to a successful protection program. A DNR sign plan will be developed for the Upper Manistee River system. Signs will be designed to identify the river system as a designated Natural River, explain the purposes of designation, emphasize that private lands along designated rivers remain private, advise the public of any watercraft controls in effect and periodically indicate approximate float times to the next public access site to discourage trespass.

17. WATER QUALITY

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MDNR will work with MDEQ to develop a Memorandum of Understanding regarding implementation of a water quality sampling program to determine the baseline water quality on the Upper Manistee river system at the time of designation, and to periodically monitor changes in water quality.

Designation as a Natural River results in no special protection related to State of Michigan water quality standards unless the designation is in the "Wilderness" classification. However, since most of the streams in this system are designated trout streams, they are afforded greater protection than minimum statewide surface water quality standards would provide. All surface waters of the state are protected for, at a minimum, agriculture, navigation, industrial and public water supply, warmwater fisheries, other indigenous aquatic life and wildlife, partial body contact recreation between November 1 and April 30 and total body contact recreation between May 1 and October 31. Designated trout streams are protected for coldwater fisheries in addition to the minimum standard listed above. This results in higher standards for temperature and dissolved oxygen levels.

18. WATERCRAFT CONTROLS

High speed operation of motorized watercraft can result in resource damage due to erosion cause by wakes and property damage to docks and other stream-side structures, and can be a safety hazard for riverfront property owners, wading anglers and operators of other watercraft. Therefore, watercraft control ordinances implementing a "no-wake" zone on all segments of the Upper Manistee River system should be developed.

Local units of government that believe that special local "no-wake" ordinances authorized by the Marine Safety Act are needed on waters subject to their jurisdiction should inform MDNR Law Enforcement Division and request assistance. All such requests must be in the form of a resolution approved by the governing body of the local unit of government.

19. MILITARY USES

The Michigan Department of Military Affairs (MDMA) uses land in the Upper Manistee River watershed for troop training, artillery and small arms ranges and other activities. MDMA owns property in the Lake Margrethe, Portage Creek, Clear Creek and Manistee River mainstream areas generally between M-72 and the CCC Bridge, and leases land from DNR in southern Kalkaska County in the vicinity of Big Cannon Creek through a 20-year lease signed in 1984 that authorizes limited use of the land. The Department of Natural Resources has responsibility for managing for natural resource goals on much of the land owned by MDMA.

Due to the potential impact of such uses on vegetation, habitat and surface waters, as well as potential conflict of use with recreational users, military use of land within the Natural River District (within 400 feet of any designated stream), is generally in conflict with the goals and objectives of the Natural River Act. Therefore, all military use of lands owned or leased by MDMA within the Natural River District other than on existing trails or roads is prohibited. No refueling operations will take place within 400 feet of any stream, lake or wetland. These and other standards are outlined in Camp Grayling Regulation 200-1, "Environmental Protection and Enhancement." Also, MDMA will annually provide DNR with a map outlining anticipated military activities in the area.

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Camp Grayling currently collects sewage from its facilities for treatment at a permitted wastewater treatment facility that discharges treated effluent to the groundwater. No effluent is discharged to surface waters of the Upper Manistee River watershed.

20. FISHERIES DIVISION MANISTEE RIVER ASSESSMENT

MDNR Fisheries Division completed a Manistee River Assessment in June 1998. The assessment provides:

- a. An organized approach to identifying opportunities and solving problems.
- b. A mechanism for public involvement in fishery management decisions.
- c. An organized reference for Fisheries Division personnel, other agencies and citizens.

In addition to being a separate document for fisheries management purposes, the assessment will be considered a companion document to the Natural River Plan. The assessment contains much detailed information regarding fisheries populations, past and present management activities and background information on the watershed. Much of the watershed background information in this plan was taken from the assessment.

The assessment also contains many options related to fisheries management in the watershed. Most of the options meet the goals and objectives of Natural River designation. However, if an option is selected that is in conflict with the goals of Natural Rivers Part 305 and this Natural River Plan, that option shall not be implemented without the approval of the DNR Director.

F. ADMINISTRATION AND IMPLEMENTATION

1. DESIGNATION

Designation of a Natural River involves several steps, including:

- a. Development of a draft Natural River Management Plan
- b. Presentation of the draft plan at public hearings
- c. Revision of the draft plan based on public comments, as appropriate
- d. Approval of a final Natural River Plan by the Director of the Department of Natural Resources

The Department of Natural Resources, with the help of the Upper Manistee River Citizens Advisory Group, developed this draft plan for the Upper Manistee River area. The draft plan will be presented at public hearings in each of the five counties potentially affected by the designation. Upon completion of those hearings, and incorporation of appropriate public comments in the plan, a final plan will be presented to the DNR Director for approval. Upon approval by the Director, the river is officially a designated Natural River.

