

AFTON COMPREHENSIVE PLAN

December, 1998

PREAMBLE

We, the residents of the City of Afton, Minnesota, in order to:
create a sound tax base and a sense of community,
preserve our rural sanctuary amidst urban sprawl,
preserve the character of our Old Village,
protect our groundwater and surface water from contamination and our undulating land from erosion,
and
provide for agriculture and open spaces to be enjoyed by future generations,
do ordain and establish this 1998 Comprehensive Plan.



SUMMARY

“Flow Gently, Sweet Afton.” (R. Burns). From the time this community was named with a river in mind and now a City on the Scenic St.

Croix River, water has been *the* foremost concern of its residents. That concern has never been greater than today. This Comprehensive Plan builds on prior, *visionary* Comprehensive Plans of the City of Afton (1974, 1981, and 1990) to do all that is politically and legally possible to *keep Afton as a rural sanctuary* as the Twin Cities Metropolitan Area expands aggressively. Some see urban development as excellent proof of a growing economy; we see urban development as a threat to the water we drink, the crops we grow, and the vistas we gaze upon. This preservation attitude is entirely consistent with the long-term desires of our residents and promotes a healthy respect for the environment. As such, our ordinances do not forbid change; they require that change does not harm the environment. As stewards of this land and all that is in it or on it, we can do no less.

This Plan is divided into Sections as recommended by the Metropolitan Council: Inventory; Goals and Policies, and Implementation. But the message of this Plan, and the story of Afton, should be abundantly clear. This City is different from other communities in the Metropolitan Area *and wants to stay that way*. This City borders on another city that has a diametrically opposed philosophy about land use and urban expansion. This is one of the most significant

challenges this City has ever faced. Adherence by both

cities to the Metropolitan Council Regional Blueprint (December 19, 1996) is a first step.

The adage in the real estate industry is that the three most important points in real estate are “location, location, and location.” The three most important points in the City of Afton are “groundwater, surface water, and groundwater recharge.” We drink this water, we fish these streams, we protect the environment for the flora and fauna with which we share the land.

Most zoning laws and court decisions regard urbanization as a good thing, so long as it is planned well. Urbanization irreversibly alters the lands that are urbanized and drives up the values of those lands that are not. Agricultural land and open space becomes a reservoir for future urban development.

In many respects, we regard agricultural and open space as the “highest and best use” of the land. We believe economic pressures to consider these lands as development reservoirs will destroy agriculture as a viable economic alternative for those of our residents who farm the land.

Some may regard our position as contrarian to inevitable reality. We regard our position as a community trust to preserve, protect, and defend our lands and lifestyle from irreversible change. That is our right, and the actions of other

jurisdictions including the Legislature and the Metropolitan Council, *should respect that vision of*

Afton to remain rural by its own choice.

TABLE OF CONTENTS

I.	INTRODUCTION	4
	A. HISTORICAL BACKGROUND	4
	B. PURPOSE	4
II.	INVENTORY	5
	A. DEMOGRAPHICS	5
	1. Population	5
	2. Households	6
	3. Employment	6
	B. LAND USE	7
	1. Physical Features	7
	a. Soils	7
	b. Topography	10
	c. Vegetation	10
	d. Drainage	11
	e. Groundwater	12
	f. Surface Water Management	13
	2. Existing Land Use	14
	a. Residential	14
	b. Industrial	15
	c. Commercial	15
	d. Agricultural	15
	e. Old Village	16
	f. Historic Sites	18
	C. FACILITIES	20
	1. Roads	20
	2. Parks and Open Space	22
	3. Community Facilities	23
III.	POLICY PLAN	24
	A. LAND USE	24
	1. Historical Background	24
	2. All Zoning Districts	25
	a. Goals & Policies	25
	3. Rural Residential Zone	26
	a. Goals & Policies	26
	4. Agricultural Zone	27
	a. Goals & Policies	27
	5. Industrial Zone	29
	a. Goals & Policies	29
	6. Commercial Zone	30
	a. Goals & Policies	30
	7. Village Historical Site - Residential	31

a. Goals & Policies	31
8. Historic Sites	31
a. Goals and Policies	31
9. Protection of Environmental Quality	32
a. Goals & Policies	32
10. Air Space Controls	33
11. Energy Conservation	34
a. Goals & Policies	34
B. FACILITIES	34
1. Transportation	34
a. Goals and Policies	35
2. Parks and Open Spaces	35
a. Goals & Policies	36
3. Waste Management	37
a. Policies:	37
4. Community Facilities	38
a. Goals and Policies:	38
IV. IMPLEMENTATION PLAN	39
A. INVENTORY	39
B. PROGRAMS	40
1. Official Controls	40
2. Housing	40
3. Capital Improvements	41
V. APPENDIX	42
1. Septic System Management Ordinance	

EXHIBITS

1. Location
2. Soil Suitability for Septic Systems
3. Prime Agricultural Land
4. Physical Features
5. Steep Slopes
6. Surface Water Features and Watershed Districts
7. Existing Land Use and Housing
8. Old Village
9. Historic Sites
10. Transportation Plan
11. Parks, Trails and Open Space Plan
12. Land Use Plan
13. Zoning

I. INTRODUCTION

A. HISTORICAL BACKGROUND



Afton was settled by New Englanders who probably felt at home among Afton's tree covered hills and bluffs. The city retains that New England flavor with its natural beauty accented by narrow, winding roads and small, clapboard sided houses.

Perhaps one of the most notable historic achievements in Afton occurred when Joseph Haskell, in 1839, planted three acres of corn and potatoes, built a farmhouse, and thus began the first farm in Minnesota. While communities north of Afton were building sawmills, the first flour mill in the state was built in Afton in 1843. A further indication of the importance of agriculture in Afton was the use of the first steam-powered threshing machine in 1861.

The village of Afton was platted in 1855. The majority of the city's historical structures are located within the boundaries of the original village. The 1974 Afton Comprehensive Plan established the Village Historic Site District in recognition of the village's historical significance. The following sites are found within the boundaries of the Village Historic Site District: the Afton Theological Academy, the area's first educational academy built in 1867; the Village Hall (housing the Afton Historical Society), built in 1895 as the Congregational Church; the "Little Red House", built in 1859; The Afton House, built in 1867; and the Little Brick Schoolhouse, built in 1857.

The township of Afton, established in 1859 and named after the village, also has important historical structures and sites. Included among

these are: the Bolles Mill Site, the first flour mill in Minnesota; the Bolles House, built in 1856 and the oldest frame house in the area; and Haskell's Farm. One of the historical sites, the Octagonal Barn, burned down in 1987.

In 1971, the village and township incorporated to form the City of Afton. Afton is a large city, approximately 25 square miles, but sparsely populated. The eastern portion of the city contains the bluffs and tree covered hillsides that attracted the original settlers, while the western portion has rolling hills, and open farmland. The historic village site has remained the identifying center of the city while the township has retained a rural character.

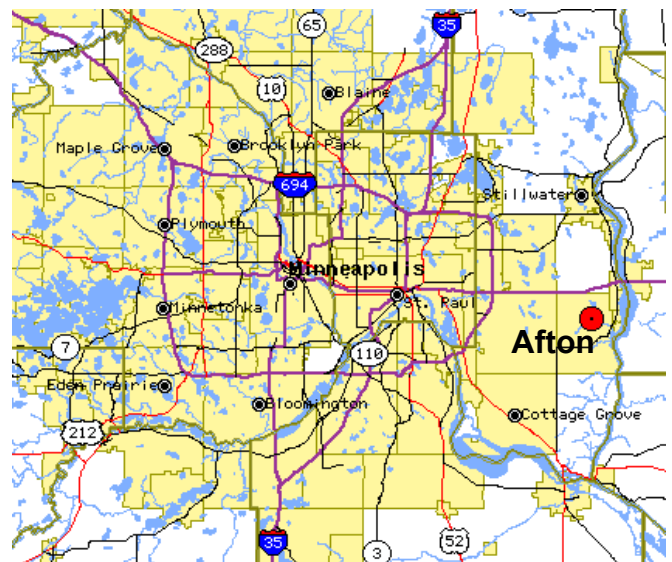


Exhibit 1. Location Map

B. PURPOSE

The purpose of the Afton Comprehensive Plan is to ensure a safe and pleasant environment for residential, commercial, agricultural, industrial and public activities, to preserve agricultural and open space, protect groundwater and natural resources, maintain historical character of the Old Village, and to promote the health, safety, and welfare of Afton's citizens. This plan is intended to include the goals and

policies contained in Minnesota Statutes 462.351, and is found to be consistent with those goals and policies.

Citizens of Afton obtain their drinking water from the ground. It is essential, therefore, that thoughtful developmental planning be followed in order to protect this vital resource. Because groundwater and surface water are connected, it is just as essential to protect our streams and lakes. A primary purpose of this plan is to provide for the preservation of our water resources through careful planning.

This plan is an updated and revised version of Afton's Comprehensive Municipal Plan prepared by the Afton Planning Commission in 1974, and the Afton Comprehensive Development Plan prepared by the Afton Planning Commission in 1981 and adopted by the City Council in 1982. (A 1990 Plan was adopted by Afton City Council but not accepted by the Metropolitan Council). This plan encompasses the recommendations and requirements of the Metropolitan Council, Valley Branch Watershed District, Middle St. Croix Watershed Management Organization, Lower St. Croix Watershed Management Organization, South Washington Watershed District, previous planning efforts, existing city plans and regulations, and a growing list of state and federal planning and development conditions, requirements and restrictions.

This plan is intended to guide Afton's growth from 1998 to 2020. This plan will be reviewed and updated as necessary.



II. INVENTORY

Population Growth History	
1970	1,993
1980	2,550
1990	2,645

A. DEMOGRAPHICS

1. Population

Analysis and projection of population are basic to making major planning decisions. The purpose of the population analysis is to anticipate the future needs of Afton regarding land use, transportation and community facilities.

Population Forecasts		
Year	City Forecast	Metropolitan Council Forecast
2000	3,000	3,100
2010	3,400	3,150
2020	3,800	3,100
Buildout	4,450	No Forecast

Age Distribution 1990 Census Data		
Age	No.	Percent
< 6	220	8.3
6-11	287	10.9
12-18	307	11.6
19-29	244	9.2
30-39	484	18.3
40-49	535	20.2
50-59	300	11.3
60-69	166	6.3
70-79	73	2.8
>80	29	1.1

Population Growth History	
1998(est.)	2,900

In 1990, Census data showed that 44% of Afton households contained children age 18 or younger.

prepared by the Metropolitan Council with the following City forecasts.

2. Households

The 1990 U.S. Census stated that there were 890 housing units in Afton. The following chart compares the most recent projections

	1970	1980	1990	1995	2000	2010	2020	1992 Buildout
City Actual	521	776	890	990				
City Forecast*					1030	1080	1230	1550
Met Council Forecast					1100	1200	1250	No Forecast

* The City forecast assumes an average of 15 new homes per year and an ultimate buildout density of no greater than 1 household per 10 acres of land.

Building Permits - New Houses - 1970 - 1997

1970 - 24	1980 -
6	1990 14

3. Employment

The Industrial Zone (along Interstate 94) and the Village Historical Site--Commercial Zone

contain the bulk of non-agricultural employment base- Most employment growth will occur within these two zones.

	1970	1980	1990	2000	2010	2020
Employment*	110	137	220	350	500	560

* From Metropolitan Council



B. LAND USE

1. Physical Features

Afton's environment is a fragile

one. The citizens of Afton have a high regard for their environment and have made major efforts to preserve and protect it. Preservation of Afton's natural features has not been an easy task considering the fragile soils, steep slopes, drainage ways, vegetation and lakes and

streams that make up the city. Because most things in nature are interrelated, these delicate features need protection through careful planning. Following is a discussion of Afton's various natural features.

a. Soils

Using the soil survey issued by Washington County Soil Conservation District in April 1980, the soils in Afton have been reviewed and the different soil types categorized as to their suitability to accommodate on-site sewage treatment systems and to support a rural atmosphere, farming, groundwater protection, wildlife habitat, and a biological diversity for its citizens, flora, and fauna.

