

HURON RIVER PLAN

LIVINGSTON, WASHTENAW, OAKLAND, MONROE
AND WAYNE COUNTIES



FISHERIES DIVISION

MICHIGAN DEPARTMENT OF
NATURAL RESOURCES

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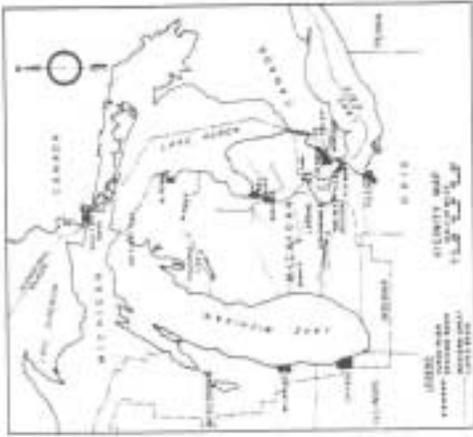
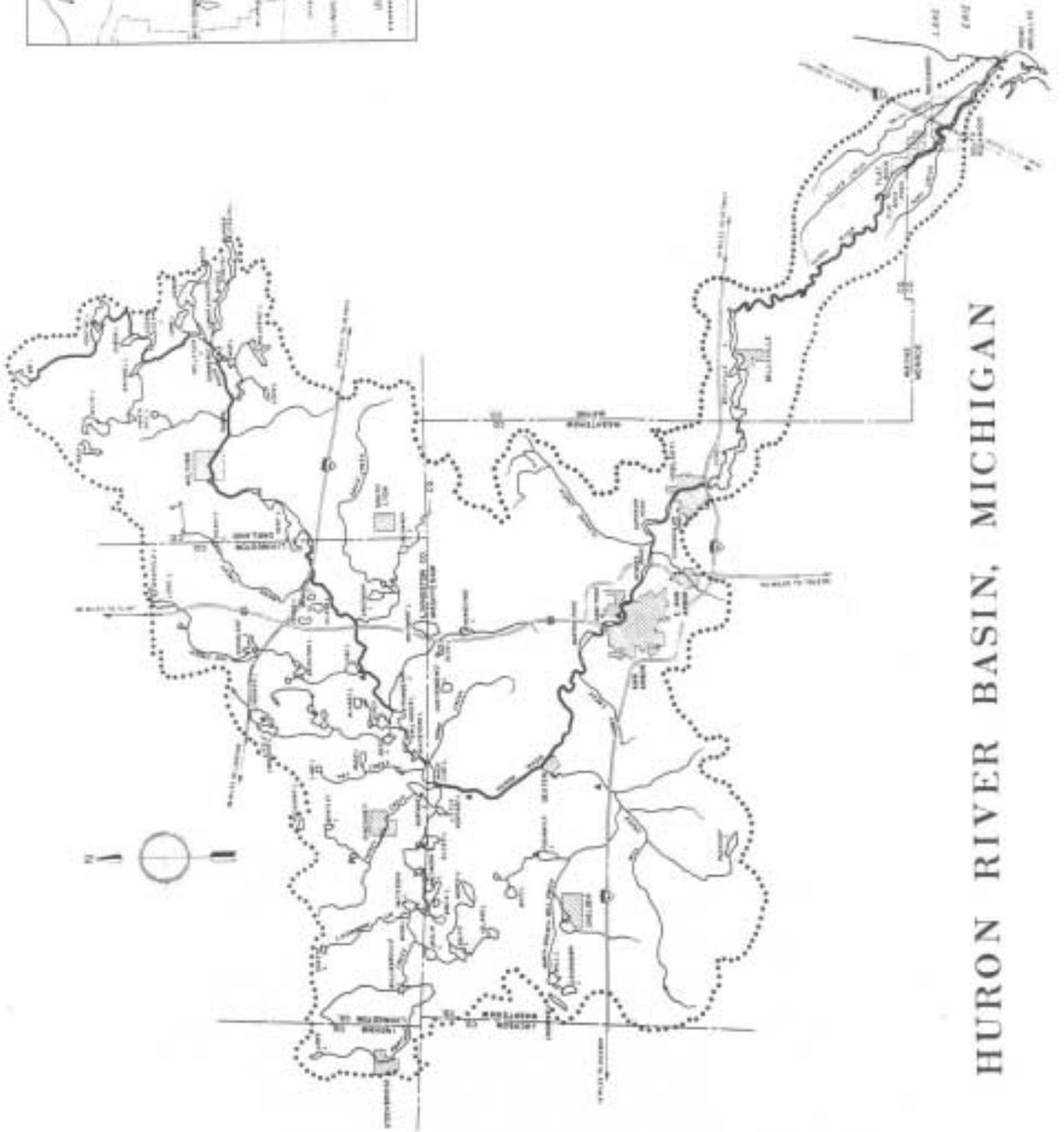
PREFACE

The Huron River is an important physical feature of the landscape in southeastern Michigan flowing through wooded areas, lakes, rolling agricultural lands affected little by existing development, and through villages and cities. In an area of intensifying population growth, economic development, and changing land uses the Huron represents a unique and special resource providing the region's inhabitants with numerous benefits. In addition to supplying water for municipal, industrial, residential and agricultural uses, the river possesses significant natural values, in terms of fish, wildlife, vegetation and aesthetics, which should be preserved for their contributions to the quality of life in the region. The river environment offers a myriad of recreational opportunities to the region's inhabitants.

The Natural Rivers Act (Part 305, P.A. 451 of 1994) authorizes the Natural Resources Commission to establish a system of "natural rivers" in the state to provide for their preservation, protection and enhancement. Section 30502 of the Natural Rivers Act states, in part, that: "The commission, in the interests of the people of the state and future generations, may designate a river or portion thereof, as a natural river area for the purpose of preserving and enhancing its values for water conservation, its free flowing condition and its fish, wildlife, boating, aesthetic, flood plain, ecologic, historic and recreational values and uses."

The Michigan Department of Natural Resources and the Huron River Planning Group (representing riparian property owners, local government, Huron River Watershed Council, other governmental agencies, and interested citizens and groups) have studied the Huron River and recommend a portion of the Huron River from Kent Lake Dam, Livingston County, to Barton Pond, Washtenaw County, be designated a "country-scenic" river. A "country-scenic" river is in an agricultural setting with narrow bands of woods or pastoral borders. Farms and other developments may be visible from the river and it may be readily accessible by road. It may have undergone some impounding and its waters should meet established water quality standards.

This report (1) provides a physical description of the river and the watershed as a whole; (2) reviews values of the river and factors affecting its future nature and use; and (3) provides a plan for the protection of the river's natural qualities and to guide its future use. The plan is the result of joint efforts of the Department of Natural Resources and the Huron River Planning Group and reflects the thoughts of a broad representation of people interested in use and protection of the many values of the Huron River.



WATERSHED MAP



THE WATERSHED AND THE STUDY AREA

A. General Description

- 1) **The Watershed.** The Huron River system drains an area of approximately 900 square miles as it flows through the southeast Michigan counties of Oakland, Ingham, Livingston, Washtenaw, Monroe and Wayne. The mainstream originates in Big Lake and the Huron Swamp northwest of Pontiac and flows roughly 125 miles to its mouth in the marshlands of Pt. Mouilee on Lake Erie.
- 2) **The Study Area.** The Huron River system contains approximately 367 linear miles of streams and drains. Although the mainstream is roughly 125 miles long, only the 27.5 mile stretch between Kent Lake Dam and Barton Pond will be considered in the study area at this time. Tributaries and lakes in this section are also a part of the study. This section received the greatest amount of support and concern from local governments and interested citizens, and generally offers the greatest recreational and scenic opportunities. Other sections of the river may be added in the future.



B. Physiography and Soils

The surface topography of the watershed was determined by the last continental glacial period, the Wisconsin. Above Ann Arbor and encompassing the study area, the Huron River watershed widens out from a relatively flat narrow strip into a region of rolling hills interspersed with flat areas. This “upper basin” of approximately 750 square miles

contains a dendritic pattern of tributaries, numerous pothole lakes, and a number of swampy areas.

The watershed is largely a region of end (or recessional) moraines, with associated till plains and outwash deposits. The moraines of the upper basin were formed by the ice being pushed forward while, at the same time its front was melting resulting in the build-up of deposits into ridges or moraines. This occurred during the period of its final retreat (approximately 10,000 years ago) from what we now know as Michigan. As the ice melted during its final retreat, the drainage patterns changed the Huron, which formerly drained to the Mississippi and the Gulf of Mexico, gradually altered its course to essentially its present day configuration. At the same time, outwash plains formed with the deposition of coarse sand and gravel materials from water emanating from the melting glacier. The upper basin today contains extensive permeable deposits of this type capable of retaining large amounts of water.

The Huron River originates at Big Lake, Oakland County, at an elevation of 1,018 feet above sea level and drops to an elevation of 572 feet at Lake Erie.

The majority of soils in the upper watershed above Ann Arbor are sandy loams or friable sand-clay mixtures. Soils of the Fox-Oshtemo-Plainfield association are located mostly near the river and streams in upland plains, broken by larger basin depressions and valleys containing lakes, swamp and marsh. Areas away from the river and streams become more rolling and hilly highlands and contain soils of the Bellefontaine-Hillsdale-Coloma association. An area around Ann Arbor contains soils of the Miami-Hillsdale-Conover association. The principle soil is the Miami type including both the loam, underlaid by the more friable clay, and the more silty loam, underlaid by tight low permeable clay.

The watershed below Ann Arbor narrows considerably and the river passes through a variety of soil associations. From Ann Arbor to Belleville, soils are generally clay to clay loam types of the Conover-Napance-Brookston association. These soils include the highest proportion of naturally better drained land when considering clay soils in southeast Michigan. From Belleville to New Boston, the soils consist of the Berrien-Plainfield association which are mostly dry sands in relatively thin layers over pebbly and bouldery till clay. The sands in this type are finer in texture, and more loamy and moist than those of other divisions. Soils in the lower river area are of the Macomb-Brookston-Berrien association which vary from wet, clay soils in close association with wet and dry sands.

C. Stream Characteristics

The table below summarizes the Huron River system. Lengths are shown in miles.

Stream			
Mainstream	12.50	*Mill Creek	15.0
Norton Creek	6.0	*Portage Creek	18.0
*Woodruff-Mann Creek	12.0	Fleming Creek	11.0

*Davis Creek	10.0	*Honey Creek (Washtenaw	
Co.)	8.0		
*Ore Creek	9.0	Griggs Drain	3.0
*Spring Mill Creek	3.0	Port Creek	5.0
*Whitmore Lake Outlet	4.0	Smith Creek	8.0
*Hay Creek	5.0	Silver Creek	10.0
*Honey Creek (Livingston Co.)	10.0	Unnamed creeks	83.0
*Livermore Creek	4.0	and drains	
*Arms Creek	8.0		
		TOTAL	367.0

*Tributaries draining into mainstream within study area.

Approximately 162 lakes ranging in size from an acre or two to 644 acres drain into the Huron River. The mainstream is dammed in 11 locations. The majority of the dams were constructed for generating electric power, however, Kent Lake Dam provides a recreational lake and two dams are water control structures to maintain lake levels in the Chair-of-Lakes and Proud Lake areas.

Water quality in the section of river under study is designated for the following uses: industrial water supply, partial body contact, recreation, warm water fish, agricultural water use, and navigation. The reach of river from Kent lake to the Village of Dexter is classified as an “effluent limitation segment”¹, while that from Dexter to Barton Road constitutes part of a “water quality segment”².

Water quality in the upper reach of the study area is generally good from a visibility standpoint. From Kent Lake Dam to Ore Lake, the river flows generally southwesterly except for one large meander in the vicinity of U.S. 23. Width varies, from roughly 30’ to 100’, and widening out to closer to 200’ at Ore Lake. Water is very clear in this section, enabling one to see the bottom which is primarily sand/silt and gravel. Depth varies by season, reaching 5’ to 6’ in some areas and dropping to as low as ½’ in others. The bottom type tends toward muck in some areas where it appears that deposition of organic material is heavy. Narrow leaf potamogetan and elodea are visible in some areas, and the incidence of both aquatic weeds and algae increases markedly as one reached Ore Lake. Turbidity also increased in this area.

¹“Effluent limitation segment” exists where quality is meeting and will continue to meet applicable water quality standards, or where there is adequate demonstration that water quality will meet applicable water quality standards after application of effluent limitations required by the Federal Water Pollution Control Act Amendments of 1972 (FWPCAA).

²“Water quality segment” is any segment where it is known that water quality does not meet applicable water quality standards, and which is not expected to meet water quality even after the application of the effluent limitations required by the FWPCA Amendments of 1972.

Currents in this reach are slow to moderate, slowing in areas where amounts of deadfall have reduced the flow rate. Several old wooden and concrete fish habitat improvement structures are visible in several areas. Three tributaries enter the river between Kent Lake Dam and Ore Lake. Woodruff-Man and Davis creeks are considered 2nd quality warm water fish habitat, while Spring Mill Creek shows evidence of containing pike spawning areas. Three additional tributaries enter the river in that portion of the Chain-of-Lakes lying in Livingston County. South Ore Creek, Horseshoe Lake Drain and Chilson-Hay Creeks are all considered 2nd quality warm water fish habitat.

Data collected by the U.S. Geological Survey over a two-year period from 1971-1973 shows generally good to high levels of dissolved oxygen in the lower reach of the study area, from Baseline Lake to Ann Arbor.

The reach from Dexter Village to Tubbs Road (and beyond the study area to Ford Lake) has been classified by the state as a water quality segment due to localized low dissolved oxygen conditions in this area. Gannon, in a short intensive survey (University of Michigan, 1971) noted that the water showed a progressive reduction in quality as it flowed from the Dexter sampling point to the Barton Impoundment. The Dexter and Loch Alpine wastewater treatment plants are the most significant point sources of pollution in this section of the river. Other principal discharges are Chrysler Corporation and Xerox University Microfilms.

Water quality reports reach unanimity on the presence of high nutrient concentrations, primarily phosphorus, in some areas. The results of over-fertilization are obvious in the algae and weed growth present in some cases. Contributing sources include: natural leaching processes from minerals, drainage from fertilized agricultural lands, septic tank/drain field systems, (especially on some lakes), and sewage treatment plant effluent. Upgrading of existing treatment plants under the Federal Water Pollution Control Act Amendments affecting local units of government and by inadequate funding of grants for planning and construction of treatment plants.

The flows due south from Portage-Baseline Lakes and then turns southeasterly in Dexter Township. Width in this area is from 40' to 100'. Bottom type is primarily sand/silt and gravel; and depth ranges from ½' to 8'. Water clarity is good above the Village of Dexter, but declines markedly as treatment plant effluent and Mill Creek enter the river at Dexter. The current is noticeably stronger from Portage Lake downstream and significant rapids providing a test for the canoeist are located at Hudson Mills and Delhi. Smaller rapids and some low-head rock dams are also present in this section. Several islands are located along this stretch.

A number of significant tributaries enter the river in this reach beginning with Arms Creek which is listed as 2nd quality coldwater (trout) habitat. Honey Creek (Putman Township) and Portage River are both considered warm water fish habitat. Parks Lake Creek (name uncertain, creeks flows westerly from Parks Lake and enters Huron below

Bell Road) and an unnamed tributary entering farther south, from the west, are both considered 2nd quality coldwater (trout) habitat. Mill Creek, the largest tributary to the Huron, enters at Dexter and is considered top quality warm water as is Honey Creek in Scio Township.

