

2002 BROWN COUNTY SEWAGE PLAN

AMENDMENT APPLICATION MANUAL

Adopted March 5, 2003

TABLE OF CONTENTS

I.	INTRODUCTION	
	A. What Are Sewer Service Areas and Why Are They Important?	5
	B. What Are Environmentally Sensitive Areas and Why Are They Important? ...	6
	C. What Are Amendments and Why Are They Important?	7
	D. Who Can Ask for Amendments?	7
	E. Who Is Responsible for Reviewing Amendments?	7
	F. When Can Amendments Be Requested?	7
	G. What Kinds of Amendments Are There?	8
	H. How Do I Start?	8
	I. What Happens After an Amendment Is Provided to the BCPC?	10
	J. What If I Disagree With the Findings of the BCPC or the DNR?	10
II.	AMENDMENT REQUIREMENTS	
	A. Amendment Types	13
	B. Amendment Policies.....	13
III.	AMENDMENT CRITERIA	
	A. Letters of Support	17
	B. Letters of Intent/Explanation.....	19
	C. Map(s) of Subject Area/ Amendment Request	19
	D. Amendment Fees	21
	E. Cost-Effectiveness Analysis.....	21
	F. Sewage Conveyance and Treatment Analysis.....	22
	G. Public Water Supply and System Analysis	22
	H. Compliance with Local and County Plans and Planning Efforts Analysis	23
	I. Population Projection Acreage Allocation Formula Analysis	24
	J. ESA Impacts Analysis	24
	K. Erosion Control and Stormwater Management Analysis	26
	L. Intergovernmental Cooperation and Coordination Analysis.....	28
IV.	SUMMARY	

I. INTRODUCTION

A. What Are Sewer Service Areas and Why Are They Important?

The Federal Clean Water Act requires that publicly-owned sewage treatment plants identify the areas they could serve within a 20-year time-period. In Wisconsin, these areas are called sewer service areas. These sewer service areas include all lands which are currently provided public sanitary sewer service and all lands which are envisioned to receive public sanitary sewer service within the next 20 years.

Only those lands located within an approved sewer service area can receive sanitary sewer service.

Both federal and state regulations direct how these areas will be identified and who will do this. In Wisconsin, the Department of Natural Resources (DNR) is responsible for establishing all sewer service areas. In Brown County and certain adjacent areas, the DNR has delegated some of this responsibility to the Brown County Planning Commission (BCPC). The BCPC establishes sewer service areas in its county sewage plan. That plan was prepared in 1972 and was updated in 1982, 1987, 1995, and again in 2003.

Using federal and state guidelines, the Brown County Planning Commission identifies sewer service areas for each community and/or sanitary district that has or is envisioned to receive sanitary sewer service within the next 20 years. These guidelines are based upon sound engineering, planning, and environmental principals and upon information contained within the DNR's Areawide Water Quality Management plans, local wastewater treatment plant facility plans, local and county comprehensive plans, cost-effectiveness studies, and state-prepared population projections. Usually, the larger the expected population of the community will be and the larger and better maintained the sewage treatment plant is, the larger its sewer service area can be.

Sound engineering, planning, and environmental principals often encourage that development occur with public sanitary sewer service. Because of this, most communities use these sewer service areas to help plan their growth. Thus, the communities in Brown County work in cooperation with the BCPC to identify a sewer service area that will best meet their future needs.

Federal and state guidelines also allow the boundaries of the sewer service areas to be revised and adjusted when necessary. At a minimum, it is recommended that they be reviewed at least once every five years to determine if circumstances warrant any change.

More detailed information about these sewer service areas can be found in Chapter 5 of the *2002 Brown County Sewage Plan*.

B. What Are Environmentally Sensitive Areas and Why Are They Important?

The Federal Clean Water Act and other federal and state regulations also require that any part of a sewer service area, which, if developed, could result in a significant adverse water quality impact, be identified and not provided sanitary sewer service. A significant adverse water quality impact would include any harm to surface or ground waters due to point or nonpoint source pollution. In addition, the incremental impacts of individually small actions, when they occur on a widespread basis throughout a watershed or along a water body, can also result in a significant adverse water quality impact. Examples of this include nonpoint source pollution, such as agricultural or construction site erosion, stormwater runoff from roads and parking lots, or the incremental grading or filling of wetlands and floodlands.