The soil survey is an inventory of the soils found in the city. The survey indicates, among other things, the type of soil, the slope gradient, the suitability of the soils to support certain uses and the degree and kind of limitation of each soil type for certain uses.

The maps that accompany the soil survey are useful as a planning tool since one is able to determine those areas that present problems for development. While the soil maps are reasonably accurate, it is still recognized that unmapped pockets of different soil types can exist within a designated soil boundary line. Therefore, these soil maps do not eliminate the need for soil sampling and testing on each building site.

Attached to this plan are two soil maps for Afton - Exhibits 2 and 3. One soil map indicates the soils that have a severe limitation for on-site sewage treatment systems. These limitations include soils that have bedrock near the surface, slow percolation rates, steep slopes, periodic flooding, seasonal high water table or have been mined. The other map indicates the areas of prime agricultural soils

and additional farmland of statewide importance.

As can be seen from the soil map, nearly 50% of the soils in Afton have a severe limitation for on-site sewage treatment systems. Nearly half of the soil with a severe limitation is soil with shallow bedrock. The shallow bedrock occurs in upland areas within the southern half of the city. Not only is there insufficient soil depth to treat septic effluent in these areas, but the effluent may flow through fractured bedrock and enter water wells without being properly filtered by soil to remove chemical and bacterial contamination.

Compared with other communities in Washington County, Afton has few soils with a slow percolation rate. Slow percolation rates usually indicate a heavy or tight clay soil which does not allow sewage effluent percolation. A significant area of these soils is in the southeast corner of Afton along the St. Croix River. Other small pockets of these soils occur along the many drainage ways within the city.

The steep slopes in Afton are predominantly in the eastern half of the city. These steep slopes follow the major drainage ways. Currently, installation of an on-site sewage treatment system is prohibited on any slope exceeding 12%. Installation of septic systems on slopes over 12% may result in erosion, lateral seepage and downslope flow of effluent.

The soils with a seasonal high water table or that are wet or subject to periodic flooding are also located along Afton's drainage ways. These soils are not suitable for septic systems since the effluent will either be dispersed into ground water or will back up into the residence.

The soils not shaded on the soil map are expected to be suitable for the installation of sewage treatment systems. It is probable that septic systems installed in these soils will

perform satisfactorily, treat the effluent properly

and present few problems to the landowner, adjacent neighbors and the environment, if the systems are properly designed, installed, and maintained.

According to the soil survey, the following soils are suitable for the installation of on-site sewage treatment systems:

Map Symbol	Soil Name	Map Symbol	Soil Name
2	Ostrander	169	Braham
7	Hubbard	177	Gotham
8	Sparta	259	Grays
12	Emmert	298	Richwood
49	Antigo	301	Lindstrom
132	Hayden	302	Rosholt
151	Burkhardt	327	Dickman
153	Santiago	367	Campia
155	Chetek	411	Waukegan
158	Zimmerman	454	Mahtomedi
159	Anoka	460	Baytown

When the soils map is overlaid with the existing land use map it appears that many of the homes in Afton are located in areas where there is a predominance of soils which are not most suitable for installation of septic systems. The general soils circumstances depicted by the map cannot be relied upon alone in determining whether a building site has suitable locations for the installation of a septic system. An area shown on the map as containing generally suitable soils must be tested for a septic location, and vice versa, any area shown as

unacceptable may by testing be proven to have an appropriate site for a septic system.

Some of the city consists of prime agricultural soils (Class I and II soils) and soils of statewide importance. Agricultural land is determined by many factors, not only by soil type. Therefore, the following criteria were used to categorize agricultural lands.

i) Class I Prime Agricultural Soils:

Map Symbol	Soil Name	Map Symbol	Soil Name
2	Ostrander	298	Richwood
225	Nessel	449	Crystal Lake

ii) Class II Prime Agricultural Soils:

<u>Map Symbol</u>	<u>Soil Name</u>	<u>Map Symbol</u>	<u>Soil Name</u>
2 B	Ostrander	266	Freer
49	Antigo	298 B	Richwood
49 B	Antigo	301 B	Lindstrom
113	Webster	340 B	Whalan
120	Brill	342 B	Kingsley
132 B	Hayden	367 B	Campia
153 B	Santiago	411	Waukegan
166	Ronneby	411 B	Waukegan
259 B	Grays	452	Comstock
264 B	Freeon	456	Barronette
460 B	Baytown	529 B	Ripon
468	Otter	1827	Waukegan Variant
504 B	Duluth	1827 B	Waukegan Variant
507	Paskin	1847	Barronette
529	Ripon		

iii) Soils of Statewide Importance:

<u>Map Symbol</u>	<u>Soil Name</u>	<u>Map Symbol</u>	<u>Soil Name</u>
2 C	Ostrander		
49 C	Antigo		
75	Bluffton	302 C	Rosholt
100 B	Copaston	327	Dickman
123	Dundas	340 C	Whalan
132 C	Hayden	342 C	Kingsley
151	Burkhardt		
151 B	Burkhardt	453 B	DeMontreville
153 C	Santiago	460 C	Baytown
155 B	Chetek	472 B	Channahon
159	Anoka		
159 B	Anoka	504 C	Duluth
169 B	Braham	529 C	Ripon
170	Blomford		
174 C	Gale	1821	Algansee

iv) Parcels of 20 acres or more, thereby eliminating most residential lots.

v) Non-treed property since the economics of clearing land to farm today are not practical. However, wooded parcels were included if they were part of a larger agricultural parcel.

vi) Areas not extremely limited by topography.

vii) Areas currently being farmed, e.g., row crops, pastures, orchards, trees, etc.

viii) Areas capable of being farmed depending on the type of vegetation and the type of soil and slope.

The Prime Agricultural Land Map – Exhibit 3 indicates those general areas that meet the above mentioned criteria. This map also indicates that the prime agricultural land is located primarily in the southwestern corner and west central portions of the city with smaller areas in the northeastern and southeasterly corners. The prime agricultural lands tend to be those areas most easily developed, yet not the most attractive in terms of aesthetics for residential development.

b. Topography

The city consists of large level or gently rolling uplands bisected by deeply cut ravines, drainage ways and streams flowing into the St. Croix River. See Exhibit 4 – Physical Features. As a result, most of the steep slopes are within the eastern half of the city along major drainage ways and the St. Croix River.

Afton's steep slopes are a result of erosion by flowing water. It is vital to the community that these drainage ways be protected and maintained. It is essential that every attempt be made to limit the amount of additional stormwater run-off that flows through these drainage ways, many of them in or near the Old Village. Therefore, utmost care must be taken when allowing the development on the upland areas of the city.

Afton protects slopes with a grade over 18% and slopes with a grade over 12% if the soils on such slopes are deemed fragile. See Exhibit 5 – Steep Slopes. In subdivisions, the city will take a scenic easement on slopes of 18% or greater, which prohibits the following activities: 1) construction of any structure, including driveways; 2) dumping; 3) vegetative cutting; 4) burning; 5) grazing by domesticated farm animals; 6) operation of motorized vehicles; and 7) grading. Slopes over 12% are protected by prohibiting installation of septic systems and construction of driveways. Any structure built on a slope of over 12% requires review and approval of the Soil and Water Conservation District.

In addition to scenic easements being required on slopes of 18% and greater, wetlands, drainage ways, and slopes over 12% judged to be fragile by the Soil and Water Conservation District are also required to be put into scenic easements when subdivided or otherwise developed, and are subject to strict requirements in the ordinances.

c. Vegetation

The major areas of vegetative cover, determined by studying aerial photographs, are mapped on the Physical Features Map attached as Exhibit 4. As can be expected, the predominant areas of tree cover correspond to the areas of steep slopes, those areas not being farmed, and along watercourses and drainage ways. The vegetative cover consists mainly of deciduous trees with several areas of planted conifers.

Care must be taken during the development of the city to preserve its existing vegetation. Development that does not consider and preserve existing vegetation could result in the following:

- i) An increase in erosion and stormwater run-off.
- ii) An increased danger of flooding and siltation.
- iii) Lessening of water quality.
- iv) Loss of landscape diversity.
- v) Decreased land values.
- vi) Detriment to surrounding wildlife and the ecosystem.
- vii) Degradation of soil and air quality.

d. Drainage

The city of Afton is divided by major drainage ways: Valley Creek, South Fork Valley Creek, Trout Brook and other major ravines and drainage ways tributary to the St. Croix River. See Exhibit 6 – Surface Water Features and Watershed Districts. Much of the surface water flows into the St. Croix River through or near the Old Village of Afton. It is vitally important to the safety of the Old Village that these drainage ways be protected and stabilized and the amount of stormwater run-off through these drainage ways be kept to a minimum.

Valley Creek, which empties into the St. Croix River approximately one-half mile north of the Old Village, now drains only that portion of the Valley Branch Watershed District up to the minor watershed surrounding Mays Lake (Lake Edith). Previously, Valley Creek was the ultimate drainageway for practically all of the water in the Valley Branch Watershed District. With the District's completion of Project 1007 in 1987-88, the water from the upper portion of the Valley Branch Watershed District was re-routed in an easterly direction from a storage site in West Lakeland Township to the St. Croix River using the drainageway constructed for Interstate 94.

The Valley Branch Watershed District includes a majority of the city of Afton, portions of West Lakeland, Grant and Baytown Townships, nearly the entire city of Lake Elmo and portions of Woodbury, Oakdale, Pine Springs and Mahtomedi. The head of the watershed is the western boundary of Washington County in Mahtomedi. Valley Creek stream flows in a southeasterly direction toward the Old Village of Afton.

A Board of Managers assisted by a consulting engineer directs the Valley Branch Watershed District. This Board of Managers reviews all building permit applications that impact on major drainage features and proposed subdivisions within the district as they are affected by the plan prepared for the district. The overall plan indicates the drainage pattern and the normal and flood elevations of water bodies and storage ponds along the main stem (Valley Creek) and the Valley Creek South Fork of the Watershed. In recognition of the sensitivity of changes to the environment affecting Valley Creek, the Board of Managers has recently established a Sub-Watershed for Valley Creek dedicated to its preservation as a cold water trout stream.

Valley Creek, with headwaters in northwestern Afton, is a spring fed stream flowing through an exceptionally fragile environment in Afton to its discharge into the St. Croix River near the eastern limits of Afton. This high quality stream is recognized as a trout habitat unique to the metropolitan area and one of the five or six best in the state. It is also home to the rare Blanding's Turtle, and serves as a natural habitat for many species of waterfowl, beaver, and other wild animals. This creek has been carefully protected by private and government interests and it is the policy of the city of Afton to continue this protective stewardship in cooperation with the Minnesota Department of Natural Resources and the Valley Branch Watershed District. Diverting urban storm

water or highway runoff through this sensitive stream would be contrary to Metropolitan Council guidelines and contrary to the Minnesota Environmental Rights Act, which prohibits degradation of the natural environment if a feasible and prudent alternative exists.

Valley Creek and the St. Croix River are regulated by the city's floodplain ordinance, the Shoreland ordinance, and the Lower St. Croix Bluffland and Shoreland ordinance. These ordinances are designed to protect both Valley Creek and the St. Croix River. It is important that planning be carried out to protect drainageways and natural resources; preserve wildlife habitat; and aquatic life and water quality; and prevent needless property damage.

The City of Afton includes, the Valley Branch Watershed District, the Middle St. Croix watershed management organization, the Lower St. Croix watershed management organization, the South Washington Watershed District. Each watershed management organization board is composed of one member from each community involved. Boards of the Watershed Districts are appointed by the Board of Commissioners of Washington County.