In the entire study area, erosion and sedimentation processes can become a major pollution problem. Sediment is most visibly noticeable at the confluence of Mill Creek with the Huron. Such sediment may carry with it nutrients, pesticides, bacteria and other contaminants. Silt is also noticeable in the river adjacent to the sand and gravel put across from the Chrysler plant. Land use changes involving earth moving, and stream bank erosion as a result of a variety of factors, also contribute sediment on an irregular basis. Programs such as the Soil Erosion and Sedimentation Control Act (Part 91, P.A. 451 of 1994) and the Natural Rivers Act should serve to mitigate sedimentation resulting from these sources.

From a long-range standpoint, the utilization of the river as a receiving body for increasing volumes of municipal and industrial waste effluents will have to be reassessed in terms of the assimilative capacity of the river and the demands for recreational uses of the river and its associated lakes and streams. Total water quality improvement will have to evaluate and deal with questions of land use and stormwater runoff as well.

The Huron River has a comparatively stable flow, due largely to the natural storage system in the upper basin. In addition to geological factors and the rapidly urbanizing pattern in the watershed, lake level control efforts have some effect on flow. It has been estimated that on the average nearly $\frac{3}{4}$ of the total precipitation falling on the basin is lost through evapo-transpiration. The generally porous soils and conditions of surface terrain, however, have been favorable to the establishment and maintenance of a large body of ground water. The Huron River has cut its channel through the most permeable of these sand and gravel deposits, and the availability of bank storage and connection with the groundwater reservoir tends to stabilize the base flow of the river during both low flow periods and high flow periods. In addition, the abundance of pothole lakes, swamp areas and a dendritic stream pattern all combine to regulate stream flow.

As one moves downstream from New Hudson there is a gradual increase in the percentage of morainic material making up the soil types, and a gradual decrease in the permeability of soils. As groundwater storage is reduced, the potential for more variable flow patterns based on precipitation and runoff increase. The following chart indicates basic flow data for the study area.

Station	Period Of Record	Drainage Area (sq. Miles)	Average Discharge (cfs)	Annual Mean Discharge (cfs)		Low Flow Of Record 7-day (cfs)	Instantaneous Flows of Record (cfs)		Discharge Frequency (cfs) 100 – Year
				Max.	Min.		Max.	Min.	
Huron River near New Hudson (150' below Kent Lake Dam)	1948-70	152	106	169	52		1,080	26	965
Huron River near Hamburg (Bridge at Hamburg Road)	1951-70	313	197	302	97		1,560	32	1,580
Huron River near Dexter (Below Bridge on N. Territorial, east of Hudson Mills)	1946-70	527	351	591	142	47	3,120	38	3,350

The Huron River has a relatively slow to moderate stream gradient dropping 445 feet in elevation from its source at Big Lake to Lake Erie. Although there are a few areas where the gradient is greater, the average drop in elevation over the 125 miles of river is just under four feet per mile.

The river system is conducive to a warm water fishery, although several tributaries are cool enough to support a second quality trout fishery. During normal summer flows, the water is relatively clear in the upper river areas. Below Dexter, the river becomes more turbid, a result of suspended silt. This is probably caused by the soils in the lower basin which tend to be heavier with clays and silt loams, and by discharge of agricultural drains into the river.

In general, the bottom above Barton Pond and through the study area, is made up of compact sediments. There is little downward cutting through this bottom, due both to its hardness and to a lack of sufficient current in the wide portions of the stream. In broad areas, deposits of silt form which give rise to luxuriant growths of aquatic vegetation. Where the current is swifter, a gravel bottom is usually exposed. Boulders are commonly found along the bottom below Portage Lake.



Island Lake Recreation Area, Livingston County



Delhi Rapids, upstream of Ann Arbor in Washtenaw County

D. Vegetation

Moderately broad floodplains are characteristic of the Huron River. Low banks one to two feet high are present on an estimated 70 percent of total bank mileage, especially in the study area, while steep hills make up the balance. About 80 percent of the floodplain is covered with swamp hardwood types, while the remaining 20 percent is made up of marsh type. Woody vegetation along the immediate river bank is composed of varying

mixtures of tag alder, red osier dogwood, willow, soft maple and ash. Marsh areas contain cattail, sedges and arrowleaf with an occasional stand of tamarack. Upland areas adjacent to the immediate river area contain oak, hickory, beech, basswood and maple.

One species of aquatic plant, the purple turtlehead (*Chelone obliqua*) is on the list of endangered plant species in Michigan. And according to Edward G. Voss, Curator of the University of Michigan Herbarium, it is currently known to grown only in the area below Dexter on the Huron River.

E. Climate

The Huron River watershed has a humid, continental climate common to much of the northeastern United States. The area is influenced by its location in the Great Lakes region, a mixing zone for tropical and polar air masses characterized by frequent and sometimes rapid weather changes. The Great Lakes tend also to modify temperatures, making summers cooler and winters warmer, than might otherwise be the case. The average annual daily temperature at Ann Arbor is 48.3°F with a maximum record of 105°F and a minimum of -21°F. Precipitation is fairly well distributed throughout the year with the average annual precipitation being 30.6” at Ann Arbor over a 57-year period. Snowfall generally averages 37” – 38” per year.

F. Ownership

The Huron River watershed contains roughly 576,000 acres of land. Of this total, 527,025 acres (85 percent) are in the private ownership. The remaining 48,975 acres are in public ownership as follows: state recreation areas and state parks – 32,428 acres; state game areas – 9,942 acres; and Huron-Clinton Metropolitan Parks – 6,595 acres.

Ownership along the mainstream of the Huron River and those tributaries selected for possible designation in the Natural Rivers Program is summarized as follows:

Ownership – Huron River (Study Area)

Stream	Private		Public	
	Linear Miles	Frontage	Linear Miles	Frontage
Mainstream	12.0	24.0	15.5	31.0
Davis Creek	3.5	7.0		
Arms Creek	3.5	7.0		
Mill Creek	3.5	7.0		
	22.5	45.0	15.5	31.0

Approximately 56 percent of the frontage on the mainstream in the study area is in public ownership. This includes the Island Lake Recreation Area, administered by the Parks Division of the Department of Natural Resources, as well as Hudson Mills, Dexter-Huron, and Delhi Metroparks of the Huron-Clinton Metropolitan Authority system.

G. Accessibility

Highway access to the Huron River is abundant with a number of major highways connecting the area to the Detroit Metropolitan area and other population centers. Major east-west roads crossing the watershed are M-59 which crosses the upper river area, I-96 which crosses near the upper limit of the study area, and I-94 which crosses near the lower limit of the study area. U.S.-23 bisects the watershed in a north-south direction, while the extreme lower portion of the Huron is crossed by U.S.-24 and I-75.

EXISTING USES AND RECREATIONAL OPPORTUNITIES

A. Land Use

The uses to which land are being put in the watershed are changing, and much of the change involves the gradual loss of agricultural and open space lands to more intensive uses, primarily urbanization. Ann Arbor is by far the largest municipality in the watershed, but smaller communities such as Chelsea and Brighton are also growing in size. In addition, the number of rural residences is increasing also, as more people seek a non-urban living environment. Despite population increases (total watershed population is approximately 315,000), agriculture remains a viable component of the economy with most of the acreage used for crop and pastureland, with an emphasis on truck farming. Light industry and commercial activities have also increased in the region, much of it related to the automobile industry or created as spin-offs of university research efforts.

Recreation is a major activity in the watershed and in the aggregate accounts for a significant amount of public-owned land. Major recreation landholders are the state and the Huron-Clinton Metropolitan Authority. A large share of the recreation land is associated with the watershed's abundant water resources, including the river itself and numerous lakes. Much of the property frontage along lakes is privately owned. Development has often not been carefully regulated these areas, but has instead progressed largely according to the inclination of individual subdividers and builders. The result in many cases has been the stimulation of a number of water resource related problems, particularly over-fertilization due to high nutrient levels and destruction of natural values along shorelines.

B. Private Recreation Facilities

There are 11 private campgrounds within the Huron River watershed which provide 585 vehicle campsites and 1,285 tent sites to the camping enthusiast. In addition, other campgrounds in the counties encompassing the watershed provide roughly 2,000 campsites of various sorts. Other recreational activities provided by private sources include golf courses, archery ranges, horseback riding, boat and canoe rentals and fishing ponds and lakes.

C. Public Recreation Facilities

All or portions of seven recreation areas and three state parks are contained within the watershed. In addition to a variety of day-use facilities, these areas provide 1,415 campsites to the camper. Other state parks and recreation areas within a short distance of the watershed expand both camping and day-use opportunities.

Five parks within the Huron-Clinton Metropolitan Park system border the Huron River. These parks, like many of the state recreation areas, offer many day-use activities such as interpretive programs, hiking trails, boating, canoeing, picnicking, etc.

In addition to boat and canoe access at the Huron-Clinton parks along the Huron, six state public access sites are available. Thirty-six public access sites are located on lakes within

the watershed and offer the recreationist with opportunities for fishing, boating and swimming.

Other public facilities or areas of interest in the watershed are Pointe Mouillee State Game Area, Chelsea State Game Area, Unadilla Wildlife Area Pinckney Recreation Area and the Gregory State Game Area.

D. Fishing

The Huron River above Barton Pond is classified as top quality warmwater. Although game fish are common and species will vary from area to area, generally rock bass is most abundant; bluegill, sunfish, small and large mouth bass are common and northern pike is occasionally taken in the area. Kent Lake is heavily fished and provides an excellent winter fishery for bluegills and black crappie.

A short segment of the upper mainstream near Milford has received attention and special management for trout in recent years. The planting and "catch and release" harvesting of trout in this area has proved to be very popular with the angler.

It should be mentioned that rough fish such as suckers and carp are present throughout most of the river system and probably make up a large part of the entire fish population.

Rough fish populations caused serious competition to game fish populations in the river and impoundments below Barton Pond. Fisheries managers initiated chemical treatment of Barton Pond in 1972. From the initial treatment until 1974, the lower river and impoundments were treated down to Flat Rock Pond to eliminate or reduce rough fish. Restocking with game fish has produced a varied fishery which should be good to excellent for a number of years.

In general, the following species are found in the impoundments and river to Flat Rock: northern pike, walleye, tiger muskie, large and smallmouth bass, channel catfish, bluegill, hybrid sunfish and black crappie. The river from Lake Erie to Belleville Dam receives fall and winter runs of Coho (most abundant), chinook and steelhead. Spring spawning runs of walleye, northern pike and white bass also contribute to the fishery.

E. Wildlife Observation and Hunting

Wildlife resources of the Huron River basin are typical of those found in southern Michigan. They include species of farm game, forest game, waterfowl, furbearing animals and non-game species. Population density depends on the quality of the habitat which varies significantly from area to area throughout the watershed.

Farm game species occur throughout the basin, however, areas of heavy residential development have depreciated wildlife habitat. Species of farm game that occur in the basin are cottontail rabbits, pheasants and fox squirrels which are relatively abundant. Quail are found in the basin, but their numbers are limited.

Forest game species include primarily whitetail deer and ruffed grouse. Deer are numerous and the herd continues to increase. Deer-car collisions occur frequently with significant property damage and personal injuries resulting. Ruffed grouse populations are limited due to limited acreage of suitable habitat.

Furbearers are distributed over the entire watershed. Aquatic species such as muskrats and mink are restricted to the watercourses and associated marshes. Muskrats are abundant and mink, while not numerous, are common. Raccoons and red fox are numerous throughout the area.

Waterfowl are also generally distributed over all of the watercourses and wetlands of the basin. Mallards, black ducks, wood ducks and blue-winged teals constitute a breeding population. Limited numbers of diving ducks, such as scaups and ringneck ducks, use the impoundments and lakes of the watershed for resting and feeding during spring and fall migrations.

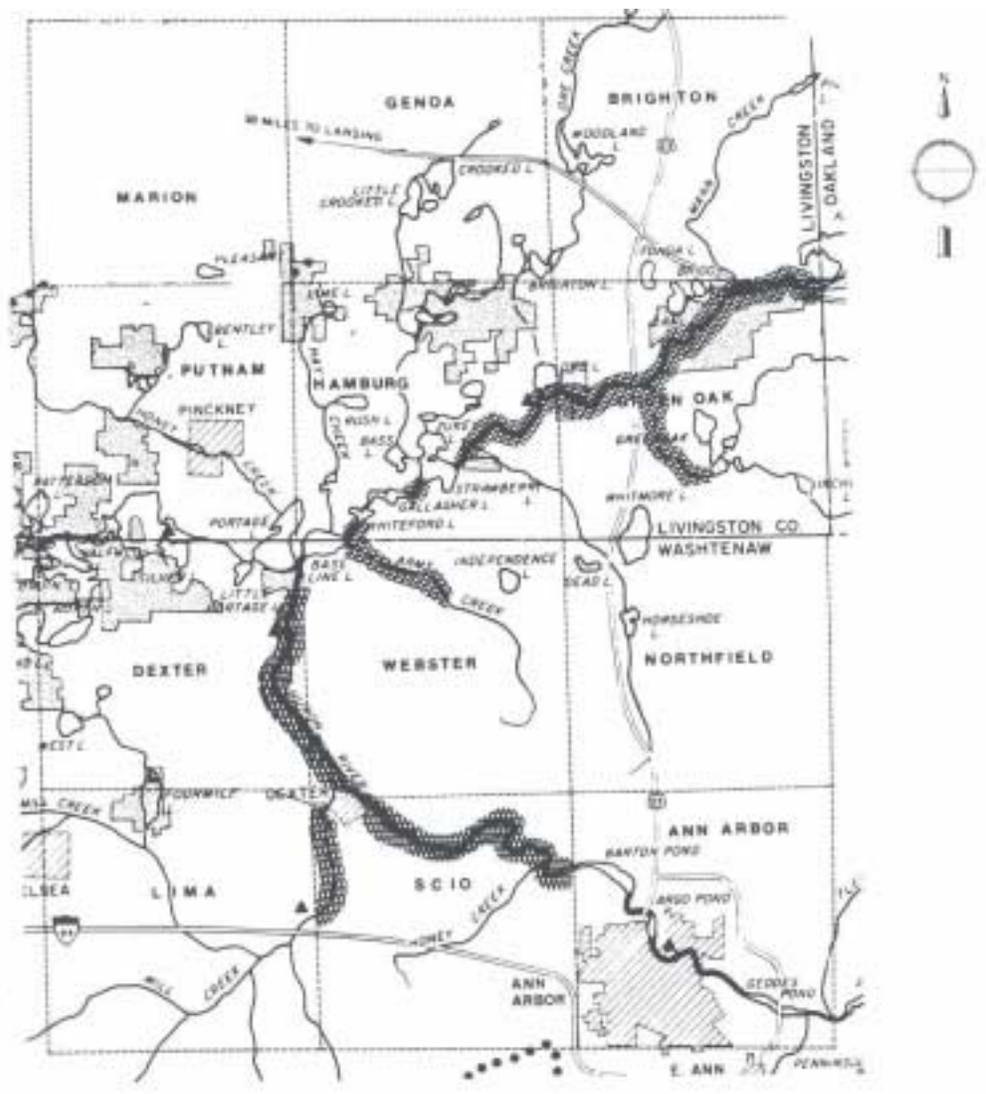
In addition to the game and furbearing animals, a large number of non-game wildlife species are founding the river basin. These include a large variety of songbirds, shorebirds, rodents, birds of prey, reptiles, amphibians, etc. At least one bird of prey found along the Huron, the red shouldered hawk, has been placed on the endangered species list.