The Brown County Planning Commission refers to such areas as environmentally sensitive areas (ESAs). They include natural resource features, such as lakes, rivers and streams, floodways, shorelands, wetlands, and steep slopes adjacent to these areas.

The Brown County Planning Commission may allow limited development within the ESAs for such purposes as public and private utilities or recreational uses. For the most part, however, development, grading, and filling within these areas is prohibited.

The protection and preservation of these environmentally sensitive areas can result in:

- cleaner, safer, and more abundant water for drinking and recreation;
- control of flooding and erosion;
- reduced water, air, and noise pollution; and
- provision of wildlife habitat and healthy ecosystems and protection of rare, threatened, and endangered plant and animal species.

Conversely, the development of these areas can result in:

- water pollution;
- wet and flooded structures and property; and
- failing foundations, pavements, and structures.

When developing land within a sewer service area, all environmentally sensitive areas must be identified and preserved to protect the environment and to prevent serious and costly development problems.

More detailed information about these environmentally sensitive areas can be found in Chapter 6 of the *2002 Brown County Sewage Plan*.

C. What Are Amendments and Why Are They Important?

The *2002 Brown County Sewage Plan* does two very important things:

- it identifies a sewer service area (SSA) for each community and sanitary district in Brown County which has or might receive sanitary sewer service by the year 2020; and
- it identifies environmentally sensitive areas (ESAs) within the sewer service areas.

Any change of these areas is referred to as an amendment. There can be sewer service area changes, environmentally sensitive area changes, or both, but all are referred to as amendments. Each sewer service area or environmentally sensitive area amendment must meet certain specific requirements and criteria, which have been established by the Wisconsin Department of Natural Resources and the Brown County Planning Commission. Detailed information concerning these requirements and criteria are provided later in this document.

D. Who Can Ask for Amendments?

Any official representative of the state or federal governments, the county, a city, village, town, sanitary district, utility district, or sewerage district can apply for an amendment. Such a representative is commonly referred to as the applicant.

If a landowner or developer is requesting an amendment, he must first obtain the support and approval of the local unit of government before the BCPC will accept and review the amendment.

E. Who Is Responsible for Reviewing Amendments?

The Brown County Planning Commission and the Wisconsin Department of Natural Resources are responsible for reviewing and approving all amendments. In addition, the BCPC staff also typically requires that the local unit of government review and concur with the amendment.

F. When Can Amendments Be Requested?

An amendment can be requested at any time. However, it is strongly recommended that the applicant get local approval of the change first and then meet with the staff of the Brown County Planning Commission to discuss the change. This is very important because an amendment is typically reviewed by the BCPC only if the local unit of government

supports the request. In turn, the DNR will typically not review an amendment until it has first been reviewed by the BCPC. Also, the more information the applicant can provide supporting the request, the better the chances are that the amendment will be reviewed in a timely manner.

It is especially important that the applicant keep in mind that review by the Brown County Planning Commission and the Wisconsin Department of Natural Resources can take as long as three months or even longer for especially complicated amendments.

Remember, no sewer development or associated construction can occur until this review is complete and the amendment approved.

G. What Kinds of Amendments Are There?

The BCPC has created an amendment system in order to both facilitate a quicker turnaround in the review of those sewer service area changes which are small in scope and impact and to provide a closer more comprehensive review for those amendments which are more complicated.

As established by the Brown County Planning Commission, there are three amendment types:

- Minor Sewer Service Area Amendments (Type 1)
- Major Sewer Service Area Amendments (Type 2)
- Major Environmentally Sensitive Area Amendments (Type 3)

There are also five amendment policies:

- Plan Correction (Policy #1)
- Acreage Swap (Policy #2)
- Existing Development (Policy #3)
- Special Regional Uses (Policy #4)
- Proper Land Use Planning (Policy #5)

Each amendment type and amendment policy has its own special set of requirements. These are presented in the following section of the *Amendment Application Manual*. In addition, each of the 15 different kinds of amendments has its own special set of criteria that must also be addressed. These criteria are presented in the third section of this manual.