Goals of these four organizations include:

1. The preservation and protection of surface and groundwater resources (quality and quantity) as well as preservation and protection of soil resources (erosion and sedimentation).
2. The protection of fish and wildlife habitat.

Policies of these four organizations include:

1. Encouragement of the use of best management practices (BMP's) for the protection of surface and groundwater quality.

2. Adoption and enforcement of wetland preservation regulations.

3. Adoption and enforcement of erosion control regulations.

4. Promotion of the use of BMP's to control soil erosion and to protect water quality in developing agricultural areas as identified by the Soil and Water Conservation District in the following publications:

- ◆ USDA Natural Resources Conservation Service, Technical Guide Minnesota;
- ◆ Construction Site Erosion and Sediment Control Planning Handbook;
- ◆ Protecting Water Quality in Urban Areas, Best Management Practice for Minnesota;
- ◆ Agriculture and Water Quality, Best Management Practices for Minnesota.

The City of Afton refers all subdivisions to the appropriate Watershed District, WMO and the Soil and Water Conservation Service for review.

e. Groundwater

Afton subscribes to the goal stated in Minnesota Statutes 103H, which encourages that groundwater be maintained in its natural condition, free from any degradation caused by human activities. Proposed changes in land use and all development activities will be evaluated in light of this goal.

Although not significant in size, there are several areas in the city that have been mined that are unsuitable for building unless it is established that they can meet all building requirements. Mining removes the top and sub-soil that filters septic effluent. As a result, septic systems installed in these soils may result in effluent moving quickly and untreated through coarse soils to the water table resulting in pollution of water wells. This is of even greater concern if the area is one of

groundwater recharge. Groundwater recharge is the means by which the aquifers are replenished via water seeping through the various geological layers.

Afton's commitment to low housing density and strict regulation of land use since its incorporation has proven to be wise planning. Pollution caused to a groundwater water supply can have devastating financial and environmental effects on a community and its residents. All homes and businesses in Afton remain on private individual wells.

Afton's concern with the quality of water and interest in non-pollution of wells and aquifers puts the burden on developers to produce data which shows that no septic systems will be installed on sites where the potential for harm to groundwater exists.

f. Surface Water Management

Afton prides itself on protection of surface water resources. The St. Croix River, Valley Creek, Trout Brook, Mays Lake (Lake Edith), and a variety of wetlands are exceptional water features which define Afton and are highly valued resources. The attached map (Exhibit 6) shows surface water resources in the city of Afton and includes many of the features identified in subsections d. and e. above.

Afton is a rural community with primarily large lot single-family residential and agricultural land uses. Due to the emphasis on low-density development, storm water control is typically handled by minimizing impervious surface and preserving large amounts natural and pervious surface cover. The City also uses its DNR approved ordinances for shoreland, bluffland, floodplain and wetland protection and also uses its erosion control policies to protect surface water resources.

For every proposed subdivision, the drainage pattern, runoff, and surface and ground water resources are analyzed in detail and appropriate preservation measures are taken. It has been and will continue to be the city's practice to require all storm water ponds to be designed to meet National Urban Runoff Program (NURP) standards and all subdivisions and grading projects to follow Minnesota Pollution Control Agency Best Management Practices. The city will formalize this practice by adopting these minimum design standards as part of the Subdivision ordinances by about July 1999.

The biggest threat to Afton's water resources is continued urban development within the Valley Creek watershed passing through the northeastern portion of the City of Woodbury. There is concern that urban development and increased impervious surface in northeast Woodbury will have a profound negative effect upon surface water quality. Afton is cooperating with the Metropolitan Council and the Science Museum of Minnesota by allowing surface water monitoring of Valley Creek. Afton intends to work with the Metropolitan Council, the DNR, and the City of Woodbury to protect water quality upstream of the Afton's border and expects these agencies to be vigorous in their protection efforts.

2. Existing Land Use

In order to plan for the future development of Afton, it is necessary to examine the existing patterns of land use in the city. Exhibit 7 illustrates the existing land use and housing pattern.

Afton's only commercial zone is contained within the old village. Its industrial zone serves as a buffer between I-94 and the residential zone. Afton intends to keep this zone as a buffer and not allow commercial, or strip development, along I-94. With the two noted exceptions, all of Afton is zoned for either agricultural use or residential use. Although both districts require a minimum five (5) acre lot size, the density in the Agricultural zone is three (3) dwelling units per quarter/quarter section (forty acres), and a maximum of eight (8) dwelling units per forty acres in the Residential zone. These densities assure the maintenance of an overall density of one (1) dwelling unit per ten (10) acres. Roads built in the residential zone are dedicated to the City and the land used for them is deducted from the total acreage used for the development. Afton's zoning ordinances allow many agricultural uses in the residential zone, which is important in preserving the rural character of Afton. Only six zoning changes have been made since 1980.

1990 Land Use Estimate *

Type	Acres	Percentage
Residential	1595	9.5%
Commercial	56	0.3
Industrial	134	0.8
Public & Recreation	562	3.3
Highway	45	0.3
Lakes & Streams	800	4.7
Wetlands	261	1.5
Agriculture/Open Space	<u>13,413</u>	<u>79.0</u>
TOTAL	16,866	100%

As of January 1998, tax classifications for land parcels in Afton are the following:

Type*	No.	Percentage
Residential Homes	951	59.9%
Improved Residential - No Homes	14	0.9
Unimproved Residential	244	15.4
Agricultural Homesteads**	101	6.4
Agricultural Parcels, Unimproved	95	6.0
Commercial and Industrial, Improved	17	1.0
Commercial and Industrial, Unimproved	3	0.2
Exempt Improved	10	0.6
Exempt Unimproved	<u>153</u>	<u>9.6</u>
TOTAL	1,588	100%

* Washington County Assessors Office
 ** Minimum 10 acres of tilled land

a. Residential

As of January 1990, there were a total of 918 residential housing units in Afton.

Type	No.	Percentage
Single Family	906	98.6
Multi-Family	6	0.7
Mobile Home/Other	<u>6</u>	<u>0.7</u>
TOTAL	918	100.0

These homes are located within the following zoning districts:

RR	A	VHS	I
639	196	82	1

All of Afton's housing relies on individual septic systems and well water. Due to the need to provide ground water recharge area and adequate septic drain fields and to preserve sensitive environmental features, most Afton's

housing consists of single family homes on large lots.

Many homes in Afton are built on unplatted lots having metes and bounds descriptions. Others are built on platted lots in the residential zone, created through the subdivision process, which is a more specific and detailed procedure than the minor subdivision process.

Since 1982, there have been fifteen major subdivisions, resulting in the creation of 119 lots and 38 Minor Subdivisions resulting in 75 additional parcels. There was a moratorium on subdivision of land in 1980 and 1981 and again in 1995 and 1996.

The majority of houses in Afton are in good condition. Many are of newer construction and are well maintained. The old village contains some older houses, and there are older farmhouses in the agricultural zone. Many of these are in the process of being restored.

On average, housing in Afton has higher value than the Metro area and Washington County values, in part because of large lot areas associated with Afton’s housing and the presence of many natural amenities (e.g., rural lifestyle, agricultural ambience, rolling terrain, bluffs, vistas, rivers and streams, and woods).

<u>Average Housing Sales Price</u>	<u>1996</u>
Afton	\$207,000
Washington County	\$115,000
Metropolitan Area	\$103,000

Source: Minnesota Planning and Dept. of Revenue

b. Industrial

Approximately 239 acres of the City are zoned for industrial use. This industrial zone is located between the I-94 frontage road and the northern boundary of the City, east of County Road 15 (Manning Ave.). The existing industrial uses are of the light industrial type, and include warehousing, storage, and a utility substation. These uses have been permitted by special use permit establishing conditions intended to be compatible with the city's

lack of urban services and do not pose environmental problems. Light industry and storage related activities will be continued to be allowed in the industrial zone under current zoning ordinances. Afton will resist any attempt to rezone this area to commercial use, since commercial uses would increase the need for urban services and Afton intends to maintain this area as a relatively low intensity use buffer between the interstate highway and the nearby residential zone. The industrial district provides an area within the city for those uses that would be incompatible with the residential and agricultural districts.

The City has created a separate Marine Services District to complement the river accesses and marinas that permits storage and repair of boats and boat trailers by Special Use Permit. This District should be confined to the area just north of the Old Village that was designated General Business and Light Industry in the Township of Afton before the Lower St. Croix River Bluffland and Shoreland Management Ordinance was adopted.

c. Commercial

All of Afton's commercial development is within the Old Village. The businesses consist mainly of marinas, restaurants, retail shops, offices, and one inn. Commercial uses in that portion of the Old Village zoned commercial are within the Lower St. Croix Bluffland and Shoreland Management District and thus allowed by Special Use Permit only.

d. Agricultural

According to the 1985 aerial photographs, approximately one-half of the city is being actively farmed in either row crops or pasture. Thus, agriculture remains the largest single land use in Afton.

In April 1980 the state legislature passed and the governor signed the Metropolitan Agricultural Preserves Act. This act provides a package of benefits designed to provide farmers in the seven county metropolitan area with the

assurance they can continue their farm operations on an equal footing with other farmers in the state without the pressures of urbanization. These benefits include:

- 1) Agricultural use valuation.
- 2) A lid on total tax rates so that they cannot exceed 105% of the statewide average in townships for all purposes..
- 3) Prohibition of special assessments for sewer and water.
- 4) Protection for normal farm practices -- a local government would be prohibited from enacting ordinances which inhibit normal farm practices unless they bear a direct relationship to the public health and safety.
- 5) State agencies are directed to be supportive of farming in Ag Preserves, and the joint legislative committee on agricultural preservation is directed to study state agency regulations that negatively affect long-term agricultural lands. The committee is requested to recommend changes in regulations that inhibit normal farm practices.
- 6) Annexation proceedings -- the Minnesota Municipal Board is required to make certain findings before an Ag Preserve can be annexed to a city.
- 7) Protection from eminent domain -- before Ag Preserve land can be acquired by eminent domain, it must be shown that there are no reasonable cost effective alternatives which would have less of a negative impact on Ag Preserves. The process of review is conducted by the Environmental Quality Board. A suspension of up to one year is possible, but it cannot permanently stop eminent domain.

(Reference: Minn. Stat. 473H.01 - 473H.17)

In order to take advantage of these benefits, a farmer's land must be designated "agricultural" on the city's land use map and zoned at a

density of no more than one dwelling unit on 40 acres for residential development. In addition, the farmer must apply for and receive certification from the city stating that his property is eligible for "preserve" status. Once a farmer's land is designated a preserve, the land must remain in agricultural use indefinitely or for eight years after the landowner applies for an expiration of the preserve designation.

As of January 1, 1998, twenty two landowners held 1,679 acres of land in Agricultural Preserve in Afton. A number of landowners have filed notice of expiration of Agricultural Preserve status.

e. **Old Village**

The former village of Afton, hereinafter referred to as the "Old Village", is located in sections 22 and 23 of Afton along the St. Croix River. See Exhibit 8 – Old Village. The eastern boundary of the Old Village is defined by the St. Croix River and the southern boundary and western boundaries by steep slopes and river bluffs. The northern boundary is defined by the intersection of St. Croix Trail South and Stagecoach Trail South. The visual appearance of the entries to the Old Village help to preserve the quaintness which is part of the character and charm of this unique, rural village. These physical features define the boundaries of the Old Village and also limit expansion of the Old Village to the south, west, and east. The Old Village also is located at the mouths of two minor watersheds.

Since the Old Village was established on river flats it is subject to flooding from the St. Croix River. A significant portion of the Old Village lies within the 100 year floodplain of the St. Croix River; currently there are 17 homes and 12 businesses in the 100 year floodplain. The city will complete major improvements to the dike, and facilitate the floodproofing of those

structures with a main floor below the 100-year flood elevation in 1998. This should greatly diminish the potential for property damage in the floodplain in the future.