F. Canoeing and Boating

Although much of the Huron River is canoeable, the area between Kent Lake Dam and Barton Pond is one of the best stretches. From Kent Lake Dam to Ore Lake a moderate current, undeveloped shore and mixture of marshes, lowland hardwoods and upland vegetation makes this an enjoyable area to canoe. Below the water control dam at Portage Lake, down to Delhi Mills, a number of rapids makes canoeing more interesting for the average canoeist. Except on the impoundments, the river is marginal for boating as it is quite shallow, especially during low summer flows.

G. Historic Archaeological Sites

Hinsdale's Archaeological Atlas of Michigan indicates six possible archaeological sites along the Huron River in the vicinity of Ann Arbor. Their locations are only approximate and it is presently unknown whether they still exist, however, there were five Indian villages and a mound located along the Huron. A professional archaeological survey of the Huron River and adjacent lands would undoubtedly uncover many more sites.



HURON RIVER

 segments proposed for Natural River designation

PRELIMINARY NATURAL RIVER PLAN

The Huron River system is an important physical feature of the southeastern Michigan region. Its natural qualities and aesthetic features provide many forms of enjoyable outdoor recreation for the residents of this highly populated area. The study area, from Kent Lake Dam in Livingston County to the Barton Pond area in Washtenaw County, in particular has great scenic and natural qualities offering recreational opportunities for the use and enjoyment of present and future generations.

Without a positive program to protect and enhance the many values of the Huron River system from adverse use and development, the area's aesthetics and natural qualities could be lost. Because of this concern, the Huron River Planning Group, under the sponsorship of the Huron River Watershed Council and the Department of Natural Resources, has been meeting since October 1974 to study this section of the stream and to draft a plan to regulate future use and development for the protection of the natural character of this attractive stream corridor.



A. Goal

To preserve, protect and enhance the river environment in a natural state for the use and enjoyment of present and future generations.

B. Objectives

- 1) To maintain or improve water quality consistent with the designated classification of the river and adhere to the concept of non-degradation of water quality.

- 2) Discourage development or activity which damage the ecologic, aesthetic or historic values of the river and adjacent lands.
- 3) Encourage any development which may occur to be done in an orderly manner consistent with the natural environment and aesthetic qualities of the stream.
- 4) To ensure that recreational uses which occur, be done in an orderly manner consistent with the natural environment and aesthetic qualities of the stream.

C. Proposed Designation

It is recommended that the following portions of the Huron River be designated as a country-scenic river under authority of Part 305, P.A. 451 of 1994, the Natural Rivers Act (approximate mileage—mainstream 27.5 miles; tributaries 10.5 miles):

Mainstream. From Kent Lake Dam downstream to the western edge of Section 32 of Hamburg Township, excluding Strawberry, Gallagher, Loon (sometimes called Long or Little Gallagher) and the two Whitewood Lakes; and from John Flook Dam downstream to Scio-Ann Arbor township line, excluding the incorporated village of Dexter.

- 1) Davis Creek (also called Southeast Branch of the Huron River) – Livingston County, Green Oak Township – from the outfall of Sandy Bottom Lake to its confluence with the Huron River;
- 2) Arms Creek – Washtenaw County, Webster Township – from the confluence of the two branches in Section 10 to its confluence with the Huron River; and
- 3) Mill Creek Creek – Washtenaw County, Scio Township – from Parker Road downstream to the incorporated village limits of Dexter.

The Huron River Planning Group feels that the other tributaries to the Huron River in this area do not specifically qualify or warrant state recognition and protection under terms of Part 305, P.A. 451 of 1994 for the following reasons:

- 1) Many of the tributaries have been extensively channelized, rerouted, dredged, filled or otherwise altered so that they are no longer “natural” in character and many are designated agricultural drains under Act 40, P.A. 1956 and are still under the direct control of the County Drain Commission.
- 2) They do not possess the necessary outstanding fish, wildlife, boating, scenic, aesthetic, floodplain, ecologic, historic or recreational values to be of statewide significance.
- 3) Local controls can be instituted that will protect the values of these streams without formal natural river designation.
- 4) Although not formally designated, these tributaries should probably be considered as part of the natural river system for agency reviews of applications for sewage treatment plants, dredging, filling, impoundments, etc.
- 5) Natural river designation of the mainstream would have a positive affect on funding priorities for water quality projects on the tributaries, and designation of the tributaries would have little or no additional affect on these priorities.
- 6) The tributaries to the Huron River, unlike the mainstream have little public access and limited public ownership of the water frontage to handle the additional recreational use that might occur as a result of natural river designation, nor does

the State of Michigan or the Huron-Clinton Metropolitan Authority have the funds necessary to provide this additional access in the near future.

D. Natural River District

The Huron River Natural River District includes an area 400 feet wide on each side of and parallel to the designated river and its designated tributaries. This district merely establishes a definable area within which local zoning may regulate future development and use. Establishment of this district on private land in no way implies a “taking” of these lands by the state or opening them up to public use. Private lands remain private and are subject to the rights of private ownership.

E. Residential Housing

Unplatted lots and new subdivisions in the Natural River District shall accommodate the building setbacks as set forth in Section G, and shall have a minimum riverfront lot width of 150 feet. Lots or property of record that are nonconforming at the time of the effective date of these regulations because of lack of size to accommodate buildings setbacks from the water’s edge shall be allowed to be built upon and variances shall be allowed for required setbacks upon such reasonable terms as set forth by the zoning board, providing that structures be so placed as to best meet the objectives of the Natural Rivers Act.

Single family dwellings are defined as a detached building designed for or occupied exclusively by one (1) family and containing housekeeping facilities, and shall be allowed within the Natural River District subject to the following requirements:

- 1) One single-family dwelling will be permitted on each lot.
- 2) Buildings and appurtenances shall conform to the minimum setback requirements as specified in Section G.

F. Industrial and Commercial Structures and Uses

- 1) New industrial uses and buildings, and expansion of existing uses and buildings will not be permitted within 400 feet of the designated river and tributaries.
- 2) In general, commercial uses and buildings; such as gas stations, motels, restaurants, retail stores, mobile home parks, etc. will not be permitted within 400 feet of the designated river and tributaries. However, a number of commercial uses requiring special exception permits may be compatible with maintaining the natural aspects of the river, such as:
 - a) Commercial crop farms or forest plantations that are landward of the native vegetation strip.
 - b) Campgrounds that are constructed, maintained and operated in accordance with State Health Department regulations (Act 17, P.A. 1970). Includes tent, travel trailer, camper and motor homes uses, buildings, cement pads, hookups, etc. in conformance with established setbacks.

- c) Sales, rental and service of recreational watercraft.
- d) Small home operated businesses such as photography studio, beauty shop, home repair, insurance or other businesses which do not alter the residential nature of the property and are in conformance with established setbacks.
- e) Small rental cabins with light housekeeping, but not motels, which are in conformance with setback requirements.

G. Building Setbacks

On the Huron River mainstream, new buildings and appurtenances will be required to setback a minimum of 125 feet from the ordinary high watermark.* The setback may be decreased 10 feet for every 10 foot rise in bank height to a minimum of 75 feet from the ordinary high watermark. Further:

- 1) New buildings and appurtenances must be setback at least 50 feet from the top of a bluff;** and
- 2) No buildings shall take place on land that is subject to flooding.***

On designated tributaries, new buildings and appurtenances will be required to setback a minimum of 50 feet from the ordinary high water mark of the tributary provided that no building shall take place on land that is subject to flooding.

H. Building Design and Screening

- 1) Property owners are encouraged to use natural materials and natural unobtrusive colors in the construction of new or remodeling of existing buildings.
- 2) Property owners of new or existing buildings visible from the river are encouraged to screen them with native vegetation. The Department of Natural Resources area forester and Soil Conservation Service will advise on planting stock, etc., on request.

**"Ordinary high watermark" means the line between upland and bottomland which persists through successive changes in water levels, below which the presence and action of the water is so common or recurrent that the character of the land is marked distinctly from the upland and is apparent in the soil itself, the configuration of the surface of the soil and the vegetation. On an inland lake which has a level established by law, it means the high-established level. Where water returns to its natural level as the result of the permanent removal or abandonment of a dam, it means the natural ordinary high watermark. (This is the definition used for administration of the Inland Lakes and Streams Act, Act 345, P.A. 1972.)

***"Bluff" means the top of a steep bank rising sharply from the water's edge.

****"Land that is subject to flooding" means that area of land adjoining the designated portions of river and tributaries which:

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

I. Docks

Docks may be constructed not to exceed six feet in width nor more than 20 feet in length with no more than four feet of the dock extending beyond the low watermark. Docks must be constructed in accordance with the rules of Part 301, P.A. 451 of 1994. The use of “natural” materials and camouflaging is encouraged.

J. On-Site Sanitation Systems

All habitations within the Natural River District shall be provided with sanitary waste disposal facilities conforming in type to those required by health specifications of the State of Michigan and the county health department having legal jurisdiction. The facilities provided may be for either water borne waste disposal by the septic tank-absorption tile field method or for non-water borne disposal by the use of a health department approved fly proof sanitary pit privy, or other state approved sanitary system.

New septic tanks and absorption tile fields and sanitary pit privies within the Natural River District shall be located not less than 125 feet from the ordinary high-water mark nor within land that is subject to flooding, whichever distance is greater. The absorption field shall be located in a well-drained area and the bottom of said field shall be at least four feet above the known high groundwater table. No absorption field shall be closer than 50 feet from any surface or subsurface drainage system, including sump pumps discharging into the river or its tributaries.

The bottom of an earth privy shall not be less than two feet above the known high groundwater table. Where this is not feasible, a watertight vault shall be installed.

K. Signs

Only those signs necessary for (a) identification, (b) direction, (c) resource information, and (d) regulation of use, shall be placed along the designated river and tributaries. Signs for the sale of products or services shall be prohibited, except that an existing business may advertise on lands on which it is established. Signs and outdoor advertising devices within the Natural River District must be:

- 1) Related to permitted uses;
- 2) Not illuminated; and
- 3) In conformance with the following standards:

- a) For residential uses, signs may not be larger than one square foot in area posted no more than one per 100 feet or one sign posted at upstream and downstream corner of lot, however, one temporary real estate "For Sale" sign not to exceed four square feet in area shall be allowed on a parcel of land; and
- b) For commercial uses, one sign per establishment is allowed, not to exceed four square foot in area, not on nor attached to any tree or shrub; and
- c) Signs posted by public agencies must be kept to a minimum, of rustic design, no larger than 10 square feet in a area, not attached to any tree or shrub, and placed so as to best meet the objectives of the Natural Rivers Act.

(NOTE: Signs by public agencies may need to be larger only to provide for public safety (such as warning of impending dangers in the river) or for an interpretive or historic sign, which may be out of sight of the river, but still within the 400 foot Natural River District.)

Also, the use of natural color wood posts is encouraged, and there should only be one sign per post.

L. Soil Erosion and Sediment Control Measures

All earth changing activities, other than normal landscaping or maintenance, undertaken within 500 feet of a lake or stream, must be conducted in accordance with the requirements of Part 91, P.A. 451 of 1994, its administrative rules and those procedures established by the local enforcing agency.

Development along the river involving earth moving shall provide for water disposal and/or protection of the soil surface during and after construction.

Practical combinations of the following will provide effective erosion control when skillfully used in planning and construction.

- 1) The development plan should be fitted to the soils and topography so as to create the least erosion potential. Local offices of the Soil Conservation Service can provide detailed information on the soil characteristics of a given site on the suitability of such soils for various uses.
- 2) Wherever feasible during construction, natural vegetation shall be retained and protected. Where adequate vegetation does not exist, temporary or permanent vegetation shall be established where possible.
- 3) Where land must be stripped of vegetation during construction, limit the exposed area to the smallest practical size at any one time.
- 4) Limit the duration of exposure to the shortest practical time.
- 5) Critical areas exposed during construction should be protected with temporary vegetation and/or mulching.
- 6) Permanent vegetation and improvements, such as roads, storm sewers and other features of development capable of carrying storm runoff in a safe manner, shall be installed as early as possible.

- 7) Provisions should be made to accommodate the increased runoff caused by changed soil and surface conditions during and after development.
- 8) Sediment basins to remove suspended soil particles from runoff water from land undergoing development should be constructed and maintained wherever erosive conditions indicate a need to prevent sediment damage to the river.
- 9) Diversions, grassed waterways, grade stabilization structures, and similar mechanical measures required by the site shall be installed as early in the development area as possible.

The erosion control measures contained in the Washtenaw and Livingston County Soil Conservation Districts Standards and Specifications for soil erosion and sediment control should be followed for all major earth changes.

Consultation and assistance from the Washtenaw and Livingston County Soil Conservation districts and/or the Washtenaw and Livingston County Act 347 Enforcer should be utilized wherever possible.

M. Minerals

New development, exploration or production of oil, gas, salt brine, sand and gravel or other minerals except ground water are not permitted within 300 feet of the designated river or tributaries (Sec. 10, Natural Rivers Act). On new leases on state land, Natural Resources Commission policy prohibits drilling for gas or oil within ¼ mile of any major stream.

N. Utilities

Except on existing rights-of-way, new gas or oil pipelines, or electric transmission lines shall not be permitted in the Natural River District or to cross the designated river and tributaries without prior written consent of the Natural Resources Commission. Plans for these transmission lines which include crossing the river district or the river and designated tributaries must be approved by the Natural Resources Commission (Part 305, P.A. 451 of 1994). New distribution lines shall not cross the designated portions of the river or housing setback zones unless they are placed underground, or if overhead lines are less disruptive to the environment. Plans for distribution lines which are to be placed under the river shall be approved by the Department of Natural Resources and all construction shall meet the requirements under the Sedimentation Control Act and Inland Lakes and Streams Act. Local service lines to private dwellings shall originate from the landward side of the dwelling insofar as practical. Utility companies shall not be permitted to chemically treat vegetation in the rights-of-way on utility easements within the Natural River District, but other normal maintenance is permitted.

O. Agriculture

- 1) Grazing will be permitted within the natural vegetation strip unless the Surface Water Quality determines the grazing contributes to stream degradation (Part 323, P.A. 451 of 1994). In those cases, livestock will be fenced out to protect the riverbanks. Cattle crossings and watering areas shall be constructed according to

accepted methods, after the landowner has consulted with the local Soil Conservation District, Soil Conservation Service, County Extension Service, and/or the Department of Natural Resources.

- 2) Water withdrawal for irrigation will not be affected by natural river designation, but will continue to be permitted in accordance with the riparian doctrine of reasonable use.

P. Disposal of Solid Wastes

No unsightly or offensive material, including but not limited to: trash, refuse, junk cars, junk appliances, garbage or sawdust, shall be dumped or stored within sight of the river.

Q. Stream Alteration

To protect the natural character of the river and the natural flow of its waters, no damming, dredging, filling or channelization of the stream channel will be permitted in those portions of the Huron River or tributaries designated under the Natural Rivers Act unless approved by the Department of Natural Resources under authority of Part 301, P.A. 451 of 1994.

New in-channel stream improvements for fish habitat, bank stabilization or other resource management practices which might alter the natural character of the stream must be approved by the Natural Resources Commission. Any private plans for these types of projects requires a permit under Part 301, P.A. 451 of 1994. Natural materials should be used to construct stream bank stabilization projects to control erosion. They should be camouflaged and the local Conservation Officer or district fish biologist contacted to provide technical advice for such projects.