H. How Do I Start?

The first step is to determine exactly what you want to do. When you know what property is involved and what it will be used for, check the Brown County Planning Commission's sewer service area maps to see if any changes need to be requested. The BCPC and the local community both have a larger color map of the sewer service area and the environmentally

sensitive areas in their offices. A copy of these maps are also available for viewing and for downloading at the Brown County website (www.co.brown.wi.us/Planning/natural_resources)

The second step is to check with the local unit of government to see if it will support your change. Remember, the Brown County Planning Commission will typically not review any change without local government support. It is also important at this time to notify any adjacent communities that may be affected by the proposed change. The Brown County Planning Commission will require that they also be provided an opportunity to review and comment on any amendment prior to action by the BCPC.

The third step is to contact the Brown County Planning Commission to arrange a meeting to discuss the change. The staff of the BCPC will let you know specifically what information you need to provide and will answer any questions you have about the amendment process.

The fourth step is to fill out the appropriate part of the *Amendment Application Manual* and gather any other information you need or want which supports your request. This can include maps, letters of support, technical studies, or special reports or plans. The more detailed and complete the information provided with the amendment application, the less likely that delays will occur. Review of the amendment by the BCPC typically does not begin until after all information requested in the *Amendment Application Manual* is provided to the BCPC.

It is important to note that the sewer service area guidelines set forth in Chapter 5, particularly those that deal with the expansion of sewer service area by one community into another community, must also be addressed in any amendment. Documentation of management area status, discussions with adjacent communities, and other similar information must be provided along with the amendment application.

In certain rare instances of documented hardship, the BCPC may review incomplete amendment applications or may approve the amendment contingent upon receipt of the missing information. In such instances, the missing information must not involve local support or engineering or environmental concerns associated with the amendment request. Applicable situations will be decided by BCPC staff on a case-by-case basis as discussed in Chapter 7 of the *2002 Brown County Sewage Plan*.

The last step is to provide the amendment application and any additional information to the Brown County Planning Commission. This must always include, at a minimum:

- documentation of appropriate support for the specific change;
- a map showing the requested change; and

- a letter explaining the change and its reasons.

Detailed information on the requirements and criteria for the various amendments is set forth in the following sections of this manual.

I. What Happens After an Amendment Is Provided to the BCPC?

When all required materials are submitted to the Brown County Planning Commission, the BCPC staff will have seven days to review the materials for accuracy and completeness. At this time, the BCPC shall contact the Wisconsin Department of Natural Resources and any other concerned units or agencies of government for additional review and comment on this matter. Should all information be in order, the BCPC will have another 14 working days (for minor amendments) or 38 working days (for major amendments) to complete their review. A public hearing to obtain public comment will also be held.

If the submitted information is incomplete or in error, review will not begin until this problem is corrected. At the end of its review, the BCPC staff will submit a letter to the applicant indicating staff's decision.

Should the BCPC staff approve the amendment as submitted, or in a revised form, and should the applicant agree with the findings and conclusion of the BCPC, the agreed upon change will be reflected in the county sewage plan and in all related sewer service area planning efforts.

If the request was a minor amendment, the agreed upon change is then final.

If the request was a major amendment, BCPC staff will arrange a public hearing on this matter. That same evening, the BCPC staff will present its findings and the public hearing comments to the Brown County Planning Commission Board of Directors. Should the Board of Directors approve the amendment as submitted or revised and should the applicant agree, the amendment request and all related information would then be provided to the main office of the Wisconsin Department of Natural Resources in Madison. Should the DNR approve the amendment as submitted or revised and should the applicant agree, the change is then final.

J. What If I Disagree With the Findings of the BCPC or the DNR?

Should the applicant disagree with the findings and decision of the Brown County Planning Commission staff regarding a minor amendment, the applicant may petition to be heard by the Brown County Planning Commission Board of Directors.

The procedure for petitioning the Brown County Planning Commission Board of Directors for review of an amendment is as follows:

- the applicant must submit a letter to the BCPC requesting that the Board of Directors review the amendment request; and
- the applicant must resubmit the request as a major amendment. Review of the amendment request will then proceed as outlined under major amendments.

Should the applicant disagree with the findings and recommendation of the Brown County Planning Commission Board of Directors regarding a major amendment, the applicant may so indicate to the Wisconsin Department of Natural Resources when the BCPC submits its materials and information to the DNR.

The Wisconsin Department of Natural Resources will review and consider this matter and will then issue its decision. Their decision on this matter is final.

II. AMENDMENT REQUIREMENTS

Every amendment request must meet the requirements of at least one of the three amendment types and at least one of the five amendment policies.