The city has adopted a comprehensive floodplain ordinance that has been approved by the Minnesota Department of Natural Resources and the Federal Insurance Administration. This ordinance requires detailed reviews of all proposed development in the floodplain and is designed to assure that all development within the flood plain will have maximum protection from floods.

In addition to the floodplain ordinance, development along the St. Croix River is regulated by the Lower St. Croix Bluffland and Shoreland Ordinance. This ordinance is designed to protect the natural features and beauty of the St. Croix River, which is designated as a National Scenic River. Afton has a strong commitment to protecting the natural beauty and wild nature of that part of the St. Croix River within the city's geographic boundaries.

The Old Village was platted in 1855 by R. Haskell, Joseph Haskell, H.L. Thomas, and C.S. Getchell. The plat is typical of land divisions of that time: 50 x 150 foot wide lots and 80 foot wide street rights of way designed in a grid pattern. The original plat notes Bolles Creek (Valley Creek), the stream through the southern portion of the Old Village (which remains an unnamed stream), the bluffline, springs, a public square, land donated for church and school use, Steamboat Landing and the Point Douglas-Stillwater military road (Perrot Avenue South).

Today, St. Croix Trail South is the major or "main" street through the Old Village. St. Croix Trail is also County State Aid Highway 21.

The other improved streets in the Old Village are typical of a rural village. Even though the rights of way are 80 feet wide, the driving surface of these improved streets is relatively narrow, approximately 20 feet, which is reminiscent of a rural village.

Of the approximately 32,000 lineal feet of dedicated street right-of-way in the Old Village, 17,150 lineal feet, or 54% of the right-of-way is improved with a driving surface. Approximately 12,900 lineal feet, or 40% of the right-of-way is not improved and 1,950 lineal feet, or 6% of the right-of way has been vacated by the city.

Most of the unimproved right-of-way will probably never be improved. Since the Old Village was platted on a grid system with no regard to the topography, some of the rights-of-way are on extremely steep slopes which would not lend themselves to improvement.

According to the Afton Zoning Ordinance and the Lower St. Croix Bluffland and Shoreland Management Ordinance, three platted lots are required for building. Currently there are approximately 115 vacant lots that make up three lot parcels. Variances would be required to build on many of them. Many of the three lot parcels are unbuildable because of steep slopes. Where property owners own more than three lots contiguously, they tend to use all of their land for accessory structures, septic systems, and lawns.

A major land use in the old village is public open space. Steamboat Park, along the St. Croix River, is approximately thirty (30) acres in size. Most of the park is in the floodway (i.e., when the St. Croix overflows its banks, the Park is flooded). It serves as a sanctuary for many birds and various kinds of wildlife. It has been developed in a limited way for passive activities such as picnicking and walking.

The Village Square has been developed as a park which serves such activities as basketball, baseball, picnicking, and group activities. There are play equipment and a picnic shelter in the park, as well as primitive restroom facilities. The Town Square Park is the focal point of such annual events as the Fourth of July Parade and Art in the Park.

Many of the structures in the Old Village are of historical interest. A partial map showing structures and sites of historical interest for the entire city is included in this plan (Exhibit 9).

As with the rest of the city, the Old Village residences and businesses are dependent on private wells and on-site sewage treatment systems. The problems with these systems are amplified in the Old Village because of small lot size, density, floodplains and high groundwater. A standard septic system with a drain field must be installed when a building permit is issued for remodeling, when the present system fails, or the use of the structure changes. Those uses not meeting the on-site septic system regulations will not be allowed to expand or intensify. The city is concerned that septic systems on extremely small lots, and especially those in areas where the water table is high, are liable to fail. Because of this, mandatory inspection is required by the city to determine whether septic systems are in need of replacement, improvement or service.

f. Historic Sites

Afton is rich with historic sites. Afton's history is recognized as an important asset to the community by its citizens and by tourists. See Exhibit 9 – Historic Sites. In order to preserve this heritage, Afton has:

(a) Entered into a 99-year lease with the Afton Historical Society in order that the Society may establish a Museum in the old Afton Village Hall. The Museum houses abundant

memorabilia available in Afton. It is hoped the citizenry will understand the importance of this Museum and contribute historic objects, photographs, and other documents. The Museum is open to the public at specified times during the summer months. A walking tour brochure has been developed by the Historical Society and is available to the public at the Museum.

(b) Established the Afton Design Review/Heritage Preservation Commission and empowered it to maintain and preserve the historic character of the Village Historic District (VHD) through its design review authority which oversees all new construction and restoration projects in the VHD to ensure their compliance with the Commission's guidelines for preservation. This review authority includes architectural review to ensure the historic integrity of a structure's exterior is maintained and review of all development plans, both public and private, in order to protect historic sites. The Commission is also mandated to identify and designate historic sites outside of the Old Village that will then fall under its design review authority. The Commission will determine the value of all historic sites and structures in order to evaluate to what extent each site or structure should be protected.

The Afton Design Review/Heritage Preservation Commission has obtained certification of their Commission by the State Historic Preservation Office as a Certified Local Government (CLG) which will allow the Commission to obtain grants for historic preservation and nominate sites for inclusion on the National Register of Historic Places.

Following is a partial list of sites having historical interest: (Exhibit 9 shows the location of the historical sites listed below)

<i>Map Number</i>	<i>Site</i>
1	St. Peter's Lutheran Church and Cemetery
2	Mount Hope Cemetery
3	Bolles Mill Site
4	Bolles House
5	Hablitzel House
6	Valley Creek School
7	Eastwood School
8	Swede Hill School
9	Dick Home
10	Tom Cooney Home Site
11	Landiss School Site
12	Boxell School Site
13	German Lutheran Church and Cemetery Site
14	Afton Theological Seminary
15	Afton Methodist Church Site (Burned 1998)
16	American Church (formerly Village Hall and currently Afton Historical Society Museum))
17	Little Red House (originally a parsonage)
18	H.L. Thomas House
19	Afton House
20	Little Brick School House
21	Arsenal Site
22	Black Woman's Cabin Site
23	Sawmill Site
24	Steamboat Landing
25	Haskell's Farm
26	Octagonal Barn Site (Barn burned 1987)
27	Indian Settlement Site
28	Jacob Fahlstrom Cemetery
29	Town Hall (Leased to Elizabeth Harrington)
30	Mackey House (1841 Oldest Village House (burned 1998 and being rebuilt))
31	Bissels Mounds
Shaded Area	Village Historic District

within the Valley Creek/Bolles Mill Area. Additional information about these sites can be obtained from the Afton Historical Society.

The City has other significant historical areas that could become designated on this map in future years, including additional locations



C. FACILITIES

1. Roads

Afton is served by a combination of federal, state, county and local roads. The Transportation Map, Exhibit 9, indicates the road system of Afton and the functional classification of each existing road based on Metropolitan Council's definitions and average daily traffic volumes for selected roads. Classification of streets and highways is the first step in preparing a coordinated transportation plan. Functional classification involves the determination of what function each street or highway should perform before determining street widths, speed limits, intersection controls or other design features. Functional classification assures that non-transportation factors such as land use and development are taken into account.

The Functional Classification System consists of four classes; Principal Arterial, Minor Arterial, Collector and Local Streets. Principal arterials, together with minor arterials, make up the Metropolitan Highway System - a highway system of metropolitan significance. Definitions of each of the four classes are as follows:

Principal Arterial - A street, highway or interstate freeway which provides for 90% to 95% high speed travel and 5% - 10% direct land accesses. Such highways should be designed as fully controlled access facilities. The emphasis on these roads is on mobility as opposed to land access. They are used to connect the subregions of the metropolitan center. They also connect the Metropolitan Area to outstate centers.

Minor Arterials - A street or highway that connects adjacent subregions and activity centers within subregions. Minor arterials are primarily oriented toward the provision of submetropolitan mobility (70% or more) and any land access (30% or less) should be oriented to public streets and major traffic

generators rather than closely spaced driveways onto the street.

Collector - A street that functions to collect traffic from local streets and move it to minor arterials and other collectors. Collector systems provide access to commercial, industrial and high-density residential development. Equal emphasis is given to mobility and land access.

Local - A street that functions to provide access to land within neighborhoods (95% or more) rather than carry through traffic (5% or less).

Interstate 94, a principal arterial, is a six lane freeway that connects Afton with the Minneapolis-St. Paul metropolitan area and Wisconsin. The highway was completed in 1985 and provides access for many Afton citizens to their work and shopping places in the Twin Cities and Hudson, Wisconsin. The citizens of Afton have access to Interstate Highway 94 from the interchanges at Manning Avenue South, (MN Hwy. 95) and St. Croix Trail).

Several minor arterials traverse the city and carry most of the traffic through the city. Two of these minor arterials are north-south roads: St. Croix Trail South and Manning Avenue South (MN 95). These two minor arterials have interchanges with I-94 and carry most of the north-south movement through the city to and from I-94. Both of these roads extend from I-94 to the southern edge of Washington County (through Denmark Township) to the cities of Hastings and Prescott, WI. Manning Avenue South carries the greater portion of this north-south traffic. Because of its straight line north-south construction, Manning Avenue is recommended over the more winding St. Croix Trail South to access Afton State Park, Denmark Township, and destinations in southern Washington County. While MN 95 and C.S.A.H. 21 are classified as minor arterial,

these roads have pre-existing conditions (such as closely spaced driveways) which are not consistent with the minor arterial definition.

The annual 1998 average daily traffic count (ADT) for Manning Avenue South at the southern edge of the city is more than two and a half times the traffic for St. Croix Trail South at the southern edge of the city: 3100 compared to 1100. It is evident from the ADT count for Denmark Township that traffic movement is from St. Croix Trail South to Manning Avenue South via county roads. Apparently, commuters and other travelers prefer the alignment of Manning Avenue South to the winding and hilly alignment of St. Croix Trail South. Also, by using Manning Avenue South as a means of access to I-94, travelers avoid being funneled through the Old Village via St. Croix Trail South.

The 1993 ADT count for St. Croix Trail South at the I-94 intersection is two and a half times the count for Manning Avenue South: 11,300 compared to 3,900. However, this exchange of counts is due to the communities of St. Mary's Point, Lake St. Croix Beach, Lakeland Shores, and Lakeland contributing to the additional traffic on St. Croix Trail South.

The city's other minor arterial, C.S.A.H. 18 (40th Street So. and Afton Boulevard S.) carries east-west traffic from the Old Village (1998 average adjusted daily traffic "aadT" 2500) (St. Croix Trail S.) to Woodbury (Manning Avenue S.).

Neal Avenue South (County Road 71) is designated a collector street. As with Manning Avenue South and St. Croix Trail South, Neal Avenue South extends from I-94 to the southern edge of the county. Neal Avenue South also acts as a major north-south road for Afton citizens. The 1996 ADT counts for Neal Avenue South are 1,400 at the I-94 frontage

road intersection on the north end to 600 near the southern end of the city.

Stagecoach Trail South from the Old Village to I-94 is also designated as a collector street. However, probably due to its many curves and hills, this street carries a minimal amount of traffic to I-94 compared to the minor arterials. The 1996-98 ADT ranges from 620 to 800 trips.

The only other street designated as a collector by the Metropolitan Council is 15th Street South. Although designated a collector street, 15th Street South is a combination of gravel and bituminous with a very low traffic levels. 15th Street South and the I-94 frontage road are the only two major east-west streets in the northern portion of Afton. Traffic patterns suggest traffic is using Stagecoach Trail South, Indian Trail and Neal Avenue to access the I-94 frontage road, then either westward to the Manning Avenue interchange or eastward to the St. Croix Trail South interchange.

The remaining streets in Afton are designated collector or local streets. Generally, all streets following section lines and of citywide importance will be designated collector streets and local streets will be those within subdivisions or those that serve isolated neighborhoods.