Permission shall be obtained from the property owner when removing fallen trees and log jams from the river. If there is any extensive removal of log material from the bottom, during these operations, advice should be sought from the district fish biologist.

Water withdrawal for irrigation will be permitted in accordance with the riparian doctrine of reasonable use.

R. Land Alteration

Cutting, filling for building, including appurtenances, on the floodplain and filling for buildings on the upland within 400 feet of the river's edge where the highest ground water table is within six feet of the surface shall be prohibited. Dredging or filling for the construction of fish or wildlife ponds within 500 feet of the river requires a permit under Part 91, P.A. 451 of 1994. However, no lake shall be constructed within the 400-foot Natural River District.

S. Natural Vegetation Strip on Adjacent Shorelines

Trees, shrubs and other vegetation types native to the area shall be maintained and enhanced on each side of the river to retain the river's natural values. The presence of the

natural vegetation strip is to help in stabilizing the river bank, prevent erosion, provide shading which will help maintain cool water temperatures, absorb nutrients from surface water runoff, provide screening of man made elements, enhance fisheries and wildlife habitat and maintain the aesthetic natural quality of the river.

1) Vegetation Strip

Public Land. On all publicly owned land, a one hundred (100) foot minimum restricted cutting strip shall apply on each side of the mainstream and designated tributaries.

Private Land. On all privately owned land a fifty (50) foot minimum restricted cutting strip shall apply on each side of the mainstream and designated tributaries.

Distances of the natural vegetation strip are measured from the ordinary high water mark.

- 2) Restricted Cutting and Removal of Vegetation. Restricted cutting of dead, diseased, unsafe, fallen trees and removal of noxious weeds and shrubs may take place. The selected removal of trees for commercial timber harvest, access or woodlot improvement shall be allowed upon specific approval of the Department of Natural Resources or its representative.
- 3) Agriculture. Grazing will be permitted within the natural vegetation strip unless the Surface Water Quality determines the grazing contributes to stream degradation (Part 31, P.A 451 of 1994). In those cases, livestock will be fenced out to protect the riverbanks. Cattle crossings and watering areas shall be constructed according to accepted methods, after the landowner has consulted with the local Soil Conservation District, Soil Conservation Service, County Extension Service, and/or the Department of Natural Resources.
- 4) Selected Cutting for Visual Access. Trees and shrubs may be selectively cut for a filtered view of the river upon arrival of the Department of Natural Resources or its representative. Filtered view of the river means maintenance or establishment of woody vegetation of sufficient density to screen new developments from the river, provide for streambank stabilization and erosion control, serve as an aid to infiltration of surface runoff and provide cover to shade the water. It need not be so dense as to completely block the river view. It means no clear cutting.
- 5) Planting of Native Vegetation. Planting of native plant species is encouraged in the vegetation strip to enhance or protect the river's edge. The Department of Natural Resources or its representative may be consulted on selection of native plant species.

T. Recreation

- 1) Campgrounds and Picnic Areas. On public land, no new structures associated with a campground or picnic area, except those necessary to protect the riverbank,

will be permitted within 300 feet of the designated mainstream or tributaries. Such structures shall be designed and constructed in such a manner as to further the purposes of the Natural River Act.

2) Fishing and Hunting.

- a) Fishing and hunting will be permitted in the Natural River District in accord with current state and local laws and regulations.
- b) IT IS EMPHASIZED THAT NATURAL RIVER DESIGNATION, OR ESTABLISHMENT OF A ZONING DISTRICT ALONG THE RIVER, DOES NOT OPEN PRIVATE LANDS TO THE PUBLIC. Because of the close proximity of the river to highly populated areas, trespassing and violation of privacy will be discouraged through the joint cooperation of property owners and law enforcement officials.
- c) Fisheries and wildlife management practices, if necessary, will be done in conformance with the character of the area and objectives of the natural river designation.

3) Lakes. No lake shall be built within the 400-foot Natural River District.

4) Boating and Canoeing.

- a) Non-motorized boating and canoeing is permitted.
- b) Use of motorized watercraft will be permitted in accordance with local controls promulgated under authority of Part 801, Marine Safety, of 1994 PA 451.
- c) Rafting of more than two vessels is not permitted.

5) Use of Firearms. It is not the intent of this plan to place additional limitations on hunting, but because of the river's unique character, numerous horseshoe bends and oxbows and the possibility of property damage or injury, the strict enforcement of the state laws pertaining to the safe use of firearms on the river and on public roads and bridges in the Natural River District will be strengthened and encouraged through the cooperative efforts of property owners, liveries and law enforcement officials.

6) Litter. In view of the special status of the Huron River, its unique character and beauty and in consideration of the rights of private property owners to avoid trespass by others, the enforcement of anti-litter laws shall be strengthened and the Department of Natural Resources and the Huron-Clinton Metropolitan Authority shall initiate and be responsible for river clean-up bees and special incentive programs for clear-up, with the cooperation, coordination and assistance of local governmental units and canoe liveries.

U. Public Access

The use of non-motorized modes of transportation as a means of reaching and enjoying the Huron River is strongly encouraged. Developed trails for non-motorized traffic within the Natural River District should be planned and constructed in a manner which preserves the natural character of the district to the greatest extent possible.

New public automobile roads and highways and river crossings will not be permitted within the Natural River District. Plans for relocation, major improvement or upgrading of existing roadways must be approved by the local zoning board and the Natural Resources Commission (Part 305, P.A. 451 of 1994). Normal maintenance such as grading and erosion control are permitted subject to all provisions of Part 301 and Part 91, P.A. of 1994. However, the use of broken concrete or other unsightly material for erosion control is prohibited.

Public access sites within the Natural River District, primarily those on Department of Natural Resources and Huron-Clinton Metropolitan Authority lands, are sufficient in distribution and number, and additional new access sites are not recommended at this time. Replacement of existing sites, if necessary, shall be done in conformance with this plan.

All existing sites have some erosion problems and the appropriate agency should take steps to minimize resource damage. In addition, the following specific recommendations are made:

- The present Department of Natural Resources picnic site on the west bank of the Huron River in Section 12, T1S, R4E (downstream of the John Flook Dam) should be encouraged as a canoe access site, and improved only to the extent necessary to provide adequate canoe launching and protection of the river bank. Wooden steps, a canoe slide and erosion control measures are recommended as appropriate investments.
- Huron-Clinton Metropolitan Authority has recently developed a canoe access site and canoe camp on Rickett Road. Huron-Clinton Metropolitan Authority should study the feasibility of better signing this area to inform canoeists of this area for canoe access.

A number of de facto (undesignated, but in general use) picnic, fishing and boat launching sites exist along the river. Use at these sites is increasing to a great extent, often causing a dangerous situation and resource damage. The following are recommended:

- The Mast Road Bridge crossing in Dexter presently has an erosion problem. With the road being expanded to four lanes, both safety and erosion problems will increase. It is recommended that the bridge and roadway be posted "NO PARKING".
- Both the east and west roads of Old-23 are used for access to the river. The safety problem here is not acute as at some other areas, but the Department of Natural Resources and Huron-Clinton Metropolitan Authority, working together, should monitor this use and investigate the possibility of providing

parking areas at either the nearby commuter parking lot or on existing Huron-Clinton Metropolitan Authority land.

- Both Evergreen and McCabe are narrow, gravel roads where they cross the Huron River. Vehicle parking for access has caused both a safety and erosion problem in the past. These should be posted “NO PARKING” to discourage canoe and boat launching.
- The bridges and approaching roadways at both Winan’s Lake Road and M-36 are extremely narrow. The areas are well used by canoeists, fishermen and boaters, and traffic on the roads is heavy. Parked cars almost block traffic at times, and cause a dangerous situation. Because of the safety factor, these existing areas should not be used for ingress and egress of canoes to the Huron River. Alternative canoe access is available at the public access site on Rickett Road. The Department of Natural Resources and Huron-Clinton Metropolitan Authority should monitor this use in the future, to determine if a designated access site is needed in this vicinity.

The Huron River Planning Group recognizes the increase in canoe traffic and use that is occurring in the state, and particularly on the Huron River. To protect the natural values and characteristics of the designated portions of the Huron River, the group recommends the following:

- New canoe liveries operating in the designated portions of the river should be discouraged. In considering rezoning, special exception or variance requests, either within or outside of the 400 foot Natural River District, local units of government should examine closely the effects such use will have on the natural qualities of the Huron River system, the need for additional local governmental services, and the safety and enjoyment of riparian landowners and other river users.
- Department of Natural Resources and Huron-Clinton Metropolitan Authority should specify the number of canoes allowed to be rented by their respective concessioners, and this number should reflect the total use patterns on the designated sections of the river.
- The Department of Natural Resources, in cooperation with the Huron River Watershed Council, should contact the livery operators using the designated portions of the river, to outline the public access problems, and to ask them to voluntarily manage their operations to help alleviate these problems.
- The Huron River Planning Group strongly supports the concept of river use rules to control the activities and number of watercraft on the Huron River, but recognizes that statutory authority for such controls has not been formally clarified.

V. Motorized Vehicles

Operation of all motorized vehicles other than on designated public roads, will be prohibited on publicly owned lands within the Natural River District.

Prohibition of such use shall be posted. Use of ORVs on publicly owned lands contiguous to the Natural River District shall be in conformance with guidelines and

regulations of the agency administering such lands, and with the state and federal noise level standards strictly enforced. (Muffler requirement of MIC – Section 7, Act 300, P.A. 1949, etc.)

Although use of ORVs by a landowner of his guest(s) on his property cannot be prohibited, it is strongly recommended that such vehicles not be operated within the natural vegetation strip as specified in Section Q of this management plan.

W. Historical and Archaeological Sites

The identification, preservation and interpretation of historical and archaeological sites along the designated portions of the Huron River and tributaries, by public agencies and local historical societies, is strongly encouraged.

W. Wastewater Treatment Facilities

It is strongly recommended that the Water Resources Commission give top priority to upgrading wastewater treatment facilities, and eliminating any other sources of pollution on the entire Huron River.

X. Administration

1) Land Use Guidelines.

- a) Zoning by local government units shall be the chief means of protecting the Huron River and its designated tributaries as a natural river under the natural river plan.

1. Zoning shall be applied within the 400-foot Natural River District on both the designated mainstream and tributaries. Upon adoption of a local zoning ordinance, certified copies of maps and/or documents describing the Natural River District shall be filed with the local tax assessing officer and County Equalization Department. In establishing true cash value of property within the Natural River District, the assessing officer shall recognize the effect of use limits established by the ordinance (Part 305, P.A. 451 of 1994).

The Huron River Planning Group also urges local government units to adopt building setbacks, vegetation management and septic system controls for other streams under their jurisdiction not within the natural rivers designation.

Any property owner with undeveloped river frontage on the designated portions of the Huron River or its designated tributaries may sign an open space development rights easement with the state under Act 116, P.A. 1974 to obtain potential tax relief.

2. Appeals: Under certain circumstances, strict adherence to this plan may create unreasonable hardships for the frontage owner. Such cases may be appealed to the appropriate local board for a variance. Applications for a variance shall be based on a site plan.* The county health department, Soil Conservation Service, appropriate staff and field personnel of the Department of Natural Resources and other experts should be consulted to recommend to the appeals board a course of action which will have the least degrading impact on the character of the natural river. Final determination of the variance shall be made by the local appeals board.
3. Nonconforming uses: As stated in Section 13 of the Natural Rivers Part 305, P.A. 451 of 1994, “the lawful use of any building or structure and of any land or premise as existing and lawful at the time of enactment of a zoning ordinance or rule or an amendment thereof may be continued although such use does not conform with the provisions of the ordinance, rule or amendment. The ordinance or rule shall provide for the completion, restoration, extension or substitution of nonconforming uses upon such reasonable terms as may be set forth in the zoning ordinance or rule.”

b) Land Acquisition

1. The state may purchase or trade lands with owner consent on the designated river and tributaries to maintain or improve the river and its environment. Efforts should be made by the Department of Natural Resources and the Huron-Clinton Metropolitan Authority to purchase lands on or trade other lands for lands along the river as key areas are identified and as funds become available (Part 305, P.A. 451 of 1994).
2. Some landowners in the Natural River District may be interested in offering scenic or other easements or inserting restrictions in their deeds which serve to protect the river environment and which coincide with their property interests. The opportunity to obtain such easements or restrictions should be pursued.

- c) State Resources. Overall responsibility for implementing and coordinating the natural river plan is assigned to the Region III Office of the Department of Natural Resources. The Natural Resources Natural Rivers Task Force will act in an advisory capacity. Enforcement of water quality standards and water use regulations will be the responsibility of the Water Resources Commission and other divisions of the Department of Natural Resources.

*"Site Plan" means a surface view showing elevations or contours of the ground, including existing earth fills; generalized vegetative cover; size, location and spatial

arrangement of all proposed and existing structures and uses on the site; location and elevations of streets, access roads, water supply and sanitary facilities.

- d) Other Public Lands. Cooperative agreements between the Director of the Department of Natural Resources and the chief administrative officer of other public agencies administering lands within the Natural River District will govern the use and management of those lands in accordance with the provisions of this plan.
- 2) Other laws and programs reinforcing natural river management objectives should be utilized to the extent necessary to protect the river in implementing the management plan for the river and tributaries (see Appendix A).
 - 3) It is recommended that property owners and other citizens further protect and enhance the values of the Huron River environment by adopting the attitudes and actions described in Appendix B.

Y. Management of Areas Beyond the Natural River Zone

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

It is recommended that local governmental units zone adjacent to the Natural River District to maintain the integrity of the Huron River and designated tributaries as a country-scenic river.

- 1) By limiting residential development to low density single-family structures or medium density cluster developments. Medium density cluster developments are recommended because it is easier to provide services and control.
- 2) By providing districts where industry which may produce noise, smoke, fumes, odors, etc., will not affect the natural characteristics of the river area.
- 3) By providing districts for commerce where heavy traffic, parking, automobile exhaust and noise will not create environmental intrusions.

Further, it is recommended that local units of government incorporate water resource protection and/or management measures into their plans, programs and decisions involving land use. Such measures are of particular importance when dealing with lands in the stream corridor as defined below.

A stream corridor essentially consists of lands contiguous to the stream, the alteration or development of which could potentially cause direct impacts on the stream and its environment. It is a composite of:

- 1) Soil types with severe limitations for development.
- 2) Vegetation along creek banks.
- 3) Wetlands.
- 4) Slopes.

5) Flood profiles when known.

Sensitive areas involving one or more of the above factors may occur within the drainage area of the river but outside of the Natural River District itself. Modification or development within such areas may adversely affect water resource benefits within the district or create problems requiring costly public investment to rectify.

It is recommended that local units of government consider such measures as regulating changes in surface water runoff from specific locations through use of the site plan review process; and protecting sensitive areas outside of the Natural River District through use of conditional use permit procedures. Local units of government should seek the assistance of, and work with, local agencies involved with water resources, such as the Huron River Watershed Council and other agencies noted below.

On private lands adjacent to and within one-quarter mile of the Natural River District, it is recommended that the local Soil Conservation Districts, local Soil Erosion and Sedimentation Control agencies, Cooperative Extension Service and the Department of Natural Resources cooperate with landowners to ensure that timber harvest, agricultural practices, housing, road building or other land use activities are compatible with the country-scenic designation of the river and with maintaining the water quality of the river.