Also as previously noted, all amendments must be based upon sound engineering, planning, and environmental principals. If an expansion of a sewer service area by one community into another community is involved, documentation indicating conformance with the guidelines set forth in Chapter 5 regarding this matter is also necessary. Furthermore, all amendments must be in conformance with pertinent federal, state, county, and local rules and regulations, not the least of which include federal and state water quality certification procedures, county shoreland and subdivision ordinances, and local zoning. And last, all amendments should also generally be consistent with local wastewater treatment plant facility plans, local and county comprehensive plans, cost-effectiveness studies, and state-prepared population projections.

A. Amendment Types

The following three amendment types have been created in order to recognize the differences between sewer service area changes and environmentally sensitive area changes. The three amendment types have also been created to distinguish amendments that have a smaller scope and impact from those amendments that have a larger impact and warrant a more detailed review.

- **Minor Sewer Service Area Amendment (Type 1).** This type of amendment applies to any sewer service area boundary change that involves five acres of land or less.
- **Major Sewer Service Area Amendment (Type 2).** This type of amendment applies to any sewer service area boundary change which involves more than five acres of land or which presents a unique or difficult to address situation.
- **Major Environmentally Sensitive Area Amendment (Type 3).** This type of amendment applies to any environmentally sensitive area boundary change.

B. Amendment Policies

An amendment policy is a description of the reasons and justification for the sewer service area or environmentally sensitive area change. Both the DNR and the BCPC require that sound engineering, planning, and environmental principals justify all amendments. Such principals are typically based upon consistency with state official population forecasts, local, county, and state

plans, ability to provide cost-effective sanitary sewer service, etc. The 2002 *Brown County Sewage Plan* has identified the following five amendment policies:

- **Plan Correction (Policy #1).** Corrections to a sewer service area or environmentally sensitive area can be made to fix an error in the maps or data of the county sewage plan or to reflect more accurate and up-to-date information due an approved regulatory change or field determination.

Specific examples of changes that qualify under this policy include:

- sewer service area boundary changes as a result of an agreement between two or more communities concerning an existing shared boundary;
 - environmentally sensitive area boundary changes made as a result of a DNR-approved flood study. (However, applicable ESA setback/buffers within the subject location, such as the minimum 100-foot navigable stream setback, steep slopes, or wetland setback/buffers, would still apply.);
 - environmentally sensitive area boundary changes as a result of an ACOE- and DNR-approved wetland field verification. (However, applicable setback/buffers within the subject location, such as the steep slopes or wetland setback/buffers, would still apply.);
 - environmentally sensitive area boundary changes as a result of a DNR or Brown County Zoning Department navigability determination. (However, applicable setback/buffers within the subject location, such as the minimum 100-foot navigable stream setback, steep slopes, or wetland setback/buffers, would still apply.);
 - environmentally sensitive area boundary changes as a result of more accurate and detailed topographic mapping (typically to refine steep slope locations and extent); and
 - environmentally sensitive area boundary changes as a result of a detailed stormwater management plan and/or Chapter 30 permit approved by all appropriate regulatory agencies. Such changes can include the addition or relocation of non-navigable streams and appropriate setback/buffers and changes to slopes. Applicable setback/buffers may also be revised if specifically reviewed and approved by the appropriate regulatory agencies (typically the local community and the DNR under its NR 216 or Chapter 30 permit programs).
- **Acreege Swap (Policy #2).** Removing land from one location within a sewer service area or environmentally sensitive area and replacing the same amount and type of land back within another location.

The lands to be removed and added must typically not result in the creation of a “hole,” “island,” or narrow extension of SSA. An exact acre for acre swap is preferred.

- **Existing Development (Policy #3).** Sewer service areas and environmentally sensitive areas may be revised to accommodate areas of existing development provided that such changes can be accomplished in a cost-effective and environmentally-sound manner and other options or alternatives have been similarly considered.