2. PLAN IMPLEMENTATION FOR PUBLIC LAND AND UTILITIES

Upon adoption of this plan by the DNR Director, **State lands must be managed in accordance with the plan and State management of fisheries, streams, waters, wildlife and boating must take cognizance of the plan.** Also, utilities and publicly provided facilities such as roads, water projects and others, except those within the boundaries of an incorporated municipality, must be constructed and managed in accordance with the Rules for Utilities and Publicly Provided Facilities promulgated under provisions of section 30514 of Natural Rivers Part 305 of 1994 PA 451 (see appendix B).

3. PLAN IMPLEMENTATION FOR PRIVATE LAND

a. Zoning ordinances and rules

Local units of government that have designated natural rivers within their boundaries may choose to adopt new zoning ordinances or amend existing zoning ordinances to incorporate the private land development standards included in this plan. They are not required to do so. If, after one year from the date of Natural River Plan adoption, all affected townships and/or counties do not have a Natural River zoning ordinance in effect, the State may adopt State Natural River Zoning Rules. These rules will only apply in areas where a township or county has not adopted a zoning ordinance that incorporates the standards in the plan. The State rules will have the effect of creating a partial zoning ordinance in units of government that do not currently have an ordinance, or an overlay zoning district in units of government that currently have zoning. Natural Rivers Part 305 prohibits the application of State zoning rules within incorporated municipalities, such as villages and cities.

A local unit of government may adopt a Natural River zoning ordinance at any time, whether or not State zoning rules have been adopted. If an acceptable local zoning ordinance is adopted, State zoning rules will not apply in that unit of government. Local units of government may also adopt zoning standards that are more restrictive than those recommended in this plan.

b. Variances/appeals

A property owner may request a variance to a zoning standard in a locally zoned Natural River District from the local unit of government's zoning board of appeals.

A property owner may request a minor variance to a dimensional standard in a State-zoned area from the State Natural Rivers Zoning Administrator for the Upper Manistee River. Other dimensional variances and land use variances may be requested from the Upper Manistee River State Natural River Zoning Review Board. This Board will consist of local citizens representing local government and citizens groups, with one local DNR staff person serving on the board. The board will act on all major variance requests and special use permit applications *in State-zoned areas of the watershed*. The State Zoning Administrator and State Zoning Review Board do not act on variance requests from within local units of government that have adopted a local Natural River zoning ordinance.

If a property owner is not satisfied with the decision of the Upper Manistee River State Zoning Review Board, he/she may file a Petition for Contested Case Hearing under provisions of the Administrative Procedures Act, 1969 PA 306, as amended.

4. COORDINATION WITH OTHER PUBLIC AGENCIES

Many decisions affecting resource management in the Upper Manistee River area are made by agencies other than MDNR and local government. The Michigan Department of Transportation (MDOT), Michigan Department of Environmental Quality (MDEQ), Michigan Department of Military Affairs (MDMA) and US Fish and Wildlife Service (USFWS) all play an active role in determining how resources will be managed or affected in the watershed. Although all are subject to the provisions of the Rules for Utilities and Publicly Provided Facilities (see 2. above), these rules frequently lack details regarding coordination between agencies and other aspects of plan administration. Accordingly, MDNR will pursue development of Memoranda of Understanding (MOU) with the following agencies for the following purposes:

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MDNR/MDOT: An MOU to provide a mechanism for the earliest possible review of transportation projects planned for construction in the watershed, ensuring that the unique characteristics of the river system will be considered during the transportation planning process.

MDNR/MDEQ: An MOU to provide for consideration of the use and development standards in the Upper Manistee River Natural River Plan during the review process for various land/water interface permits, surface and ground water quality issues and mineral exploration and development issues addressed by MDEQ Divisions.

MDNR/USFWS: An MOU to ensure that management of State and Federal lands and programs is in compliance with the provisions of this Plan and Federal statutes including the Endangered Species Act and the Federal Aid in Wildlife Restoration Act and any associated management plans.

5. PLAN REVIEW

This Management Plan will be reviewed and updated every 10 years or earlier if needed. The MDNR Director and Natural Resource Commission shall be informed of any changes made to this Management Plan.