APPENDIX A

PART 305 NATURAL RIVERS

324.30501 Definitions.

Sec. 30501. As used in this part:

- (a) "Free flowing" means existing or flowing in natural condition without impoundment, diversion, straightening, riprapping, or other modification.
- (b) "Natural river" means a river that has been designated by the department for inclusion in the wild, scenic, and recreational rivers system.
- (c) "River" means a flowing body of water or a portion or tributary of a flowing body of water, including streams, creeks, or impoundments and small lakes thereon.
- (d) "System" means all of those rivers or portions of rivers designated under this part.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

324.30502 Natural river; designation; purpose; long-range plans; publicity; cooperation.

Sec. 30502. The department, in the interest of the people of the state and future generations, may designate a river or portion of a river as a natural river area for the purpose of preserving and enhancing its values for water conservation, its free flowing condition, and its fish, wildlife, boating, scenic, aesthetic, floodplain, ecologic, historic, and recreational values and uses. The area shall include adjoining or related lands as appropriate to the purposes of the designation. The department shall prepare and adopt a long-range comprehensive plan for a designated natural river area that sets forth the purposes of the designation, proposed uses of lands and waters, and management measures designed to accomplish the purposes. State land within the designated area shall be administered and managed in accordance with the plan, and state management of fisheries, streams, waters, wildlife, and boating shall take cognizance of the plan. The department shall publicize and inform private and public landowners or agencies as to the plan and its purposes, so as to encourage their cooperation in the management and use of their land in a manner consistent with the plan and the purposes of the designation. The department shall cooperate with federal agencies administering any federal program concerning natural river areas, and with any watershed council established under part 311, when such cooperation furthers the interest of the state.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

324.30503 Qualifications for designation; categories of rivers.

Sec. 30503. A river qualifying for designation as a natural river area shall possess 1 or more of the natural or outstanding existing values cited in section 30502 and shall be permanently managed for the preservation or enhancement of such values. Categories of natural rivers shall be defined and established by the department, based on the characteristics of the waters and the adjoining lands and their uses, both as existing and as proposed, including such categories as wild, scenic, and recreational. The categories shall be specified in the designation and the long-range comprehensive plan.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

324.30504 Land acquisition; purpose; interest acquired; consent.

Sec. 30504. The department may acquire lands or interests in lands adjacent to a designated natural river for the purpose of maintaining or improving the river and its environment in conformance with the purposes of the designation and the plan. Interests that may be acquired include, but are not limited to, easements designed to provide for preservation and to limit development, without providing public access and use. Lands or interests in lands shall be acquired under this part only with the consent of the owner.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

324.30505 Federal financial assistance programs; leases; expenditures; purposes.

Sec. 30505. (1) The department may administer federal financial assistance programs for natural river areas.

(2) The department may enter into a lease or agreement with any person or political subdivision to administer all or part of their lands in a natural river area.

(3) The department may expend funds for works designed to preserve and enhance the values and uses of a natural river area and for construction, management, maintenance, and administration of facilities in a natural river area conforming to the purposes of the designation, if the funds are appropriated by the legislature.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

324.30506 Public hearings; notice.

Sec. 30506. Before designating a river as a natural river area, the department shall conduct public hearings in the county seat of any county in which a portion of the designated natural river area is located. Notices of the hearings shall be advertised at least twice, not less than 30 days before the hearing, in a newspaper having general circulation in each such county and in at least 1 newspaper having general circulation in the state and 1 newspaper published in the Upper Peninsula.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

324.30507 Land uses; zoning; local ordinances; state rule.

Sec. 30507. After designation of a river or portion of a river as a natural river area and following the preparation of the long-range comprehensive plan, the department may determine that the uses of land along the river, except within the limits of an incorporated municipality, shall be controlled by zoning contributing to accomplishment of the purposes of this part and the natural river plan. County and township governments are encouraged to establish these zoning controls and additional controls as may be appropriate, including, but not limited to, building and subdivision controls. The department may provide advisory, planning, and cooperative assistance in the drafting of ordinances to establish these controls. If the local unit does not, within 1 year after notice from the department, have in full force and effect a zoning ordinance or interim zoning ordinance established under authority of the acts cited in section 30510, the department, on its own motion, may promulgate a zoning rule in accordance with section 30512. A zoning rule may also be promulgated if the department finds that an adopted or existing zoning ordinance fails to meet adequately guidelines consistent with this part as provided by the department and transmitted to the local units concerned, does not take full cognizance of the purposes and objectives of this part, or is not in accord with the purposes of designation of the river as established by the department.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

324.30508 Zoning ordinance or rule; purpose.

Sec. 30508. A zoning ordinance adopted by a local unit of government or a zoning rule promulgated by the department shall provide for the protection of the river and its related land resources consistent with the preservation and enhancement of their values and the objectives set forth in section 30502. The ordinance or rule shall protect the interest of the people of the state as a whole. It shall take cognizance of the characteristics of the land and water concerned, surrounding development, and existing uses and provide for conservation of soil, water, streambed and banks, floodplains, and adjoining uplands.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

324.30509 Zoning ordinance or rule; establishment of districts; powers; distance.

Sec. 30509. The ordinance or rule shall establish zoning districts within which such uses of land as for agriculture, forestry, recreation, residence, industry, commerce, and additional uses may be encouraged, regulated, or prohibited. It may limit or prohibit the placement of structures of any class or designate their location with relation to the water's edge, to property or subdivision lines, and to flood flows and may limit the subdivision of lands for platting purposes. It may control the location and design of highways and roads and of public utility transmission and distribution lines, except on lands or other interests in real property owned by the utility on January 1, 1971. It may prohibit or limit the cutting of trees or other vegetation, but such limits shall not apply for a distance of more than 100 feet from the river's edge. It may specifically prohibit or limit mining and drilling for oil and gas, but such limits shall not apply for a distance of more than 300 feet from the river's edge. It may contain other provisions necessary to accomplish the objectives of this part. A zoning rule promulgated by the department shall not control lands more than 400 feet from the river's edge.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

324.30510 Local zoning ordinance; conformance with applicable law; construction.

Sec. 30510. A local unit of government, in establishing a zoning ordinance, in addition to the authority and requirements of this part, shall conform to the township zoning act, 1943 PA 184, MCL 125.271 to 125.310, or the county zoning act, 1943 PA 183, MCL 125.201 to 125.240, including, but not limited to, the variance provisions of those acts. Any conflict shall be resolved in favor of the provisions of this part. The powers granted under this part shall be liberally construed in favor of the local unit or the department exercising them, in such manner as to promote the orderly preservation or enhancement of the values of the rivers and related land resources and their use in accordance with a long-range comprehensive general plan to ensure the greatest benefit to the state as a whole.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995;--Am. 2000, Act 17, Imd. Eff. Mar. 8, 2000.

324.30511 Districts; valuation for tax purposes.

Sec. 30511. Upon adoption of a zoning ordinance or rule, certified copies of the maps showing districts shall be filed with the local tax assessing officer and the state tax commission. In establishing true cash value of property within the districts zoned, the assessing officer shall take cognizance of the effect of limits on use established by the ordinance or rule.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

324.30512 Rules; enforcement; promulgation; variance; existing use.

Sec. 30512. (1) The department shall prescribe administrative procedures and rules and provide personnel as it considers necessary for the enforcement of a zoning ordinance or rule enacted in accordance with this part. A circuit court, upon petition and a showing by the department that there exists a violation of a rule properly promulgated under this part, shall issue any necessary order to the defendant to correct the violation or to restrain the defendant from further violation of the rule.

(2) The department shall promulgate a zoning rule to implement this part. The rule shall include procedures for receiving and acting upon applications from local units of government or landowners for change of boundaries or change in permitted uses in accordance with chapter 4 of the administrative procedures act of 1969, 1969 PA 306, MCL 24.271 to 24.287. An aggrieved party may seek judicial review under chapter 6 of the administrative procedures act of 1969, 1969 PA 306, MCL 24.301 to 24.306.

(3) A variance from a zoning rule promulgated by the department to implement this part may be applied for and granted pursuant to section 4 of the uniform condemnation procedures act, 1980 PA 87, MCL 213.54, and the variance provisions of the zoning rule.

(4) The lawful use of any building or structure and of any land or premise as existing and lawful at the time of enactment of a zoning ordinance or rule or of an amendment of a zoning ordinance or rule may be continued although the use does not conform with the ordinance, rule, or amendment. The ordinance or rule shall provide for the completion, restoration, reconstruction, extension, or substitution of nonconforming uses upon reasonable terms as set forth in the zoning ordinance or rule.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995;--Am. 2000, Act 17, Imd. Eff. Mar. 8, 2000.

324.30513 National wild and scenic river system; administration.

Sec. 30513. This part does not preclude a component of the system from becoming a part of the national wild and scenic river system under the wild and scenic rivers act, Public Law 90-542, 16 U.S.C. 1271 to 1287. The department may enter into written cooperative agreements for joint federal-state administration of rivers that may be designated under the wild and scenic rivers act.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

324.30514 Area plans; approval; rules.

Sec. 30514. The department shall approve preliminary and final plans for site or route location, construction, or enlargement of utility transmission lines, publicly provided recreation facilities, access sites, highways, roads, bridges, or other structures and for publicly developed water management projects, within a designated natural river area, except within the limits of a city or incorporated village. The department may require any measure necessary to control damaging erosion or flow alteration during or in consequence of construction. The department shall promulgate rules concerning the approvals and requirements provided for in this section.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

324.30515 Construction of part.

Sec. 30515. This part does not prohibit a reasonable and lawful use of any other natural resource that benefits the general welfare of the people of this state and that is not inconsistent with the purpose of this part.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

APPENDIX B

“ALTERATION OF RIVERS” LAWS

Construction on Streams (Act 156, 1951): Authorizes county commissioners to permit or prohibit the construction of dams or bridges on navigable streams. They can also provide for the removal of obstructions.

Construction of Dams in Streams (Act 184, 1963): Prohibits dam building on a stream or river impounding more than five acres without a permit from the Department of Natural Resources.

Inland Lakes and Streams Act of 1972 (Act 346, 1972): Authorizes the Department of Natural Resources to regulate structures, fills, dredgings and other such actions on waterfronts.

Soil Erosion and Sedimentation Control Act of 1972 (Act 347, 1972): Control of soil erosion for the identified land uses of an area to prevent sedimentation of the waters of this state.

Regulate Alteration of Floodplain and Floodways (Act 167, 1968): Authorizes the Water Resources Commission to control alteration of the water courses and the floodplains of all rivers and streams, and to prohibit the obstruction of the floodways of rivers and streams of the state.

Goemaere-Andreson Wetland Protection Act (Act 203, 1979): Authorizes the Department of Natural Resources to regulate dredging, filling, draining and other such actions to wetlands, including those contiguous to Michigan rivers (effective October 1, 1980).

RIVER USE LAWS

Marine Safety Act (Act 303, 1967): Sets forth general regulations for the use of vessels on waters of the state. Department of Natural Resources may, via hearings and adoption of rules by local governments, further regulate the use of such waters by special regulation.

Pending Canoe Registration Act: Would require registering of canoes that are intended for use in public waters of the state.

POLLUTION LAWS AND PROGRAMS

Water Resources Commission (Act 245, 1929): Commission must establish “pollution standards for waters of the state in relation to the use to which they are or may be put.” Has the authority to make regulations and issue orders and permits restricting the polluting content of discharges into state surface and ground waters. Act prohibits discharges of any substance into water which are or may become injurious to public health, safety, welfare; domestic, commercial, industrial, agricultural, recreational or other uses of water; value or utility of riparian lands; to livestock, wild animals, birds, fish, aquatic life or plants, etc. Prohibits structures that will unduly restrict the capacity of the floodway.

Environmental Protection Act (Act 127, 1970): Allows the Attorney General, any public body, and private body or person to sue to enjoin the pollution or likely pollution of any natural resource or obtain relief with respect to such actions.

Clean Water Bonding Act (Act 76, 1968 implemented by Act 329, 1966, as amended): For sewage treatment facilities eligible for federal aid, the Water Resources Commission may grant up to 25 percent of the project cost providing that the sum of state and federal aid shall not exceed 80 percent of the project cost.

RELATED & GENERAL LAWS APPLICABLE TO NATURAL RIVERS PROGRAM

Shorelands Protection and Management Act (Act 245, 1970): The Great Lakes counterpart of the Natural River Act.

Farmland and Open Space Preservation Act (Act 116, 1974): Provides tax relief for certain property owners signing nondevelopment agreements with the state.

Subdivision Control Act (Act 288, 1967): Regulates the subdivision of land; requires that the land be suitable for building sites and public improvements, and that there be adequate drainage thereof; to control residential building development within floodplain areas, etc.

State Constitution (Act IV, s.52): Legislature must provide for the protection of natural resources.

Department of Conservation (Act 17, 1921): Department must protect and conserve the natural resources of the State of Michigan.

Natural Beauty Roads (Act 150, 1970): Such roads may be established by county road commission upon local petition. After establishment, commission may enact regulations to preserve native vegetation in the road right-of-way.

Safety Zones (Act 61, 1968): Prohibits discharge of firearms within 150 yards of an occupied dwelling.

Reckless Use of Firearms Act (Act 45, 1952):

Recreational Trespass Act (Act 323, 1976): Must have written permission to be on an individual's property, and prohibits possession or discharge of a firearm within the limits of a right-of-way on certain public roads.

RIVER PLANNING & DEVELOPMENT ORGANIZATIONS

Local River Management Act (Act 253, 1964): Authority to establish both a watershed council (like a planning or advisory board) and a river management district and board (planning a development agency).

Intermunicipality Study Committee (Act 200, 1957): Two or more municipalities may establish an intermunicipality study committee to study area problems and formulate recommendations to their governing bodies.

APPENDIX C**DEPARTMENT OF NATURAL RESOURCES
FISHERIES DIVISION
HURON RIVER NATURAL RIVER ZONING**

(By authority conferred on the commission of natural resources by section 13 of Act No. 231 of the Public Acts of 1970, being §281.773 of the Michigan Compiled Laws)

R 281.151 Definitions.

Rule 1. As used in these rules:

- (a) "Applicant" means a person who requests on proper forms and pursuant to proper procedures, a zoning permit, special exception permit, or variance.
- (b) "Appurtenance" means a structure that is incidental to a dwelling, including, but not limited to, garages, private access roads, pump houses, wells, sanitary facilities, and electrical service lines.
- (c) "Bluff" means a steep bank which rises sharply from the river's edge.
- (d) "Building inspector" means the agency or individual who is appointed by the appropriate governmental subdivision to issue building permits and to administer the provisions of Act No. 230 of the Public Acts of 1972, as amended, being §125.1501 et seq. of the Michigan Compiled Laws, and known as the state construction code act of 1972.
- (e) "Building permit" means a permit that is issued by the appropriate governmental subdivision, as presently required under the provisions of Act No. 230 of the Public Acts of 1972, as amended, being §125.1501 et seq. of the Michigan Compiled Laws.
- (f) "Commission" means the natural resources commission.
- (g) "Cutting edge of the river" means the edge of a river or stream where the water velocity is such that it may cause soil or streambank erosion.
- (h) "Director" means the director of the department of natural resources.
- (i) "Family" means either of the following:
 - (i) One or more persons who are related by blood, legal adoption, or marriage and who occupy a single-family dwelling unit with not more than 3 other persons.
 - (ii) Not more than 5 unrelated persons who occupy a single-family dwelling unit.
- (j) "Filtered view of the river" means the maintenance or establishment of woody vegetation of sufficient density to screen developments from the river, to provide for streambank stabilization and erosion control, to serve as an aid to infiltration of surface runoff, and to provide cover to shade the water. The vegetation need not be so dense as to completely block the river view. "Filtered view of the river" means no clear cutting.
- (k) "Front" means that side of a lot abutting the river's edge of the mainstream or tributary.
- (l) "Lot" means a continuous area or acreage of land which can be described for purposes of transfer, sale, lease, rental, or other conveyance.
- (m) "Lot of record" means a lot that actually exists in a subdivision plat as shown on the records of the county register of deeds before the effective date of these rules, or a lot or parcel described by metes and bounds which has been recorded as required by law.
- (n) "Natural river district" means the Huron river natural river district as described in R 281.153(l).
- (o) "Ordinary high-water mark" means the line between the upland and bottomland which persists through successive changes in water level and below which the presence and action of the water is so common or recurrent that the character of the land is marked distinctly from the

upland and is apparent in the soil itself, the configuration of the surface of the soil, and the vegetation.