Specific examples of changes that qualify under this policy include:

- sewer service area boundary changes as a result of addition of existing development with currently functioning onsite sewage disposal systems. Such changes must undertake a facilities plan and cost-effectiveness study which determines that the best long-range solution for sewage disposal of the subject area is connection to the proposed public sewer system. These studies must investigate and compare all reasonable alternatives, including use of conventional and non-conventional onsite sewage disposal systems, including community onsite sewage disposal systems, deferment of connection to public sewer until the next scheduled update of the county sewage plan, and connection to other public sewer systems. When such changes are fully consistent with local and county “Smart Growth plans” for the extension of urban services, such as public sanitary sewer and water service, such developed lands may be added to the appropriate SSA without application of the population projection acreage allocation analysis. All other amendment criteria would apply, however.
 - sewer service area boundary changes as a result of addition of existing development with failing onsite sewage disposal systems. Such changes must undertake a facilities plan and cost-effectiveness study which determines that the best long-range solution for sewage disposal of the subject area is connection to the proposed public sewer system. These studies must investigate and compare all reasonable alternatives, including use of conventional and non-conventional onsite sewage disposal systems, including community onsite sewage disposal systems, deferment of connection to public sewer until the next scheduled update of the county sewage plan, and connection to other public sewer systems. Such developed lands may be added to the appropriate SSA without application of the population projection acreage allocation analysis. All other amendment criteria would apply, however.
- **Special Regional Uses (Policy #4).** Sewer service areas and environmentally sensitive areas may be revised provided there is a documented need for a unique facility or development of regional or

statewide importance and the change can be accomplished in a cost-effective and environmentally-sound manner. Significant adverse water quality impacts will not be allowed. An example includes development for which a special location is required (such as regional parks, prisons, landfills, and airports).

- **Proper Land Use Planning (Policy #5).** Sewer service areas and environmentally sensitive areas may be revised to reflect unanticipated growth and development trends when in accord with sound engineering, planning, and environmental principals. Such development must be in accord with local, county, regional, and state plans, rules, and regulations.

Specific examples of changes that qualify under this policy include:

- sewer service area changes as a result of assigning additional sewer service area acreage to the subject SSA, which had previously been held in reserve at the time of the last update of the county sewage plan;
- sewer service area changes as a result of loss (development) of previously vacant developable land within the SSA. The *2002 Brown County Sewage Plan* allows SSA acreage to be replenished when the amount of such acreage within the SSA falls below the amount stated in the approved population projection acreage allocation for that SSA;
- Sewer service area changes as a result of unanticipated rates of growth within the community; and
- Sewer service area changes as a result of intergovernmental services or boundary agreements between neighboring communities.

III. AMENDMENT CRITERIA

This section of the *Amendment Application Manual* sets forth the detailed information relating to the criteria of each possible combination of the three amendment types and the five amendment policies. As previously noted, all amendments must be submitted under and must be consistent with at least one of the amendment types, one of the amendment policies, and the following pertinent criteria.

Although hardship cases may exist and may warrant conditional BCPC review and/or approval and special circumstances may sometimes warrant a unique approach in an amendment's review and consideration, the intent of this plan is to fully, consistently, and fairly apply the goals, objectives, policies, requirements, and criteria set forth in the *2002 Brown County Sewage Plan* and in this *Amendment Application Manual*.

However, in no instance shall an amendment be approved by the Brown County Planning Commission that is not in conformance with at least a preponderance of the following criteria nor shall an amendment be approved which does not promote the cost-effective and environmentally-sound provision of public sanitary sewer service.

Details of the amendment criteria are summarized in a series of checklists found at the end of this section.

A. Letters of Support

All amendments must include appropriate letter(s) of support. Letters of support may be provided by the chief elected official of the community or organization, by its governing body, or by any representative authorized to speak on behalf of the community or agency on such matters. The letters of support must specifically reference the requested amendment.

Locally sponsored minor amendments and major ESA amendments must also include a letter of support from the affected local unit of government.

Locally sponsored major SSA amendments must include a letter of support from the affected local unit of government, the operator of the subject sewerage system, and the pertinent sanitary district and sewerage district.

Letters of support from affected property owners are required for all ESA amendments but, while often helpful and beneficial, are not required for SSA amendments.

When an amendment is sponsored by the DNR or the BCPC, all reasonable efforts will be made to obtain local support. However, while a consensus of

affected units of government will always be sought by the DNR and the BCPC, it is recognized that in some cases unanimous support of an amendment may not be achieved. In those cases, the DNR and the BCPC will have to weigh the positions of the parties concerned and make a final determination concerning the issues involved.

Amendments that fail to receive applicable state, county, or local support will not meet this criterion.