Based on excessive maintenance costs for gravel streets, the city now requires that all streets in subdivisions be paved with asphalt. The city continues to study a program of paving collector streets with asphalt.

The policy of the city has been not to condemn private property for road construction or to facilitate private development.

Afton residents use the Park and Ride lot located at I-94 and St. Croix Trail. This is an appropriate location and no other park and ride

or transit facilities are currently planned to be located in Afton.

2. Parks and Open Space

Afton is a large city: 25.6 square miles and sparsely populated. The estimated 1995 population was 2,831 persons. There are few concentrations of households and people, with

the exception of several major subdivisions, the Old Village, and higher than usual densities along River Road and Afton Boulevard and on Swede Hill.

Because of this sparse population, Afton citizens have grown accustomed to a rural atmosphere. An impression of open space is reinforced because of a large (5 acre) minimum lot size outside the old Village, the many unbuildable areas of the city and the large amount of farmland. The city also has a substantial amount of public and private open space and parks (see Exhibit 11). Following is an inventory of Afton's open spaces and parks:

PARKS AND OPEN SPACES				
AREA	SIZE	OWNERSHIP	TYPE	FACILITY
Afton Village	2 acres	City	Neighborhood	Picnics, Basketball, Tennis, Baseball, Volleyball, Playground
Meadow Ridge	10.4 acres	City	Neighborhood	Currently Open Space
Collin Green	2.8 acres	City	Open Space	Conservancy with Trail
Steamboat Park	27 acres	City	Community	Minimum development: Trails, Picnics, fishing, swimming, non-motorized small craft
Remus	5 acres	City	Neighborhood	Passive Uses until 2026 with trail
Rinta	3.25 acres	City	Neighborhood	Currently Open Space
Aftonwood	7.74 acres	City	Open Space	Conservancy with Trail
CITY SUBTOTAL	53.39 acres (2 acres developed for active recreation and the remainder undeveloped).			
Afton State Park	787 acres	State	Regional	Trails, Picnics, Swimming
Bowles Mill Monument	0.5 acres	State	Historical Site	Monument with small parking lot.
STATE SUBTOTAL	787.5 acres (plus 715 acres of Afton State Park located in Denmark Township to the south, surrounding Afton Alps and Golf Course, a very active recreation area)			
Science Museum of Minnesota	120 acres	Non-Profit	Quasi-Public	Minimal trails, Private
Belwin Foundation	700 acres	Non-Profit	Quasi-Public	Outdoor Educational Center and Land Trust, Private
QUASI-PUBLIC SUBTOTAL	820 acres			
TOTAL	1660 acres within Afton City Limits and about 10% of the total acreage of the			

PARKS AND OPEN SPACES				
AREA	SIZE	OWNERSHIP	TYPE	FACILITY
City of Afton (1660/16,896), with an increase of 28% in acreage since 1990 (predominantly quasi-public Land Trust acquisitions)				
TRAILS				
Manning Ave. Trail	Paved Lanes Along Manning Ave.	State	Trail	Paved Shoulders to State Hwy. 95
St. Croix Trail	Along St. Croix Trail	Various	Trail	Paved Path for Winter-Motorized and Non-motorized Uses
Afton Coulee Trail	Paved Lanes Along C.S.A.H.	County	Trail	Paved Shoulders from 45th St. to River Road along County Hwy. 21

Other community parks and regional parks (Afton State Park in Denmark Township, the Lake Elmo Regional Park Reserve in Lake Elmo, St. Croix Bluffs Regional Park in Denmark Township, Cottage Grove Ravine Regional Park in Cottage Grove) also provide a variety of kinds of recreation to Afton residents.

Fire, ambulance, and rescue services are provided by way of a joint powers agreement among the five Lower St. Croix Fire Protection District cities with a fire station located in Lake St. Croix Beach.

3. Community Facilities

The City of Afton owns six public buildings located on three parcels of property. The Afton Village Hall, leased to the Afton Historical Society, and City Garage are located on Lots 1, 2, and 3 of Block 8 in the old village. The Town Hall (leased out) and Garage (leased to a septic service), are located in the NW quarter of the SW quarter of Section 10, on Stagecoach Trail South. The City Hall is located on Lots 2, 3, 4, 5, and 6 of Block 11 of the Old Village. The City also owns docks that are leased to a private operator.

Police protection is provided, through contract, by the Washington County Sheriff's Department. As the city grows the cost of police protection will increase. The effective provision of police protection services is a consideration when new development is proposed.

III. POLICY PLAN



A. LAND USE

1. Historical Background

In the Metropolitan Council's Regional Blueprint (December 19, 1996), Afton is designated as “Permanent Rural” and “Permanent Agriculture”. The Metropolitan Council recommends limiting Afton’s residential development to an average overall density of one dwelling unit on 10 acres in the Permanent Rural area and one dwelling unit on 40 acres in the Permanent Agriculture area. This Comprehensive Plan conforms in general to the designations of the long-term land use in the Metropolitan Council’s Regional Blueprint. Based on the inventory and analysis contained in this plan, Afton will not, by the year 2020, develop at a rate that would exceed the Metropolitan Council's recommended densities.

The residents of the City of Afton have consistently supported the concept that Afton remain Permanent Rural and Permanent Agriculture. Their intent has been communicated via elections, City Council and Commission actions, referenda, moratoria, Green Space studies, surveys, public statements, participation in public hearings, participation in other extra-jurisdictional organizations such as the Valley Branch Watershed District, the MN-DNR Trout Stream Initiative, the Five Cities Planning Committee (five cities incorporated within the original Afton Township), and other means.

After several years of work, and in conformance with the Metropolitan Council’s prior Development Framework Plan, in the Comprehensive Plan of 1982, the City of Afton established an Agricultural Zone with a density of 3 dwelling units per 40 acres of land and passed ordinances to enforce that policy. At that time, and continuously to the present, the

residents of the City of Afton value the agricultural economy and rural character that an agricultural environment provides.

Productive and potentially productive agricultural land is being lost to non-agricultural development at an alarming rate in the Twin Cities metropolitan area. Within the seven county metropolitan area, approximately 20% of the agricultural land was converted to other uses between the years 1964 and 1974. Thirty-five thousand acres of that lost agricultural land was in Washington County. Between 1982 and 1990, Washington County lost an additional 25,000 acres of agricultural land.

The primary causes of land being taken out of agricultural production are development of land for residential use and increasing land values. These trends impair the ability of farmers to continue to efficiently farm the land.

Agriculture plays an important role in preserving the balance of economic conditions in the Twin Cities Metropolitan area. Once agricultural land is developed for non-agricultural residential, commercial, or industrial use, it is *forever* lost to agricultural production. This Plan intends to preserve agricultural land for permanent agricultural use, and does not accept the belief held by some that agricultural use is merely a temporary use or that agricultural lands are merely a holding area for future residential or other development. Moreover, the community values agricultural land as open space in an increasingly urban environment, a sanctuary for a rural lifestyle that Afton residents have consistently desired to maintain.

Of the city's 16,364 acres, approximately 8,320 are zoned agricultural with a residential density of three dwelling units on 40 acres. 6,722 acres are zoned rural residential with a minimum lot size of five acres. 239 acres are zoned

industrial. 1,290 acres are public and private open space. Approximately 17 acres are zoned commercial. The density requirements and acreages will keep the residential development in Afton within the Metropolitan Council's guidelines, and will be consistent with Afton's limited growth policies.

As of January 1990, there were 196 houses in the Agricultural (A) zone. If all of the rural residential (RR) zone were developed at a five-acre density, there would be a total of 1,344 houses in the RR zone. As of January 1990 there were 639 houses in the RR zone.

The severe topography, fragile nature of Afton's geologic base, and the large number of drainage ways, as well as soil conditions limit the number of possible building sites in Afton.

Landowners in the Agricultural zone may apply to the City of Afton for Agricultural Preserve status. Certification of land to Agricultural Preserve results in rezoning to an overall density of one dwelling unit per 40 acres. The 40 acre and larger parcels in the Agricultural zone which are eligible for Agricultural Preserve status are outlined on the Land Use Map contained in this section of the plan.

Due to the limiting topography, soil conditions for on-site sewage treatment systems and to the possibility of existing farms being zoned one dwelling unit for each 40 acres for Agricultural Preserve certification, the Rural Residential area will be developed at an overall density of less than one dwelling unit for each five acres.

The Comprehensive Plan adopted in 1982 has worked as it was intended, to guide the growth and development of Afton while preserving the open spaces, agricultural land use, rural character, and fragile environment of Afton. Enforcement of appropriate zoning codes has successfully prevented the need to consider public sanitary sewer and water, and has been

successful in keeping taxes low. It is the intention of the City of Afton, through adoption of this revised Comprehensive Plan, with the following enumerated goals and policies, to continue to preserve and maintain Afton's unique environment and quality of life.

2. All Zoning Districts

a) Goals:

- 1) Provide for a mixture of land uses which maintains a rural environment and lifestyle and avoids the necessity of installing metropolitan sewer systems and municipal water systems and other urban services.
- 2) Protect surface water, groundwater and groundwater recharge areas. Protect private wells from all sources of contamination.
- 3) Limit the average overall density for the city to one (1) dwelling unit per ten (10) acres.
- 4) Preserve open space and wildlife habitat, and protect natural resources.
- 5) Retain existing productive agricultural lands and encourage the use of such lands for a variety of agricultural uses (which includes without limitation, row crops, fruit and berry crops, nurseries, pasture lands, etc.).
- 6) Protect steep slopes, tree cover, wetlands, and other fragile lands through easements, ordinances, and other available means.
- 7) Develop a sound tax base and other means to avoid excessive tax burdens upon individual property owners and to minimize tax increases.
- 8) Maintain existing dwellings to support Livable Communities Program.
- 9) Investigate and cooperate with adjacent communities and institutions efforts to make provisions for senior housing.

b) Policies:

- 1) Effectively control surface water runoff through natural means.
- 2) Assure agricultural uses remain the dominant use whenever new residential uses are introduced into an agricultural area -- a right to farm is presumed.
- 3) Encourage transfer of land and development rights to preserve agricultural usage.
- 4) Utilize planning practices that avoid the need for urban services.
- 5) Encourage community supported agriculture and other forms of affordable agriculture.
- 6) Utilize this Comprehensive Plan as a guide to manage growth and development and to enforce zoning ordinances.
- 7) Continue to implement limited growth policies and ordinances in order to:
 - a) protect surface water, groundwater, and groundwater recharge areas;
 - b) maintain the rural environment and atmosphere of the community;
 - c) avoid the need for metropolitan sanitary sewer or public water or other urban services;
 - d) avoid excessive public service costs;
 - e) avoid the necessity of upgrading existing gravel roads to bituminous surface roads;
 - f) adhere to Permanent Rural and Permanent Agriculture policies of the Metropolitan Council Regional Blueprint (December 19, 1996).
- 8) Preserve agricultural land, open spaces, and wetlands using existing and new methods of conservancy.
- 9) Monitor and control land uses which contribute to erosion, pollution, and well contamination.
- 10) Enforce all regulations designed to protect the natural environment.

- 11) Participate in inter-governmental organizations to assure that neighboring communities do not endanger Afton's natural beauty, resources, or residential density by
 - a) enforcing the Metropolitan Council Regional Blueprint (December 19, 1996);
 - b) establishing transitional areas from urban land use to rural land use along the border between the City of Afton and the City of Woodbury; and
 avoiding contamination of watershed areas upstream from the City of Afton.
- 12) Require property owners developing or improving their land to bear the costs of infrastructure improvements and mitigate any adverse offsite impacts.