- (p) "Reforestation" means the renewal of vegetative cover by seeding, planting, or transplanting.
- (q) "River's edge" means the ordinary high-water mark as used in Act No. 346 of the Public Acts of 1972, being §281.951 et seq. of the Michigan Compiled Laws, and as defined in subdivision (o) of this rule.
- (r) "Setback" means the horizontal distance between any portion of a structure and the river's edge, measured at the structure's closest point to the river's edge.
- (s) "Single-family dwelling" means a detached building, or portion thereof, which is used exclusively for residential purposes, which is designed for, or occupied exclusively by, 1 family, and which contains housekeeping facilities.
- (t) "Soil erosion and sedimentation control enforcement agency" means the local agency that is appointed by the appropriate governmental subdivision to enforce the provisions of Act No. 347 of the Public Acts of 1972, as amended, being §282.101 et seq. of the Michigan Compiled Laws.
- (u) "Structure" means anything that is constructed, erected, or moved to or from any premise which is located above, on, or below the ground, including, but not limited to, roads, signs, billboards, and mobile homes. Temporary recreational facilities, including, but not limited to, tents, camper trailers, and recreation vehicles are not considered structures when used less than 30 days per year and located landward of the natural vegetation strip.
- (v) "Zoning administrator" means the administrator of these rules who is appointed by the natural resources commission.
- (w) "Zoning permit" means a standard form which is issued by the zoning administrator upon a determination that the proposed construction and use of land and buildings and structures thereon is in compliance with all provisions of these rules.
- (x) "Zoning review board" means a group of not less than 5 nor more than 9 people which includes not less than 3 local representatives and 1 department of natural resources representative and which is appointed by the commission to act upon requests for special exceptions.

History: 1979 ACS 7, Eff. July 16, 1981.

R 281.152 Purpose.

Rule 2. The commission, on its own motion, in order to implement the intent of Act No. 231 of the Public Acts of 1970, being §281.761 et seq. of the Michigan Compiled Laws, and in the absence of local zoning to protect the Huron river, a designated natural river, promulgates these zoning rules whose purposes are as follows:

- (a) To promote the public health, safety, and general welfare, to prevent economic and ecological damage due to unwise development patterns within the natural river district, and to preserve the values of the natural river district for the benefit of present and future generations.
- (b) To protect the free-flowing condition, fish and wildlife resources, water quality, scenic and aesthetic qualities, and historical and recreational values of the Huron river and adjoining land.
- (c) To prevent flood damage due to interference with natural floodplain characteristics by excluding developments which are vulnerable to flood damages and which may reduce the capacity of the floodway of the river to withstand flooding conditions.
- (d) To provide for residential and other compatible, permitted uses that complement the natural characteristics of the natural river system.
- (e) To protect individuals from investing funds in structures proposed for location on lands unsuited for such development because of high groundwater, erosion, or vulnerability to flood damage.

History: 1979 ACS 7, Eff. July 16, 1981.

R 281.153 Boundaries; rules of construction; display and filing of zoning map; effect of zoning rules.

Rule 3. (1) The boundaries of the Huron river natural river district shall be as described in these rules and as depicted on the certified Huron river natural river zoning map. The Huron river natural river district comprises an area which is described as follows:

(a) The mainstream of the Huron river from Kent lake dam downstream to the western edge of section 32 of Hamburg township, Livingston county, excluding Strawberry, Gallagher, Loon, which is also known as Long or Little Gallagher, and the 2 Whitewood lakes; and from John Flook dam downstream to the Scio-Ann Arbor township line in Washtenaw county, excluding the incorporated village of Dexter.

(b) Davis creek, which is also called the southeast branch of the Huron river, Livingston county, Green Oak township, from the outfall of Sandy Bottom lake to its confluence with the Huron river.

(c) Arms creek, Washtenaw county, Webster township, from the confluence of the 2 branches in section 10 to its confluence with the Huron river.

(d) Mill creek, Washtenaw county, Scio township, from Parker road downstream to the incorporated village limits of Dexter.

(e) The lands lying within 400 feet of the river's edge which are enumerated in subdivisions (a) to (d) of this subrule.

(2) Certified copies of the Huron river natural river zoning map shall be filed with the local tax assessing officers and with the state tax commission, and additional display copies shall be provided to local officials in the Huron river area, including all of the following:

(a) County register of deeds.

(b) Zoning administrator of these rules.

(c) Local planning, zoning, and health officials.

(d) Township and county clerks.

(e) Local building inspector.

(f) Local soil erosion and sedimentation control enforcement agencies.

(g) The soil conservation service.

(h) Huron river watershed council.

(3) These zoning rules do not repeal, abrogate, or impair any existing easements, covenants, or deed restrictions applicable to lands within the natural river district, except that if these rules impose greater restrictions than those found on such easements, covenants, or deeds, the provisions of these rules shall prevail.

(4) These zoning rules do not permit actions prohibited by other statutes or ordinances, including zoning ordinances, which are applicable to the natural river district. Therefore, all of the following provisions apply:

(a) All earth-changing activities, other than normal landscaping or maintenance, that are undertaken within 500 feet of a lake or stream are subject to the provisions of Act No. 347 of the Public Acts of 1972, as amended, being §282.101 et seq. of the Michigan Compiled Laws.

(b) All dredge and fill activities and construction of permanent structures lying below the ordinary high-water mark are subject to the provisions of Act No. 346 of the Public Acts of 1972, being §281.951 et seq. of the Michigan Compiled Laws.

(c) All development and land uses in the Huron river natural river district are subject to the provisions of appropriate local zoning ordinances, health codes, and building codes, including requirements for permits and approvals.

(5) If uncertainty exists with respect to the boundaries indicated on the Huron river natural river zoning map, all of the following rules shall apply:

- (a) Boundaries that are indicated as approximately following streets or highways shall be construed to be the center lines of the streets or highways.
- (b) Boundaries that are indicated as approximately following lot lines shall be construed as following such lot lines.
- (c) Boundaries that are indicated as approximately following city, township, or county boundary lines shall be construed as following such city, township, or county boundary lines.
- (d) Boundaries that are indicated as approximately following railroad lines shall be construed to be midway between the train tracks.
- (e) Boundaries that are indicated as approximately parallel to the center lines of streets or highways shall be construed as being parallel thereto and at such distance therefrom as indicated on the official Huron river natural river zoning map. If no distance is given, the dimension shall be determined by the use of the scale shown on the official Huron river natural river zoning map.
- (f) Boundaries that follow the shoreline of a river, stream, lake, or other body of water shall be construed to follow such shoreline and, in the event of change in the shoreline, shall be construed as moving with the actual shoreline. Boundaries that are indicated as approximately following the thread of streams, canals, or other bodies of water shall be construed to follow such threads.

History: 1979 ACS 7, Eff. July 16, 1981.

R 281.154 Zoning permits; application; additional requirements.

Rule 4. (1) A person shall not commence excavation, erection, alteration, or repair on a building or structure, or commence a land use, until a zoning permit has been obtained from the zoning administrator. If the alteration or ordinary maintenance made on a dwelling does not change the character of the structure or land use, and if the total cost does not exceed 5% of the market value of the structure in any 12-month period, the owner of the structure or land is exempt from obtaining a zoning permit, but may be required to obtain a local building permit from the appropriate local building inspector.

(2) A written application for a zoning permit shall be filed with the zoning administrator. All of the following information shall be submitted with an application for a zoning permit:

- (a) Two copies of a site plan which give accurate dimensions on either a scale drawing or a rough sketch and which contain all of the following information:
 - (i) The location on the lot of all existing and proposed structures.
 - (ii) The existing or intended use of the structure.
 - (iii) The generalized vegetative cover.
 - (iv) The lines and dimensions of the lot to be used.
- (b) Evidence of ownership of all property that is affected by the coverage of the permit.
- (c) Evidence that all required federal, state, county, and township licenses or permits have been acquired, or that applications have been filed for the required licenses or permits.
- (d) Other information, as required by the zoning administrator, which is necessary to carry out the intent and provisions of these rules.

(3) One copy of both the plans and the specifications shall be filed and retained by the zoning administrator, and the other copy shall be delivered to the applicant when the zoning administrator has approved the application, completed the site inspection, and issued the zoning permit. To insure that new land uses in the natural river district are in conformance with these rules. before beginning construction or commencing a land use, the applicant shall display the permit required by these rules face out in a conspicuous place facing the nearest street or roadway and shall display it continuously until the purpose for which the permit was issued is completed. Failure to obtain and display a permit is a violation of these rules.

(4) Within 30 days of receipt of a completed application, the zoning administrator shall render a decision to issue or deny a permit. If a permit is denied, notice of the denial, together with the reasons for the denial, shall be sent to the applicant.

(5) Zoning permits are valid for 1 year and are not transferable. All buildings shall be completed within 1 year from the date of issuance of the zoning permit. However, 1 extension may be authorized by the zoning administrator, in writing, for a period of time not to exceed 6 months. Any subsequent extensions shall have the written approval of the zoning review board.

History: 1979 ACS 7, Eff. July 16, 1981.

R 281.155 Subdivision of land; plats with preliminary approval.

Rule 5. (1) A lot that exists on the effective date of this rule, or amendment thereto, shall not be subdivided or reduced in dimension or area below the minimum requirements of these rules. Lots that are created after the effective date of this rule shall meet the minimum requirements of these rules, except as provided in subrule (2) of this rule.

(2) Proposed lots which have preliminary plat approval pursuant to Act No. 288 of the Public Acts of 1967, as amended, being §560.101 et seq. of the Michigan Compiled Laws, but which do not meet the dimensional requirements of these rules on their effective date shall, on final plat approval, be issued a permit subject to the requirements provided in R 281.159.

History: 1979 ACS 7, Eff. July 16, 1981.

R 281.156 Permitted uses.

Rule 6. (1) The following uses are permitted by the owner upon the owner's property within the natural river district, subject to the limitations and requirements outlined in these zoning rules, local ordinances, and other applicable statutes:

(a) Private camping and other recreational activities which do not require the installation of permanent structures and which are outside of the natural vegetation strip.

(b) The operation of watercraft, subject to the limitations of local ordinances established under the authority of Act No. 303 of the Public Acts of 1967, as amended, being §281.1001 et seq. of the Michigan Compiled Laws.

(c) Fishing and hunting in compliance with existing laws and rules.

(d) Reforestation and other accepted forest management practices, subject to the limitations outlined in R 281.157.

(e) Normal agricultural activities, if the activities meet the requirements of these rules, and if the bureau of environmental protection of the department of natural resources determines that such activities do not contribute to stream degradation.

(f) The operation of licensed motor vehicles on dedicated public roads or access roads to private single-family dwellings.

(g) Off-road operation of emergency and public utility maintenance vehicles.

(h) Private footpaths that are constructed by the landowner of natural materials to facilitate permitted uses.

(2) The following uses are permitted upon prior approval of the zoning administrator:

(a) One single-family dwelling and appurtenances on a lot not less than 150 front-feet wide, subject to the following limitations:

(i) On the designated portion of the mainstream, new buildings and appurtenances shall be required to set back a minimum of 125 feet from the ordinary high-water mark, except that the setback may be decreased 10 feet for every 10-foot rise in bank height to a minimum of 75 feet from the ordinary high-water mark.

(ii) On the sections of Arms, Davis, and Mill creeks within the natural river zoning district, new buildings and appurtenances shall be required to set back a minimum of 50 feet from the ordinary high-water mark.

- (iii) New structures shall be set back not less than 50 feet from the top of the bluff on the cutting edges of the river and tributaries, or 25 feet from the top of the bluff on the noncutting edge of the stream.
- (iv) Setback shall be not less than 15 feet from side lot lines and not less than 25 feet from the right-of-way of a public road.
- (v) New structures shall not be located on land that is subject to flooding.
- (b) Plats, if the minimum setbacks and lot width requirements specified in subdivision (a) of this subrule are met.
- (c) Private boat docks that are not more than 6 feet in width or 20 feet in length, with not more than 4 feet of the dock extending over the water, if they are designed, constructed, and maintained with indigenous natural materials, and if a permit is issued under the authority of Act No. 346 of the Public Acts of 1972, being §281.951 et seq. of the Michigan Compiled Laws.
- (d) Mining and extracting industries which are located more than 300 feet from the ordinary high-water mark, if they are constructed and operated pursuant to applicable local ordinances and state laws and rules.
- (e) Utility lines to service private single-family dwellings.
- (f) Utility transmission lines on lands or interests in real property which are continuously owned by a utility from January 1, 1971, subject to review and approval by the commission.
- (g) Disposal fields and septic tanks which are located not less than 125 feet from the ordinary high-water mark or on lands that are not subject to flooding, whichever distance is greater, and which are in conformance with local county health codes and these rules. In addition, a septic tank or absorption field shall not be closer than 50 feet to any surface or subsurface drainage system emptying into the Huron river or its designated tributaries.
- (h) Land alteration, such as grading, dredging, and filling of the land surface, unless the high-groundwater table is within 6 feet of the land surface, if the activities meet all of the provisions of Act No. 347 of the Public Acts of 1972, as amended, being §282-101 et seq. of the Michigan Compiled Laws, and Act No. 346 of the Public Acts of 1972, being §281.951 et seq. of the Michigan Compiled Laws, and if approval is granted by the local soil erosion and sedimentation control enforcement agency and the department of natural resources.
- (i) Signs and outdoor advertising devices shall meet all of the following requirements:
 - (i) They shall be related to permitted uses.
 - (ii) For residential uses, signs shall not be larger than 1 square foot in area and shall not be posted more than 1 per 100 feet or 1 sign at the upstream and downstream corner of the 1 lot; however, 1 temporary real estate "for sale" sign which does not exceed 4 square feet in area shall be allowed on a parcel of land.
 - (iii) For commercial uses, 1 sign per establishment which does not exceed 4 square feet is allowed.
 - (iv) They shall not be illuminated by a neon light or flashing device.
 - (v) They shall not be attached to a tree or shrub.
- (j) Other uses for which an applicant is granted a permit by the zoning administrator pursuant to R 281.158, R 281.159, and R 281.161.

History: 1979 ACS 7, Eff. July 16, 1981

R 281.157 Natural vegetation strip.