Minor Sewer Service Area Amendment (Type 1) Checklist

Criteria	Policy #1	Policy #2	Policy #3	Policy #4	Policy #5
Letters of Support	X	X	X	X	X
Letter of Intent/Explanation	X	X	X	X	X
Map(s)	X	X	X	X	X
Amendment Fee	N/A	X	X	X	X
Sewage Conveyance and Treatment Analysis	N/A	X	X	X	X
Cost-effectiveness Analysis	N/A	X	X	X	X
Public Water Supply and System Analysis	N/A	X	X	X	X
Compliance with County and Local Comprehensive Plans	N/A	X	X	X	X
Population Projection Acreage Allocation Analysis	N/A	N/A	X	N/A	X
ESA Impact Analysis	N/A	X	X	X	X
Erosion Control and Stormwater Management Analysis	N/A	X	X	X	X
Intergovernmental Cooperation and Coordination Analysis	N/A	X	X	X	X

X = required N/A = not applicable

Major Sewer Service Area Amendment (Type 2) Checklist

Criteria	Policy #1	Policy #2	Policy #3	Policy #4	Policy #5
Letters of Support	X	X	X	X	X
Letter of Intent/Explanation	X	X	X	X	X
Map(s)	X	X	X	X	X
Amendment Fee	N/A	X	X	X	X
Sewage Conveyance and Treatment Analysis	N/A	X	X	X	X
Cost-effectiveness Analysis	N/A	X	X	X	X
Public Water Supply and System Analysis	N/A	X	X	X	X
Compliance with County and Local Comprehensive Plans	N/A	X	X	X	X
Population Projection Acreage Allocation Analysis	N/A	N/A	X	N/A	X
ESA Impact Analysis	N/A	X	X	X	X
Erosion Control and Stormwater Management Analysis	N/A	X	X	X	X
Intergovernmental Cooperation and Coordination Analysis	N/A	X	X	X	X

X = required N/A = not applicable

Major ESA Amendment (Type 3) Checklist

Criteria	Policy #1	Policy #2	Policy #3	Policy #4	Policy #5
Letters of Support	X	X	X	X	X
Letter of Intent/Explanation	X	X	X	X	X
Map(s)	X	X	X	X	X
Amendment Fee	N/A	X	X	X	X
Sewage Conveyance and Treatment Analysis	N/A	X	X	X	X
Cost-effectiveness Analysis	N/A	X	X	X	X
Public Water Supply and System Analysis	N/A	X	X	X	X
Compliance with County and Local Comprehensive Plans	N/A	X	X	X	X
Population Projection Acreage Allocation Analysis	N/A	N/A	X	N/A	X
ESA Impact Analysis	N/A	X	X	X	X
Erosion Control and Stormwater Management Analysis	N/A	X	X	X	X
Intergovernmental Cooperation and Coordination Analysis	N/A	X	X	X	X

X = required N/A = not applicable

B. Letter of Intent/Explanation

All amendments must include a letter from the applicant that fully explains the purpose and intent of the amendment. The letter must also identify the subject area and which amendment type and policy are applicable.

Inclusion of any other information that would support the amendment request is also strongly encouraged.

Amendments that fail to provide an appropriate letter of intent/explanation will not meet this criterion.

C. Map(s) of Subject Area/Amendment Request

All amendments must include a map or maps of the subject area. The map(s) must specifically identify the proposed changes at a scale and detail acceptable to BCPC staff. The map(s) shall not only identify the subject area but shall also identify all other information applicable to the amendment request. The applicant must contact BCPC staff prior to submittal of an amendment request in order to determine specific mapping requirements.

While map(s) for minor SSA and Policy #1 amendments need not be to scale and can be similar in nature to a sketch plan, map(s) for all other amendments shall be to scale and shall be adequately detailed to accurately and legibly show all pertinent information.

For SSA amendments, mapping requirements should generally include:

- the extent of the subject area.
- the location of pertinent municipal boundaries, property boundaries, sanitary district/sewerage district boundaries, sanitary sewers and other major utilities, easements, rights-of-way, land uses, and zoning districts within and immediately adjacent to the subject area.
- the generalized location, extent, and identification of proposed development and land-disturbing activities.
- the generalized location and extent of erosion control and stormwater management activities.
- the generalized location and extent of pertinent major natural resource features, such as lakes, rivers, streams, floodlands, wetlands, and steep slopes. Of particular importance is the identification of the ESAs.
- the location and extent of the existing and proposed SSA boundaries.