3. Rural Residential Zone**a. Goals:**

- 1) Maintain the city's overall low density and preserve the rural character of Afton by encouraging residential development only in the residential zone.
- 2) Keep the need for public expenditures at a low level consistent with the public facility and service needs generated through development trends by:
 - a) retaining low density, single-family housing development rather than permitting high density, multiple-family housing;
 - b) focusing on low density residential development in order to maintain a low level of public service costs for streets and fire and police protection.
 - c) focusing on low density residential development in order to avoid pollution caused by intensive and high density land use.

b. Policies:

- 1) Require a minimum lot size of five acres.
- 2) Lot size alone does not determine a parcel's suitability for on-site sewage treatment systems. Such suitability depends upon soil types, depth to water table and bedrock, slope, whether the lot is in the floodplain or a wetland, and other physical features and environmental concerns. Lots may be required to be larger than five acres when physical conditions warrant.
- 3) Permit no commercial or industrial uses in the Rural Residential zone, except home occupations as permitted by ordinance.
- 4) Require a minimum buildable area of 2.5 contiguous buildable acres according to applicable zoning ordinances. Each buildable lot shall have enough area with suitable soils for the installation of a sewage treatment system and a backup drainfield.
- 5) Require a minimum of 300 feet of frontage on a public street for all lots in order to:
 - a) provide adequate separation of houses to preserve the rural atmosphere;
 - b) reduce the need for setback variances by providing an adequate lot width;
 - c) provide adequate separation of and limit the number of driveways onto collector streets to ensure safe access and traffic flow;
 - d) eliminate long and narrow lots and irregularly shaped lots, because both are difficult to define and develop.
- 6) Require each applicant for a building permit to demonstrate that there is sufficient area on the lot within all setback requirements to construct a house and all allowable accessory structures.
- 7) Require landowners to install and maintain driveways from the road frontage of the lot to such a standard that emergency vehicles will have ready access to all buildings.
- 8) Encourage the continuation of existing agricultural uses on parcels in the residential zone and consider zoning for agricultural preserve where appropriate and when requested.
- 9) Permit residential subdivisions that best utilize the available buildable land, protect environmentally sensitive areas, retain open spaces, maintain maximum vegetation and tree cover, and assure the protection of surface water and groundwater.
- 10) Practice planning principles that will avoid the need for metropolitan sewer and municipal water and other urban services.
- 11) Prohibit land uses which are inconsistent with the rural character of the rural residential zone and which might place excessive demand on city services.
- 12) Protect existing agricultural uses from restrictive nuisance ordinances other than those requisite to the health, safety and welfare of the farm public and neighboring landowners, and which do not unduly inhibit normal agricultural practices and operations.
- 13) In areas where agricultural and non-agricultural uses interface, the non-agricultural developer is responsible for any desired screening, which must not interfere with the agricultural use.

4. Agricultural Zone

a. Goals:

- 1) Work to preserve the economic vitality of agriculture in Afton.
- 2) Use all available means to retain existing productive agricultural lands.
- 3) Promote and maintain the open character of the Agricultural District, identified on the Land Use Plan Map, and on Exhibit 3, Prime Agricultural Land, in order to preserve large parcels of land for farming, orchards, livestock production, tree farms,

community supported gardens, and other agricultural uses or as open space.

- 4) Promote wise land stewardship so that the land is undiminished for future generations.
- 5) Resist development pressures and land speculation which tend to create urban sprawl.
- 6) Promote, with other jurisdictions and agencies, legislation and regulations (e.g., tax incentives) that encourage preservation of agricultural land and open space.

b. Policies:

- 1) Encourage the continued use of agricultural preserves and follow the requirements of the Agricultural Preserve Act.
- 2) Encourage good soil and water conservation practices to protect the groundwater and to reduce or eliminate soil erosion.
- 3) Establish zoning that is consistent with agricultural and open space preservation.
- 4) Discourage residential development on lands suitable for agricultural use and adhere to planning practices that will allow existing farms to continue operating without external pressures.
- 5) Prohibit commercial and industrial uses.
- 6) Confine nuisance restrictions for noise, animals, odors, etc. to those requisites to the health, safety and welfare of the public and which do not inhibit normal agricultural practices and operations.
- 7) Prohibit the extension of sewer lines and water mains into the agricultural zone.
- 8) Prohibit the use and purchase by public agencies of tillable agricultural land except for agricultural or conservation uses.
- 9) Prohibit the construction of new streets in the agricultural zone except to the extent city ordinances and the city determine that a road will fit with the overall road plan or is necessary in order to allow a property owner to use the property in keeping with

the agricultural zoning and all other city ordinances.

- 10) Control the upgrading of existing roads and construction of new roads which would serve to encourage non-farm development in the agricultural zone or which would be inconsistent with the transportation policy plan.
- 11) Limit residential density in the agricultural area to three dwelling units on each quarter-quarter section (approximately 40 acres).
- 12) Existing dwelling units, where the density of three (3) dwelling units for each forty (40) acres is already exceeded, shall not be considered non-conforming uses or substandard; however, they will be counted for purposes of calculated permitted density development is contemplated.
- 13) Encourage the use of conservation or "Open Space Design" subdivisions where the subdivision permanently preserves open space or agricultural land uses or creates transition zones with adjoining zones or jurisdictions.
- 14) Encourage landowners to participate in a Purchase of Development Rights (PDR) or a Transfer of Development Rights (TDR) program or use other appropriate tools to preserve agricultural land and open space permanently.
- 15) Encourage consolidation of agricultural parcels to permit efficient placement of dwellings thereon to maximize remaining contiguous agricultural lands and open spaces.
- 16) In areas where agricultural and non-agricultural uses interface, the non-agricultural developer is responsible for any desired screening, which must not interfere with the agricultural use.
- 17) Limit residential use on agricultural lands to those lands that are determined to be least suitable for agricultural use.
- 18) The following criteria will be used to determine which land in an agriculturally

zoned parcel may be developed for residential use:

- a) the parcel is least suitable for agricultural use because of size, soil, slope, and vegetation and cannot reasonably be modified or combined for such use;
 - b) the land is and will be the least economically suitable for agricultural use;
 - c) the parcel cannot be used for a reasonable alternative use allowed in the agricultural zone;
 - d) the higher density residential use of any part of the parcel is a reasonable economic and physical use of that part of the parcel and would not be inconsistent with other ordinances regulating residential development and preserving or protecting agricultural land and open space (with an overall density of the parcel not greater than 3 dwelling units per 40 acres);
 - e) there will be no adverse effects on surrounding agricultural uses and open spaces; and
 - f) No rezoning of a parcel from Agricultural to Rural Residential shall occur unless, in addition to meeting the criteria listed above, the parcel is more than 50% contiguous to a rural residential zoning district and such a rezoning would not result in development which is inconsistent with the generally rural character of the surrounding area.
- 19) Residential use of a parcel will not set a precedent for granting residential use of another parcel of related physical type in the Agricultural zone.
 - 20) Use any available means to establish permanent agricultural status for those lands qualifying for such status and shown on Exhibit 3.
 - 21) Encourage the use of Integrated Pest Management and MN Dept. of Agriculture

“Best Management Practices” for specific crops.

- 22) Consider limiting maximum lot size for residential uses in agricultural areas.
- 23) Continue to require a minimum 300 feet of frontage on a public street for all lots except for subdivisions that are specifically designated to permanently preserve agricultural land and open space.

5. Industrial Zone

a. Goals:

The industrial area is confined to a strip bounded on the north by I-94 and the south by the I-94 frontage road. The purpose of this zone is to serve as a buffer between I-94 and the Rural Residential zone which lies south of the frontage road, while at the same time providing a location for light industry within the City of Afton.

- 1) Develop a sound tax base for the community and Independent School District # 834 (Stillwater Area), thereby avoiding excessive tax burdens on residential property owners.

b. Policies:

- 1) Restrict industrial development to those uses that do not generate large amounts of sewage and can operate efficiently on an on-site standard drainfield approved by City ordinances.
- 2) Restrict industrial uses to those which do not pose a threat to air or groundwater. Hazardous waste facilities will not be allowed in the industrial zone.
- 3) Restrict industrial uses to those which would not create the need for metropolitan sewer, municipal water or additional urban services.
- 4) The county or its agent will conduct annual inspections of industrial sites and will

require certification that all potential pollutants are disposed of in a lawful manner which does not pose a threat to the environment.

- 5) All proposed industrial uses must comply with the performance standards in the ordinances, as amended from time to time.
- 6) The City will utilize architectural, signage, landscaping, berming, screening, sound, odor and other controls through its zoning ordinances to protect adjacent areas from adverse impact by industrial uses.
- 7) Special Use Permits shall be reviewed annually.

6. Commercial Zone

The commercial area of the city is located within the Old Village (VHS Zone) which has been certified as a Historic District. This area has been the traditional commercial focus for the city and for area visitors. The existing small scale intimate village atmosphere is to be preserved while allowing a balanced and complementary mix of residential, recreational, locally attractive commercial and tourist uses. Infrastructure improvements should be designed to eliminate environmental hazards and to sustain the long term viability of the commercial area.

a. Goals:

- 1) Plan for a joint sewer treatment facility system and other infrastructure enhancements (sidewalks, bike paths, etc.) to enhance the long term viability, aesthetics, and value, and to lessen environmental impact of commercial development within the Village area.
- 2) Replace existing on-site sewer treatment facilities when a joint sanitary sewer system becomes available.
- 3) Eliminate substandard structures and conditions within the floodplain.

- 4) Limit commercial uses to the commercial zone, as expanded from time to time, of the Old Village. Eliminate legal non-conforming use anomalies through rezoning of the area shown in Exhibit 8 to VHS-C.
- 5) Encourage expansion of Old Village commercial activity within the expanded commercial zone, regulated by special use permits.
- 6) Encourage commercial uses that develop a sound tax base.
- 7) Permit only those commercial uses that are compatible with the existing village atmosphere of the Old Village.
- 8) Define enforceable structure and architectural and site design standards.

b. Policies:

- 1) Certify the 100-year flood plain to exclude the portions of the Old Village that are now out of the defined flood plain.
- 2) Pursue development of a joint sewer treatment system for:
 - a) septic systems located on the dike;
 - b) areas in the floodplain;
 - c) areas within or tributary to the Old Village.
- 3) Encourage "low intensity" commercial usage within the amended VHS-C district in addition to the current residential uses. "Low Intensity" means equal or less sewage flow than single family residential uses on an equivalent lot area as determined by the Metropolitan Council Environmental Services- Sewer Access Charges. "High Intensity" use is more sewage flow than equivalent single family use.
- 4) All commercial uses shall be environmentally benign.
- 5) Expansion of Village commercial activity to "High Intensity" usage will not be permitted until a joint sewer treatment facility is available. "High Intensity" users will bear the initial and proportionate costs

of a joint sewer treatment facility with any available government grants.

- 6) Require commercial uses to adhere to the defined architectural standards and signage requirements which maintain the tax base in the commercial zone and serve to further the existing village character.
- 7) Prohibit all industrial uses in the Old Village.
- 8) Preserve the historic character of the Old Village
- 9) Enforce design standards through the Design Review Committee/ Historic Preservation Commission.

7. Village Historical Site - Residential

The residential area of the Old Village contains a mix of single family residential homes arranged in a traditional village manner adjacent to the Village commercial area. The village atmosphere and compatible relationship with the commercial area is to be preserved and enhanced. Infrastructure improvements should be designed to eliminate environmental hazards and to sustain the long-term viability of the Village area.

a. Goals:

- 1) Eliminate substandard structures and conditions within the floodplain.
- 2) Preserve the visual quality of the Old Village, especially the entrances into the village.
- 3) New residential buildings, additions, major exterior renovations should be compatible with defined architectural standards.
- 4) Preserve the historic atmosphere of the Old Village.
- 5) Design enforceable architectural and design standards and incorporate them into new restoration and renovation efforts.

b. Policies:

- 1) Stabilize, flood proof, elevate, or eliminate structures located within the floodplain.
- 2) Require the periodic inspection of all on-site sewage treatment systems and improvement to code of all substandard systems
- 3) Pursue a small-scale alternative sewer treatment system to serve the Old Village.
- 4) Improve the pedestrian and non-motorized circulation system within the Old Village.
- 5) Prohibit non-residential uses, except legal home occupation uses, within the residential zoning district.
- 6) Use Certified Local Government status to obtain grants and make nominations for historic preservation projects.