Rule 7. Within the natural river district, a 50-foot minimum restrictive cutting belt shall be maintained on each side of the mainstream of the Huron river and on Arms, Davis, and Mill creeks. Trees and shrubs may be pruned for a filtered view of the river upon approval of the zoning administrator or the area forester, but clear cutting in the natural vegetation strip is prohibited. The natural vegetation strip is also subject to both of the following provisions:

(a) Dead, diseased, unsafe, or fallen trees and noxious plants and shrubs, including poison ivy, poison sumac, and poison oak, may be removed.

(b) Selected removal or trimming of trees for timber harvest, access or woodlot improvement, landscaping, or public utility lines to service private single-family dwellings is permitted upon approval of the area forester or zoning administrator.

History: 1979 ACS 7, Eff. July 16, 1981.

R 281.158 Special exception permits.

Rule 8. (1) Special exception permits may be granted to allow a use in the natural river district which is not specifically permitted by R 281.156, if implementation of that use does not contravene the purposes of these rules as specified in R 281.152.

(2) Application for a special exception permit shall be made on a form provided by the zoning administrator.

(3) Upon reviewing an application for a special exception permit, the zoning review board, at any time before rendering a decision thereon, shall require the applicant to furnish all of the following information which the zoning review board deems necessary for determining the suitability of the particular site for the proposed use:

(a) A detailed description of the proposed activity or use.

(b) A surface view plan which gives accurate dimensions on either a scale drawing or a rough sketch and which shows all of the following:

(i) Elevations or contours of the ground, including existing earth fills.

(ii) Generalized vegetative cover.

(iii) The size, location, and spatial arrangement of all proposed and existing structures on the site.

(iv) The location and elevations of streets, access roads, and water supply and sanitary facilities.

(c) Photographs that show existing land uses and vegetation upstream and downstream from the proposed use.

(d) Valley cross sections that show the natural stream channel, streambanks, high-water marks, flood marks, if known, and locations of proposed developments.

(e) All other information which is deemed relevant by the zoning administrator and which is necessary to carry out the intent and provisions of these rules.

(4) Before considering applications, the zoning review board shall give notice, by certified mail, to all of the following:

(a) Property owners whose property is within 500 feet of the proposed use as shown on the current tax assessment rolls.

(b) The appropriate local officials and department of natural resources personnel, including all of the following:

(i) The township supervisor.

(ii) The township building inspector.

(iii) The county health officer.

(iv) The local soil erosion and sedimentation control enforcement agency.

(v) County and township planning and zoning officials.

(vi) The soil conservation service.

(vii) The regional office and natural rivers section of the department of natural resources.

(viii) The Huron river watershed council.

(c) Any other interested parties who request that they be notified of such applications in the natural river district.

(5) In reviewing an application, the zoning review board shall consider all of the following:

(a) All relevant factors specified in these rules in light of the spirit and intent of the purposes specified in R 281.152.

- (b) The economic effect of the subject property weighed in light of the applicant's entire contiguous holdings and not merely the portion within the natural river district. If the subject portion is the remainder of a larger holding, this fact, together with a description of the title history, shall be included in the hearing evidence.
- (c) Increases in flood levels and flood damages that may be occasioned by the proposed use at the site and upstream and downstream from the site, water quality consequences, and other relevant factors within the terms of these rules.
- (d) The cumulative effect upon the natural river district from the potential development of holdings in a legal position similar to the applicant's, if the applicant's request is approved by the zoning review board.
- (e) Reasonable alternatives that are available to the applicant.
- (6) In weighing the applicant's request, consideration of public health, safety, and welfare shall prevail, unless private injury is proven by a preponderance of the evidence to be so great as to override the public interest.
- (7) A requested use shall not be granted if the zoning review board determines that the requested use poses a substantial hazard to life or to public or private property rights.
- (8) The zoning review board may require public hearings to be held regarding the application. The zoning review board shall decide on an application within 30 days after its receipt, except that if public hearings are held or if additional information is required pursuant to subrule (3) of this rule, the zoning review board shall render a decision within 30 days following the hearings or upon receipt of the last requested item of information.
- (9) The zoning review board shall attach such conditions to the granting of a special exception permit as are necessary to further the purposes of these rules.
- (10) A special exception use shall adhere strictly to the terms of the special exception permit. A special exception permit that does not adhere strictly to the terms of the permit may be revoked by the zoning administrator.

History: 1979 ACS 7, Eff. July 16, 1981.

R 281.159 Substandard lots of record.

Rule 9. (1) The zoning administrator, in compliance with the terms of this subrule, shall grant a permit if, because of either of the following circumstances, a proposed structure cannot be erected on a lot of record or a lot described in a deed or land contract executed and delivered before the effective date of this rule:

- (a) The lot is of insufficient width, depth, or area.
 - (b) Physical limitations exist on an existing lot or parcel.
- (2) The zoning administrator shall ensure that all structures are located to best meet the objectives and purposes of these rules, the adopted Huron river natural river plan, and Act No. 231 of the Public Acts of 1970, being §281.761 et seq. of the Michigan Compiled Laws.
- (3) The zoning administrator shall determine if a proposed structure on a lot of record or on a lot described in a deed or land contract executed and delivered before the effective date of these rules cannot conform to the standards listed in R 281.156(2)(a) and is, therefore, ineligible for consideration for use under R 281.156.
- (4) A written application for a zoning permit on a lot of record shall be filed with the zoning administrator. The same information required in R 281.154(2) shall be submitted with an application.
- (5) The zoning administrator shall grant a zoning permit for the use of a substandard lot of record only upon a showing of all of the following:
- (a) Granting the permit is not contrary to the public interest.
 - (b) The permit does not allow the establishment of a use not otherwise permitted by these rules.

- (c) The permit applies only to the property under the control of the applicant.
 - (d) The practical difficulties claimed by the applicant are not the result of actions taken by the applicant.
 - (e) Granting the permit poses no substantial hazard to life or to public or private property rights, secures public safety, and does substantial justice.
 - (f) Granting the permit will not result in an increase of flood levels or risk of flood damage to other lands.
 - (g) The lot shall be developed pursuant to department of natural resources requirements under Act No. 245 of the Public Acts of 1929, as amended, being §323.1 et seq. of the Michigan Compiled Laws.
 - (h) Use of the lot will not significantly impair existing water quality, vegetative cover, fisheries, or wildlife habitat or increase the risk of erosion.
 - (i) The substandard lot size shall be the minimum dimensional reduction necessary to achieve a reasonable use of the land, after evaluation of alternative dimensional arrangements and permitted land uses available to the applicant, given the peculiar characteristics of the lot and circumstances surrounding the request. Alternatives shall be examined in light of the applicant's entire contiguous holdings and not merely a single lot or the portion within the natural river area. If dimensional requirements may be more nearly met through lot combination of contiguous holdings, the zoning administrator may so require.
 - (j) The permit provides that no fill shall be placed within the natural vegetation strip and that the approval of both the appropriate county or district health department and the soil erosion and sedimentation control enforcement agency shall be secured.
 - (k) The permit provides conditions necessary to insure proper development of the substandard lot pursuant to these rules.
- (6) A special exception permit is required if a dimensional reduction of more than 50% of any of the standards listed in R 281.156(2) (a) is necessary to achieve reasonable use of the land. The zoning review board shall base its decision upon the standards set forth in R 281.158(5).
- (7) The zoning administrator may confer with, and seek the advice of, the zoning review board, personnel of the Michigan department of natural resources, and other federal, state and local officials to determine the possible effects of, and a suitable location for, a proposed structure.
- (8) One copy of the plans, specifications, and the zoning permit, with conditions attached, shall be filed and retained by the zoning administrator, and another copy of each shall be delivered to the applicant when the zoning administrator has approved the application, completed the site inspection, and issued a zoning permit.
- (9) The applicant may appeal any decision of the zoning administrator or any conditions attached to a zoning permit to the zoning review board.

History: 1979 ACS 7, Eff. July 16, 1981.

R 281.160 Nonconforming uses.

- Rule 10. (1) The lawful use of any land or structure which is in existence on the effective date of these rules may be continued although the use does not conform to these rules.
- (2) Routine or normal repairs and maintenance work required to keep a nonconforming structure or other use, such as a roadway, in sound condition are permitted. Remodeling of nonconforming structures within the confines of the existing foundation and elevations is permitted, if the structure is neither enlarged nor extended nor its use changed.
- (3) A special exception permit is required for the restoration of a nonconforming building or structure which is damaged or destroyed by more than 50% of its value due to flood, fire, or other means. In determining whether 50% of the value has been destroyed, the zoning review board shall use appraised replacement costs, as determined by a qualified individual appointed

by the zoning review board, and shall compare the value of the part destroyed to the value of the total operating unit where there are several buildings or structures which are used together by the landowner as a single operating unit. A request for a permit to restore a nonconforming building or structure damaged or destroyed by more than 50% of its value shall be approved if all of the following conditions exist:

- (a) The land on which the building or structure is situated is not subject to flooding.
 - (b) The continued use of a nonconforming building or structure will not lead to accelerated bank erosion or other material degradation of the river resource, and the use of the building or structure is approved by the local soil erosion and sedimentation control enforcement agency.
 - (c) The continued use conforms with local county health codes and is approved by the local county health department.
 - (d) The continued use conforms with local building codes and is approved by the local building inspector.
 - (e) Restoration of a damaged building or structure, if approved by the zoning review board, shall be started within 1 year from the time of damage.
- (4) A nonconforming use may be changed to a use of a like or similar character if the new use more closely conforms to the rules of the natural river district.
- (5) A nonconforming use of any land or structure shall not be enlarged or extended without a special exception permit granted upon consideration of the factors outlined in subrule (3) of this rule. An enlargement or extension of a nonconforming use of up to 50%, of the land area or the floor area of a residential structure or public accommodation which provides overnight facilities and which does not exceed 12 units may be approved by the zoning review board if the owner submits to the zoning review board a detailed description of the proposed enlargement or extension, together with a site plan showing the location of all new structures or uses, and if the zoning review board determines that all of the following conditions exist:
- (a) The land on which the nonconforming use is situated is not subject to flooding.
 - (b) The enlargement or extension of the nonconforming use does not lead to accelerated bank erosion or other material degradation of the river resource, and the enlargement or extension is approved by the local soil erosion and sedimentation control enforcement agency.
 - (c) The enlargement or extended use conforms with local county health codes and is approved by the local county health department.
 - (d) The enlarged or extended use conforms with local building codes and is approved by the local building inspector.
 - (e) The enlarged or extended use does not contravene the purposes of these rules as specified in R 281.152.
- (6) The substitution of a nonconforming use with another nonconforming use may be made if a special-exception permit is granted, based upon consideration of the factors outlined in subrule (5) of this rule, to ensure that the changed use conforms as closely as possible to the purposes of these rules as specified in R 281.152.
- (7) If a nonconforming use is discontinued for 12 consecutive months, any future use at that site shall conform to these rules.
- (8) A property owner may request the zoning review board to certify the existence of a prior nonconforming use on the owner's property. Certification of a prior nonconforming use shall be granted if the use meets the criteria of this rule and the common law criteria of nonconforming uses of this state.

History: 1979 ACS 7, Eff. July 16, 1981.

R 281.161 Appeals; contested cases.

Rule 11. An aggrieved party who contests a decision of the zoning administrator or zoning review board shall be granted a hearing if a petition is filed with the director within 60 days after notice of disapproval is received. The hearing shall be conducted pursuant to the provisions for contested cases of Act No. 306 of the Public Acts of 1969, as amended, being §24.201 et seq. of the Michigan Compiled Laws, and R 299.3071 to R 299.3081.

History: 1979 ACS 7, Eff. July 16, 1981.

R 281.162 Zoning administrator and zoning review board; appointment; duties.

Rule 12. The commission shall appoint a zoning administrator and a zoning review board to act as its agents to enforce these rules. The duties of the zoning review board and zoning administrator include, but are not limited to, all of the following:

- (a) Receiving and processing applications for zoning permits, special exception permits, petitions for appeals, requests for changes, amendments, and supplements.
- (b) Inspecting sites.
- (c) Issuing or denying zoning permits as outlined in these rules.
- (d) Assisting with other matters requiring a decision by the commission.

History: 1979 ACS 7, Eff. July 16, 1981.

R 281.163 Violations.

Rule 13. (1) An alleged violation shall be inspected by the staff of the department and, if it is found that a violation exists, the department shall order the applicant, in writing, to correct all conditions found to be in violation of these rules.

(2) The owner of a building, structure, or land which violates these rules is subject to the provisions of section 13 of Act No. 231 of the Public Acts of 1970, being §281.773 of the Michigan Compiled Laws.

History: 1979 ACS 7, Eff. July 16, 1981.

R 281.164 Boundaries and permitted uses; changes, amendments, and supplements.

Rule 14. (1) The commission may make changes, amendments, and supplements to boundaries and to permitted uses requested by a local unit of government or by a landowner, if implementation of the change, amendment, or supplement does not contravene the purposes of these rules as specified in R 281.152.

(2) A local unit of government or a landowner who requests a change, amendment, or supplement to the boundaries or to permitted uses shall have a hearing held pursuant to sections 71 to 87 of Act No. 306 of the Public Acts of 1969, as amended, being §§24.271 to 24.287 of the Michigan Compiled Laws.

(3) Copies of any changes, supplements to boundaries, or adopted amendments shall be sent to all of the following:

- (a) The county register of deeds.
- (b) The zoning administrator of these rules.
- (c) Local planning, zoning and health officials.
- (d) Township and county clerks.
- (e) The local building inspector.
- (f) Local soil erosion and sedimentation control enforcement agencies.
- (g) The soil conservation service.

(h) Public utility companies which provide service to riverfront property owners affected by these rules.

(i) Huron river watershed council.

(4) Upon approval by the director, a local zoning ordinance which meets all of the requirements of Act No. 231 of the Public Acts of 1970, being §281.761 et seq. of the Michigan Compiled

Laws, Act No. 184 of the Public Acts of 1943, as amended, being §125.271 et seq. of the Michigan Compiled Laws, or Act No. 183 of the Public Acts of 1943, as amended, being §125.101 et seq. of the Michigan Compiled Laws, whichever is applicable, shall take precedence over these rules. If the director withdraws his or her approval of a local zoning ordinance, or if the local ordinance becomes inapplicable to the land area encompassed by the Huron river natural river district through court action or for any other reason, these rules shall apply.

History: 1979 ACS 7, Eff. July 16, 1981.

APPENDIX D

SUGGESTIONS FOR POSITIVE CITIZEN ACTION

ACTION: PROPERTY OWNERS

Land use practices on private property can greatly affect a creek. The following suggestions are easily accomplished by property owners (individuals or corporations). These suggestions should be considered by those owning land along a water course AND by those owning land in the upland. These actions refer to general creek corridor protection and water quality matters as well as to soil erosion and sedimentation control. Some apply to land being used for agricultural operations.

1. PROPERTY MANAGEMENT

- Do not fertilize lawns down to the water's edge.
- A strip of vegetation should be left as a buffer between the creek and residences. This keeps the water cool (helping to preserve coldwater fish species), prevents erosion, provides wildlife habitat and maintains the character of the creek.
- Stream crossings by livestock or horses should be avoided.
- Marshland or any kind of wetland should be left in its natural state and off limits to cattle.
- If the land next to the corridor is cropland, inorganic fertilizer should be applied in the right form at the right time; organic fertilizers should be applied when there is no danger of their being washed into the creek.
- Erosion sites anywhere on the property should be eliminated (by planting vegetation, sodding and filling, rerouting flow, building a splash apron, using barriers to slow down velocity, etc.).
- Septic tank drainfield systems should be checked every two or three years to be certain they are operating properly. The septic tank may have to be pumped out periodically in order for it to provide proper treatment.