For ESA amendments, mapping requirements should generally include:

- the extent of the subject area.
- the location of pertinent municipal boundaries, property boundaries, easements, rights-of-way, land uses, and zoning districts. Of particular importance is the identification of such features as drainage easements, conservancy districts, and publicly- or privately-owned recreational lands.
- the location, extent, and identification of proposed development and land-disturbing activities.
- the location, extent, and identification of proposed erosion control and stormwater management facilities.
- the location and extent of all pertinent natural resource features, such as lakes, rivers, streams, drainageways, floodlands, shorelands, wetlands, steep slopes, critical soils, and significant vegetative, topographical, geological, archeological, and historic features within and immediately adjacent to the subject area. All such pertinent features shall be field verified and approved by the appropriate regulatory agencies, and this verification shall be provided to BCPC staff.
- the location and extent of the existing and proposed ESA boundaries.

The greatest level of detail will typically be necessary for ESA amendments, as accurate locations of all pertinent physical and natural resource features are often critical to such an amendment's approval. Slightly less detailed mapping will typically be necessary for major SSA amendments, as only accurate locations of the proposed SSA boundary changes are critical. Less detailed mapping will typically be acceptable for minor SSA amendments.

BCPC staff may require additional mapping requirements on a case-by-case basis. Such additional mapping will typically be required when DNR

and/or BCPC staff believes a possible adverse water quality impact may occur, when unique or critical natural resources are involved, or when mitigation or enhancement efforts are proposed. Examples of such mapping include detailed flood studies, geo-technical and slope analysis studies, grading and drainage plans, detailed erosion control and stormwater management plans, soil surveys, vegetation surveys, and landscaping plans.

Amendments that fail to provide appropriate detailed maps will not meet this criterion.

D. Amendment Fees

An amendment review fee will be charged for most amendments to help defray the cost involved with Brown County Planning Commission's review and documentation of the amendment request.

Those amendments which meet the requirements of Policy #1 or which are sponsored by the DNR or BCPC shall not be subject to an amendment fee.

The fee for all other minor amendments shall be \$200 and \$900 for all other major amendments. This fee must be submitted to the Brown County Planning Commission in full at the time of the amendment's submittal.

Amendments that fail to provide the appropriate amendment fee will not meet this criterion.

E. Cost-Effectiveness Analysis

Most amendments will be required to provide a cost-effectiveness analysis. Such an analysis will not be necessary for amendments that meet the requirements of Policy #1.

For all other amendments, the analysis should include a brief review of the relationship of the subject area to adjacent SSAs, ESAs, sanitary and sewerage districts, and sewerage systems, other options or alternatives available for resolution of the subject issue, and the reasons for selection of the preferred alternative.

For major SSA amendments under Policy #3, the analysis should specifically include a discussion of why continued use of onsite sewage disposal systems was not chosen, why the extension of public sewers could not be deferred until a regularly scheduled update of the county sewage plan could be prepared, and what other options or arrangements for the provision of public sewer service could have been made. Costs associated with the provision of onsite and public sewer should be identified and compared. The comparison should be made for both sewer development densities, as

well as unsewered development densities, and for both a 20-year and a 50-year timeframe. A facilities plan should also be prepared which indicates the extent of failing onsite systems, the probability of other adjacent systems failing, and a detailed comparison of other alternatives for both onsite and public sewer service.

For major ESA amendments, the analysis should include a discussion of why an alternative design, development, or land use which would not have required an ESA amendment could not have been pursued and why a lesser level of intrusion into the ESA could not have been accomplished.

Amendments that fail to provide the appropriate cost-effectiveness analysis that indicates that the amendment is the most cost-effective alternative (within commonly accepted margins of error and barring any over-riding environmental or social concerns) will not meet this criterion.

F. Sewage Conveyance and Treatment Analysis

Most amendments shall be required to provide a sewage conveyance and treatment analysis. Such an analysis is not necessary for amendments that meet the requirements of Policy #1.

For all other amendments, the analysis should include a letter from the appropriate local engineer confirming the ability of the community's sewers to adequately convey the subject area's sewage.