8. Historic Sites

The City of Afton has a rich history. Preservation and interpretation of key elements of that history are important to the social and economic well being of the city.

a. Goals and Policies

- 1) Define enforceable structure and design standards.
- 2) Encourage individuals to restore structures having historical interest.
- 3) Promote the use of the Afton Historic Museum in the Old Village.
- 4) Continue to evaluate structures for addition to the list of sites and structures having historical interest.
- 5) Require new construction within the VHS District to be compatible with the defined design standards of the Old Village.

9. Protection of Environmental Quality

The soils, topography and natural features

maps contained in the inventory section of this plan indicate that approximately one-half of the city is environmentally sensitive and in need of protection. These areas of the city are also the most aesthetically attractive for residential development. Afton will take all possible steps to protect environmentally sensitive areas in order to preserve the health and safety of the residents, the aesthetic qualities of the environment and land, air and water quality.

This 1998 Comprehensive Plan for Afton will expand on the concerns for protection of the environment listed in the original 1974 Plan and its successors. The Geological Atlas of Washington County, prepared by the Minnesota Geological Survey, provides information about the geology, hydrology, and sensitivity of Afton's groundwater systems to pollution. This Atlas underscores Afton's need to take strong measures to protect its groundwater and fragile environment. Furthermore, Afton adopts the Minnesota State Environmental policies contained in Minnesota Statutes Chapter 116D, and will use them in evaluating all prospective land uses within the City of Afton.

The following goals and policies provide a guide for private and public land use decisions and are designed to create a sustainable environment.

a. Goals:

- 1) Protect surface water by preserving shorelands, wetlands, water bodies, floodplains, streams and rivers.
- 2) Protect groundwater recharge areas.
- 3) Protect and preserve steep slopes.
- 4) Protect and preserve existing forests and woodlands.

- 5) Prohibit the discharge of pollutants into water bodies, water courses, wetlands, and groundwater recharge areas.
- 6) Protect and preserve unique natural features.
- 7) Regulate the extraction of minerals.
- 8) Protect the aquifers to preserve safe drinking water through the sealing of abandoned wells and other measures.
- 9) Through regulation, protect soils from erosion, contamination, and loss.
- 10) Make all land use decisions in an environmentally benign manner.

b. Policies:

- 1) Maintain stormwater run-off volumes from land to the level prior to development.
- 2) Prohibit land development from increasing the rate of contribution of water over and above what is being contributed under current land use.
- 3) Require, when necessary, on-site stormwater retention in order to reduce run-off volumes, provide sedimentation prior to discharge and increase groundwater recharge.
- 4) Require preservation of groundwater recharge areas through land dedication in subdivisions, scenic easements and through zoning use permits.
- 5) Protect water bodies and wetlands from encroachment of development, grading and filling and pollution.
- 6) Restrict development within every floodplain.
- 7) Preserve and protect all drainage ways.
- 8) Require setbacks from the crest of all slopes of 18% or greater, except in Lower St. Croix Bluffland District where the percentage is greater than 12%, in order to provide a buffer strip to control surface water run-off and erosion.
- 9) Encourage the maintenance of existing vegetation and ground cover to reduce the rate and volume of stormwater run-off.

- 10) Encourage the reduction of herbicide, pesticide, and fertilizer usage in residential areas.
- 11) Encourage in agricultural areas the use of Integrated Pest Management (IPM) and Minnesota Dept. of Agriculture "Best Management Practices" for specific crops.
- 12) Require erosion control and other improvements in major drainage ways in all developments.
- 13) Prohibit construction of structures, driveways, vegetative cutting, burning, grazing of domesticated animals, operation of motorized vehicles, grading and dumping on slopes of 18% and greater, in wetlands, and other areas deemed to be fragile lands.
- 14) Require utilization of sound soil conservation practices for all development on all slopes.
- 15) Encourage utilization of sound soil conservation practices for all agricultural operations. to reduce soil erosion.
- 16) Use sound soil conservation and engineering practices in the design and construction of all streets and driveways to assure soil stabilization.
- 17) Limit the installation of on-site sewage treatment systems to those soils, proven through percolation tests and borings, capable of treating sewage effluent and preventing pollution to ground and surface waters.
- 18) Prohibit the extraction of minerals except in the industrial zone.
- 19) Require extensive restoration of mined areas to assure erosion control, revegetation, groundwater protection and suitability for future development.
- 20) Prohibit clear cutting of major woodlands except for agricultural purposes and as normally needed for construction.
- 21) Require all abandoned wells to be sealed.
- 22) Monitor the use and location of irrigation wells.
- 23) Monitor storage of petroleum products within the city limits.
- 24) Enforce noise pollution ordinances.
- 25) Amend the City Code to incorporate current National Urban Runoff Program (NURP) standards and current Minnesota Pollution Control Agency "Best Practices" by July, 1999 and apply these provision to the review of any proposed development.
- 26) Enforce the Shoreland Ordinances to protect Afton's surface waters.
- 27) Cooperate with all applicable governmental watershed management organizations to improve groundwater quality regardless of the city limits and jurisdictions involved.

10. Air Space Controls

The City regards air quality as important as water quality. The vistas and clarity of the air are affected by regional activities irrespective of city limits and jurisdictions.

The City has no airport and will not plan for any, due to the lack of central services, suitable land space, fragile soils and noise pollution. No heliport is planned for the City of Afton for the same reasons.

The City will regulate ultra-light aircraft, hang-gliders, and balloons in order to (1) protect the personal safety and privacy of citizens, (2) minimize damage to property, and (3) avoid unnecessary disruption to animals and of the environment.

All seaplane operations on the St. Croix River will be regulated by the Minnesota Department of Transportation's Code of Rules. Through zoning ordinances, the city has limited the height of structures to 35 feet. However, Minnesota Rules regulating height for aviation purposes will also be utilized by the city. Reviews of all developments in the city, especially along the river, will consider the

height of structures and the safety of seaplanes.

11. Energy Conservation

In conjunction with its concern for the environment, the community is also concerned about energy waste. As a sparsely populated rural community, Afton will encourage all feasible methods of conserving energy.

a. Goals

- 1) Decrease the demand for fossil fuels. Diminish the demand for additional highway infrastructure.

b. Policies

- 1) Encourage alternative energy sources and regulate their use.
- 2) Encourage proper planning and design of subdivisions to ensure that, to the extent possible, lots are capable of taking advantage of natural energy resources such as solar access.
- 3) Encourage use of light rail transit systems when they are built.
- 4) Encourage permitted home occupations and a general reduction in automobile usage.
- 5) Encourage car and van pooling for commuters.
- 6) Encourage park and ride areas for commuters.

B. FACILITIES



1. Transportation

The continued emphasis on a low density, rural development pattern will result in minimal increases in trip generation. The entire city of Afton generates approximately 12,000 vehicle trips per day. This equates to an

average of less than one daily trips per acre of land compared to typical suburban development which generates approximately 40 trips per day per acre.

Traffic on roads within Afton will increase as growth continues outside of Afton and from the minimal growth forecast to occur within Afton. Exhibit 10 shows Washington County’s traffic forecasts for the year 2020. These forecasts were determined by multiplying the current ADT (average daily traffic) counts by a factor of 1.9.

Washington County is proposing to change the functional classification of Manning Avenue (TH 95) from a minor arterial to a principal arterial (post 2015) and proposes to transfer jurisdiction of the portion County Road 71 within the City limits to the City of Afton. The City of Afton will analyze these changes when they are formally proposed and will work with the County to address the issues involved in functional and jurisdictional changes.

The City of Afton subdivision regulations specify minimum access spacing requirements for driveways and roads. In addition, all proposed subdivisions which access a State or County road are sent to the appropriate agency for review and approval of access locations. The City of Afton will work with the County and Mn/DOT to develop an access management plan which assures an appropriate level of access and alleviates potential conflicts and roadway congestion.

a. Goals and Policies

- 1) Develop collector and arterial streets according to the Transportation Plan attached hereto as Exhibit 10.
- 2) Require all road construction and reconstruction along the river to be done in accordance with this Plan, City

- Ordinances, and the National Scenic Rivers Act.
- 3) Provide for the possible extension of all local streets in new subdivisions to avoid cul-de-sacs.
 - 4) Require adequate separation of access points on collector streets.
 - 5) Require minimum setbacks from the centerline of streets, through zoning and subdivision ordinances, to assure adequate rights of way in the future as streets are upgraded.
 - 6) Require right-of-way dedication for existing easement roads and future streets whenever land is subject to City Council approval.
 - 7) Require right angle intersections wherever possible to avoid traffic hazards and odd shaped lots.
 - 8) Require a 150 foot setback along designated collector streets.
 - 9) Continue studies to upgrade C.S.A.H. 21 from 45th Street S. to Co. Rd. 20.
 - 10) Encourage non-motorized trails construction when County and State roads are reconstructed.
 - 11) Coordinate street improvements with adjacent communities, county and state agencies.
 - 12) Encourage "park and ride" lots for commuters in areas adjoining major thoroughfares.
 - 13) Allocate funds for the annual maintenance of streets in accordance with the Capital Improvements Plan.
 - 14) Post speed limits and weight and parking restrictions on City streets, where appropriate.
 - 15) Conduct an annual audit of City street conditions.
 - 16) Prepare and implement a non-motorized trails master plan to accommodate alternative modes of transportation.

- 17) Prepare an access management plan designed to assure an appropriate level of access and alleviates potential conflicts and roadway congestion.

2. Parks and Open Spaces

There are just 2 acres of City-owned park developed for active recreational use. See Exhibit 11 – Parks and Open Space Plan. Any land obtained by the City of Afton as parkland should be suitable for “active” or “passive” recreation or land preserves according to size, soil stability, access, and topography. Priority for land acquisition may change between “active” and “passive” recreation and land preserves and is dependent upon land availability, land cost, and direction from the residents of Afton. Some examples of “active” recreation include picnic areas, ballfields, soccer fields, skating rinks, basketball courts, children’s play areas, bicycle, walking, and ski trails. Some examples of “passive” recreation include natural areas, nature trails, nature viewing areas, and meadows. *Open spaces, in and of themselves, are valuable to the residents of the City as preserves of nature and sanctuaries for flora and fauna.*

To meet possible future needs, it would be wise to obtain land for future neighborhood parks in all Afton Wards while land prices are relatively low and before development limits the amount and location of available land. Then, as an area's population density increases, parkland will be available in each city ward to provide for the residents' recreational needs. An ordinance enacted in 1998 contributes to the City’s ability to acquire and develop parks and open spaces whenever subdivisions are created.

The city will obtain scenic easements on major natural features during any development review process. The city will also work to protect significant natural features such as Trout

Brook, Valley Creek and its North Branch, Bissels Mounds and Kel's Coulee in the old village. The mounds (erosional outliers) are unique to Washington County and are a recognized landmark in the city. Other natural features that are determined to be either unique or geologically sensitive will be preserved as the property around them is developed.

The city has limited recreational trails. One trail is along St. Croix Trail South and extends from the northern edge of the Old Village to I-94. It is desirable that trails be developed that access the Old Village, Afton State Park, and trails in neighboring communities.

Washington County and the Regional Parks and Open Space Plan designate County Highway 18 (Afton Blvd., 40th St. and a portion of St. Croix Trail) as the Afton Bluffs Regional Trail. The trail location is shown on Exhibit 11. The City will work with the County and the Met Council to determine the trail alignment within the right of way.