2. PROPERTY DEVELOPMENT CONSIDERATIONS

These suggestions will maintain or enhance the value of your property and protect the creek.

- Do not disturb the creek corridor if at all possible.
- Learn about the soils of the site and the physical limitations associated with those soils.
- Implement a soil erosion control program for the site.
- If there will be more runoff water as a result of changing the use of the site, handle it by infiltration or storage and slow release.
- Be certain that the soils are adequate to accommodate a septic tank-drain field system.

3. WHERE TO GO FOR HELP

- Most counties have a Soil Conservation Service representative who can explain the nature of your soil and its best uses. Soil Conservation Districts in your county may also have an active soil conservation program which could provide information about crop and woodland management.
- Other assistance may be available from the Cooperative Extension Service, the county or state health departments, the county or township planning departments, the county drainage engineer or the state department of Natural Resources.

ACTION: CITIZENS

Local public agencies need to know what their constituents want; they need to have public input. Local policy boards need such information in order to be responsive and also to have the political support to make difficult decisions. There is a necessary role for the citizen to play when it comes to protecting creeks and the benefits they can provide. In many cases the difference between a high quality, beautiful creek and one which has become a polluted eyesore is the vigilance and concern of citizens and citizen groups. The following suggestions are essential steps in establishing a process of meaningful citizen participation.

1. DEVELOP A FACTUAL BASE OF INFORMATION

- Understand the rules of the game by which the changes that affect creeks are undertaken: know about local ordinances relating to planning and development, state legislation and, in general, the decision-making process involved in land use change.
- Survey and document the condition of the creek. Develop as much information as you can about the creek's environment. Studies or reports which may have been done by public agencies or private consultants can be helpful.
- Get to know the staff of the local, regional, state and Federal agencies which may be involved. They should be able to provide technical information and tell you which legislation applies.

2. ANALYZE THE PROBLEM AND COMMUNICATE THE PROBLEM

- Define the problem.
- What benefits are being affected?
- Who or what is responsible for the immediate problem?
- With the facts in hand let your local officials know your concerns.
- State pollution control agencies should also be contacted to determine if a violation of state water quality standards has occurred.

3. MAINTAIN A LONG RANGE PERSPECTIVE TO INSURE CONTINUING CREEK PROTECTION

- It is always preferable to prevent a problem rather than wrestle with it after it exists. The informed, active citizen or citizen group should be involved in creek protection while there is still a creek to protect.
- Cultivate a good working relationship with officials at all appropriate levels:

LOCAL LEVEL

- Local units of government have many options available.
- Local government planning commission -These groups adopt development policies and usually a zoning map with a desired land use pattern. Water resource protection is usually not fully integrated in such efforts but could be.
- Agencies responsible for drainage-The policies, operating standards and enabling legislation of these agencies can be quite important.

REGIONAL LEVEL

In most metropolitan areas there is a regional planning commission or a council of governments with a professional staff. These organizations have expertise in many areas (e.g., health, criminal justice, transportation, housing) including environmental and water resource issues. They also are sources of information and can be helpful in identifying and addressing local water resource problems. Watershed associations or councils exist in many states to promote sound water resource management, study river basin and water related problems and assist in coordinating actions of governmental units. In Michigan, watershed councils can be organized under the Local River Management Act (P.A. 253 of 1964); other states often have similar enabling legislation.

STATE LEVEL

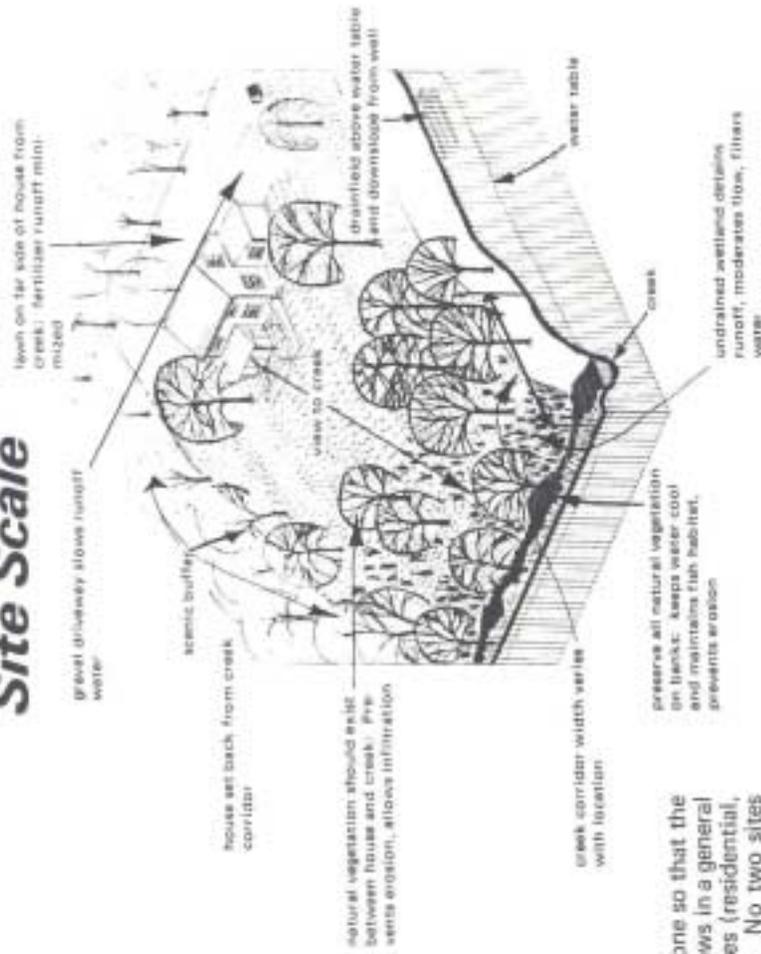
State governments are involved because of state legislation dealing with environmental protection, natural resource use or management and State water quality standards. The administration of such legislation is a state government activity.

FEDERAL LEVEL

The most useful piece of legislation today (1974) with respect to encouraging citizen participation in water resources is based on the Federal Water Pollution Control Act Amendments of 1972. This act requires the states to permit public (citizen) review and comment on proposed pollution discharge permits. Investigate this legislation with your state water pollution control agency or the Regional office of the U.S. Environmental Protection Agency.

DESIGN SUGGESTIONS

Site Scale



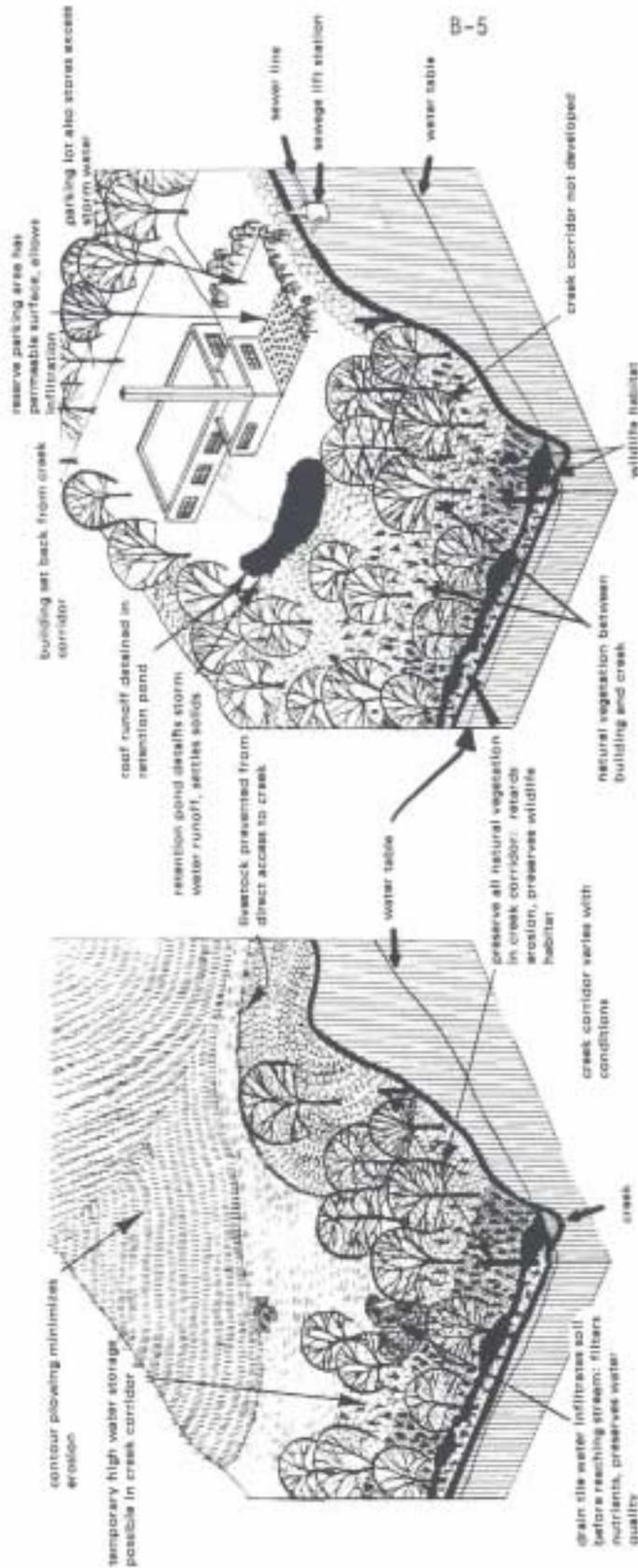
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When land is developed in a creekshed it can be done so that the benefits of the creek are protected. This section shows in a general way what should be considered when different uses (residential, commercial and agricultural) are placed on a site. No two sites are alike, of course, so each must be analyzed and carefully planned. The sketches may not look like any creek landscape you know; they should be useful though because they highlight development techniques which respect the creek's values and sensitive features.

Design considerations for sound creekshed management at three different scales: the site, the project and the creekshed are presented here. It is important to realize that very large projects can have very large adverse impacts on a small watercourse. At this scale too, care must be taken that the physical developments undertaken by the public sector will serve to protect creek benefits and avoid future problems.

RESIDENTIAL USE

The first consideration in the site planning process should be whether any development is appropriate especially if the parcel is in a creek corridor. If the site has no serious physical limitations (soils, vegetation, steep slopes, wetlands for example) the development should not lower or ruin the quality of the creek related site. (At this scale the physical design of the site should include the following considerations: vegetation buffers along banks and between dwellings, runoff water stored or infiltrated on site, adequate sewage treatment which does not pollute the creek or ground water.



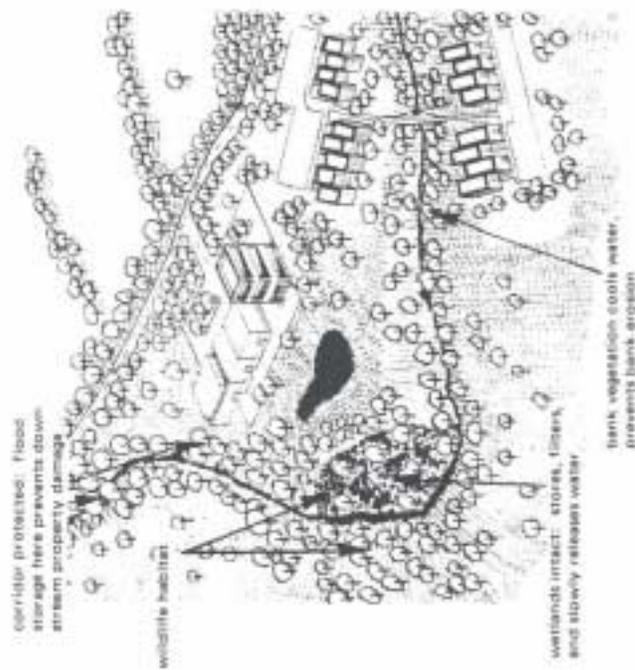
AGRICULTURAL USE

In many areas land along a creek is being used for agricultural purposes. This kind of use can also affect the creek's quality both in the immediate area and downstream. The illustration above notes some of the land and water conservation practices which are appropriate for this land use. Some of these considerations have to do with physical changes: drainage which dissipates the water before it gets to the creek, contour plowing, preservation of a vegetated buffer strip along the creek corridor, fence lines along the creek corridor if the land is grazed. Other considerations have to do with treatment of the land: when and what kind of fertilizers are applied to fields, and what kind of crop (row crop or ground-covering crop) is grown near the creek.

INDUSTRIAL/COMMERCIAL USES

These uses can generate many adverse impacts on the creek at the point where they occur as well as downstream. Such uses often have large parking areas or roof surface areas. They may require a large volume of water for manufacturing products. This suggests a need for careful analysis of: wastewater disposal methods (domestic sewage or process water), quantity of runoff generated from buildings or parking lots, setback from creek corridor to preserve scenic or natural quality, and amount, kind and placement of vegetation elsewhere on the site.

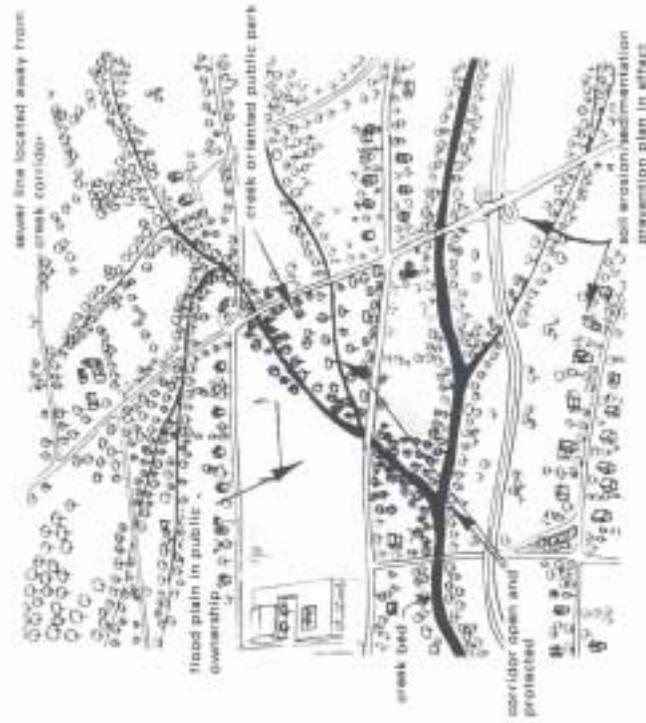
Large Project Scale



THE LARGE PROJECT SCALE

At this scale of development a much larger parcel of property is being planned or developed. Even if such a development is some distance from a creek it can still greatly affect a creek and downstream property. The following should be provided for: minimal change in the runoff rate, preservation of the hydrological function of the natural creek bed, non-degradation of land and water quality of the creek corridor during and after construction, maximum scenic enhancement and maintenance of wildlife habitat.

Creekshed Scale



THE CREEKSHED SCALE

This scale is the entire creekshed. "Good" design or "wise" land use at this scale depends upon the implementation of the measures already mentioned for the site and project plus some assurance that expenditures for public services will not result in degradation of creek benefits. At this scale the benefit realized is a smoothly functioning, high quality creek system. The units of government and communities in the creekshed can enjoy many or all of the creek's benefits (drainage, wildlife, amenity, water supply, open space and local recreation). In addition, significant savings can be realized by *not* having to pay for pollution abatement or control, or installation and maintenance of drainage "improvements". Flooding will be minimized and private property values will be stabilized or increased.