- 1) The city approves an annual operating budget for parks. A Park and Open Space fee is paid either when a lot is platted or by the builder of each new dwelling unit. In addition to appropriations and the Park and Open Space fee, the city will apply for federal and state park development grants when available and when the city is able to contribute its matching share.

a. Goals:

- 1) Acquire and develop active and passive recreational parks.
- 2) Preserve adequate amounts of open space to maintain a rural atmosphere.
- 3) Preserve locally important water resources, natural and scenic features.
- 4) Develop safe, multiple use non-motorized trails along designated streets.

- 5) Connect major public open spaces with a trail system.
- 6) Periodically identify the recreational needs of Afton citizens and evaluate ways to meet them.

b. Policies:

- 1) Acquire and develop:
 - a) a parcel in the range from five to about ten acres in size in each Ward for use as a neighborhood park;
 - b) a parcel of more than 20 acres, preferably in the western area of the City, for use as a community park and open space;
 - c) multiple use trails along designated routes as shown on the Parks and Open Space Map, Exhibit 11 as these streets are upgraded and when funds are available for their construction; and
 - d) other parcels as they become available and are deemed desirable to be preserved as parks or open spaces.
- 2) Preserve open spaces and natural resources through scenic easements and other means.
- 3) Utilize collected parks funds, seek grants, and use matching funds to develop and acquire parks and open space.
- 4) Assess a fee, to be determined by the City Council, on all new subdivisions when a land dedication is not recommended.
- 5) Accept gifts of money or land to be dedicated by fee title or easement, if determined to be useable, for open space, parks, or trails.
- 6) Consider entering into agreements with potential donors of parks and open space.
- 7) Obtain scenic easements in all subdivisions on: (a) all slopes 18% and greater, (b) wetlands, and (c) other fragile or sensitive areas.
- 8) Develop trail links between the Old Village and Afton State Park; along Trading Post

from Afton Blvd. to 57th St. and through Aftonwood to County Road 21; and between Afton and its neighboring communities.

- 9) Preserve and protect Bissels Mounds, the Afton Coulee, Trout Brook, Valley Creek and its North Branch, Kel's Coulee, and other significant natural features.
- 10) Support the proposed Afton Bluffs Regional Trail and encourage development of trails along Manning Ave., Afton Blvd., County Road 21, and Hudson Road, where possible and safe, whenever such roads are upgraded by the State or County.
- 11) Consider support for multi-community sports facilities, trails, open spaces, and preserves that may be located outside of the City of Afton but serve Afton residents.

3. Waste Management

The Metropolitan Council has no plans to install central sewer in Afton. A major policy of the city is to avoid the need for metropolitan sewer, continuing to rely on on-site sewage treatment systems. Continued use of septic systems will avoid large public expenditures for central sewer and will prevent development at urban densities. There are special conditions in the Old Village described above which indicate a need for planning a municipal sewage treatment system sometime in the future, because of smaller-sized lots, the floodplain existing in a portion of the village, and the like.

Deliberately choosing to remain dependent on individual sewage treatment systems (ISTS), commonly referred to as septic systems, means the city must accept the resulting responsibility to insure the health, safety and welfare of its citizens. This responsibility includes a thorough review and permit process with expert inspection for septic system installation, implementation of a maintenance program for

existing systems, including the on-site, biennial mandatory inspection, and the gradual upgrading of all substandard systems to protect the health and safety of Afton residents. The Appendix includes a copy of the City's septic system management ordinance.

The city accepts and fulfills these responsibilities through the adoption of and enforcement of certain ordinances. The city requires a minimum buildable area of 2 1/2 acres, throughout most of the city as a means of assuring an adequate area for the installation and effective operation of a septic system. The city has adopted, with modifications, Washington County's model ordinance on sewage disposal and issues septic system permits and inspect sites and system installations in compliance with State of Minnesota Pollution Control Agency 7080 Rules. Each permit requires extensive soil testing, borings and percolation tests, to prove there is sufficient area for the installation of a primary septic system and a backup drainfield on each lot which meets the requirements of the city's septic ordinance. The city also requires that existing substandard systems be upgraded or replaced when: 1) an application for a building permit for an addition to or a major alteration of the principal structure is submitted; 2) the use of the property or a structure changes; 3) a zoning use permit application for a duplex is submitted, or 4) when a qualified agent of the city deems it necessary based upon evidence of the system failing to function properly. The city will continue to enforce these regulations.

The city enforces ordinances that prohibit the burning of garbage and the dumping of trash and garbage. The city licenses trash haulers and typically periodically contracts with one hauler to minimize large, heavy, loud trucks on its streets. Afton has an active recycling program and encourages its citizens to recycle on a regular basis, also contracting with a

recycling hauler. Because of the fragile nature of the soils and underlying geological makeup of Afton, (see Geologic Atlas of Washington County, Afton) it is impossible to locate a solid waste disposal site in Afton.

The city will enforce the following policies with respect to waste management:

a. Policies:

- 1) Prohibit residential densities and uses that could trigger the need for metropolitan sewer.
- 2) Continue to require each lot developer or subdivider to prove through soil borings and percolation tests that there is sufficient area of suitable soils for a septic system and a backup drainfield.
- 3) Continue to utilize qualified personnel for the issuance of septic system permits, inspections, and record keeping.
- 4) Educate all residents on the proper use of a septic system.
- 5) In accordance with MPCA Rules 7080, require all landowners to have their septic tanks inspected and /or pumped every two years to ensure continued use and functioning of the septic system.
- 6) Plan for community sewage treatment alternatives in the Old Village due to scarcity of available land, presence of the floodplain, arrival of additional commercial activity, compliance with Army Corps of Engineers' requirements, and other factors.
- 7) Require issuance of a septic system permit prior to the issuance of a building permit.
- 8) Permit only those alternative sewage treatment systems as are then permitted by the City's septic ordinance and meet MPCA Rules.
- 9) Require all sewer system installers, pumpers, and haulers to be licensed for this jurisdiction.
- 10) Require a systematic upgrading of all substandard septic systems and the

immediate upgrading or replacement of failing septic systems.

- 11) Require all trash haulers to be licensed for this jurisdiction.
- 12) Prohibit dumping of refuse within the City.
- 13) Encourage recycling of all recyclable materials, educate citizens about recycling and use whatever means practical to make recycling convenient.

4. Community Facilities

a. Goals and Policies:

- 1) Plan for a community sewage treatment facility to serve the Old Village.
- 2) Cooperate with the Fire Department in assuring adequate facilities for the safety of Afton residents.
- 3) Study the need for the acquisition of property by the city for future public facilities or preserves.



IV. IMPLEMENTATION PLAN

A. INVENTORY

The city has adopted and does enforce the following ordinances, among others. The ordinances and official controls listed in this section will continue to be enforced in order to implement this Plan.

- 1) *The Zoning Ordinance*, as amended from time to time and incorporated by reference herein, implements the primary elements of this Plan by establishing the type, location, and intensity of uses throughout the city as prescribed by this Plan.
- 2) *The Shoreland Management Ordinance*, as amended from time to time and incorporated by reference herein, protects wetlands, water bodies and water courses throughout the City as prescribed by this Plan.
- 3) *The Floodplain Ordinance*, as amended from time to time and incorporated by reference herein, protects man-made development from floodwaters and the floodplain areas that carry and discharge regional floods by limiting development in those floodplains and floodways in the City as prescribed by this Plan.
- 4) *The Sanitary Sewer Disposal Ordinance*, as amended from time to time and incorporated by reference herein, governs the installation, inspection, and maintenance of septic systems as prescribed by this Plan. Further, the City issues septic system permits, inspects installation of all septic systems, reviews soil tests for subdivisions, issues building permits after

the City has issued any required zoning use permit, and provides consultant planning services.

- 5) *The Subdivision Ordinance*, as amended from time to time and incorporated by reference herein, regulates the division of all property as prescribed by this Plan.
- 6) *The Mining Ordinance*, as amended from time to time and incorporated by reference herein, establishes uniform performance standards for sand and gravel extraction and for land reclamation as prescribed by this Plan.
- 7) *The Lower St. Croix River Bluffland and Shoreland Management Ordinance*, as amended from time to time and incorporated by reference herein, protects the natural environment and aesthetics of this wild and scenic river as prescribed by this Plan.
- 8) *State Building Codes*.

In addition to these ordinances, the city utilizes and depends on the following agencies for reviews of proposed developments and advice on ordinance revisions:

- 1) Watershed and Water Management Organizations review all proposals within the watershed and recommend permit conditions for building within four different watershed districts within City limits.
- 2) Minnesota Department of Natural Resources reviews and approves all developments along the St. Croix River, other public water bodies and floodplains.
- 3) Minnesota-Wisconsin Boundary Area Commission reviews and offers recommendations on developments along the St. Croix River.
- 4) U.S. Army Corps of Engineers reviews and approves alterations of public water bodies.
- 5) Minnesota Pollution Control Agency reviews feedlot permits and pollution problems.

- 6) Metropolitan Council reviews and approves the comprehensive development plan.
- 7) Lower St. Croix Valley Volunteer Fire Department recommends ordinances necessary to protect the health and safety of Afton residents, and comments on development proposals.
- 8) Washington County Soil and Water Conservation District reviews proposed projects and offers recommendations on slope, wetland, and fragile lands protection.
- 9) Minnesota Department of Transportation and Washington County Highway Department maintain and develop state and county roads.

Create a Right to Farm Ordinance to confine nuisance restrictions for noise, animals, odors, etc. to those requisite to the health, safety and welfare of the public and which do not inhibit normal agricultural practices and operations.

(d) Open Space Preservation Ordinance

Establish zoning that is consistent with agricultural and open space preservation.

(e) Access Management Plan

Prepare an access management plan designed to assure an appropriate level of access and alleviates potential conflicts and roadway congestion.

B. PROGRAMS

1. Official Controls

In 1998 the City amended and recodified its ordinances to eliminate any inconsistencies and to assure conformance with the Comprehensive Plan. In addition to enforcing the existing ordinances that will implement this Plan, the city will update and revise pertinent ordinances in order to implement all of the policies contained in this Plan. As a general overview, it is the City's intent to amend the following ordinances and policies by September, 1999:

(a) Zoning Ordinance

Identify soil erosion standards.

(b) Subdivision Ordinance

Incorporate Minnesota Pollution Control Agency "Best Practices" and National Urban Runoff Program standards into subdivision and building plan permit review.

(c) Right to Farm Ordinance

2. Housing

Afton has subscribed to the Livable Communities Program for affordable housing, even though it is a low density rural community without central sewer and water services and public transit.

The city requires nothing beyond the State's minimum housing size, does not require a garage, and permits pre-fabricated housing units approved by the State Building Inspector.

The city seeks opportunities to preserve existing smaller-lot, affordable housing within the City.

The housing analysis indicates that Afton's housing stock is generally in good condition and there is no need for a housing redevelopment authority in Afton.

The City will continue to cooperate with Washington County Housing Redevelopment Authority to upgrade substandard properties.

With Federal Government funding, the City is coordinating the rehabilitation and

floodproofing of homes within the Floodplain affected by the Great Flood of 1997.

3. Capital Improvements

The City has quite limited funding for Capital Improvements and seeks opportunistically other sources of funding in order to minimize debt before taking action. The City's goals are modest, in reflection of its own and others' funding.

- (a) Regravel and/or sealcoat streets as required.
- (b) Repair bridges, streets, and culverts as required when funding is available.
- (c) Complete the Old Village trail.
- (d) Use the Park Dedication Funds to upgrade existing facilities and develop new ones.

A detailed CIP outlining cost estimates, income sources, and payment schedules will be attached to this plan at a future date. The CIP will be reviewed and revised annually. All attempts will be made to avoid incurring long-term outstanding debts.

V. APPENDIX

1. Septic System Management Ordinance