For all major SSA amendments, the analysis should also include a letter from the operator of the downstream sewerage system (if different than the local community) and from the appropriate sewage treatment plant operator confirming their ability to adequately convey and treat the subject area's sewage. As outlined in Chapter 5, the analysis should also include a detailed description of the flows and loads to be generated by the subject development, as well as a description of the impact and relationship of those flows and loads to the design capacity and permit levels of the treatment facility.

Amendments that fail to provide the appropriate sewage conveyance and treatment analysis which indicates that the downstream sewerage system planned to be in place at the time of development of the subject area can adequately convey and treat the subject area's sewage flows and loads (in compliance with all applicable permits and approvals and in consideration of other existing and planned flows and loads) will not meet this criterion.

G. Public Water Supply and System Analysis

Most amendments will be required to provide a public water supply and system analysis. Such an analysis will not be necessary for amendments that meet the requirements of Type 4 or Policy #1.

For all other amendments, the analysis should include a brief review of the relationship of the subject area to adjacent public water supplies and systems and the options or alternatives for obtaining public water. If public water is to be provided, a letter from the appropriate service provider confirming this fact must be obtained. If public water is not to be provided, an explanation is required.

For major SSA amendments under Policy #5, the analysis should specifically address the proposed development's impact upon the adjacent public water supplies and public water systems. This analysis must include consideration of:

- identification and description of the proposed source of drinking water;
- the possibility and sources of potential drinking water contamination, excessive withdraw, lowering of water table levels, etc.; and
- current and projected future capacities within adjacent drinking water systems.

Amendments that fail to provide the appropriate public water supply and system analysis, which indicate that public water will be provided to the amendment area and that development of the amendment area will not adversely impact public water supplies and public water systems, will not meet this criterion.

H. Compliance with Local and County Plans and Planning Efforts Analysis

All amendments shall be required to provide a compliance with local and county plans and planning efforts analysis.

For all amendments, the analysis should indicate whether the subject area is located within an urban service area and/or has been designated to receive public sanitary sewer and other urban services, as identified by local and county plans. In addition, the analysis should also indicate whether an area development plan has been prepared for the subject area, what the current and planned land use and zoning are for the subject area, and whether they are consistent with the proposed amendment request.

For all ESA amendments, the analysis should also indicate whether the subject area has been identified for natural resource preservation or otherwise intended to be protected.

Amendments that fail to provide the appropriate compliance with local and county plans and planning efforts analysis that indicates that the

subject amendment is in compliance with local and county plans and planning efforts will not meet this criterion.

I. Population Projection Acreage Allocation Formula Analysis

Most amendments shall be required to provide a population projection acreage allocation formula analysis. Such an analysis is not necessary for amendments that meet the requirements of Policies #1 (except SSA exchanges), #2, or #4.

For all other amendments, the analysis should indicate the current amount of vacant developable land located within the subject sewer service area and compare that to the amount provided to the SSA under the county sewage plan to determine if additional vacant developable land is warranted.

For all amendments that meet the requirements of Policy #3, those developed lands which have confirmed the presence of failing onsite sewage disposal systems need not meet this criteria.

Amendments that fail to provide the appropriate population projection acreage allocation formula analysis that indicates that the vacant developable land located within the subject amendment will not cause the subject SSA to exceed its acreage allocation will not meet this criterion.

J. ESA Impacts Analysis

Most amendments shall be required to provide an ESA impacts analysis. Such an analysis is not necessary for amendments that meet the requirements of Policy #1 when the subject area has subsequently been determined not to be an ESA per approved flood studies, wetland field determinations, etc.

For all other amendments, the analysis should include a general description and identification of the ESAs within and immediately adjacent to the subject area, the anticipated impacts upon and land-disturbing activities within the subject ESAs, and any proposed erosion control and stormwater management activities.

For all ESA amendments, the analysis should also indicate the local and county shoreland zoning, conservancy zoning, and erosion control and subdivision ordinance requirements which pertain to the subject area and the proposed development's degree of conformance with those requirements. In addition, the location and delineation of all pertinent natural resource features, such as lakes, rivers, streams, drainageways,

floodlands, wetlands, and steep slopes, should be verified by the appropriate regulatory agencies and that information provided with the analysis.

If applicable and warranted, the DNR, BCPC, or local community may require the preparation of additional detailed studies, such as flood studies, drainage plans, grading plans, geo-technical studies, slope analysis studies, soil surveys, vegetation surveys, and landscaping plans. Such additional information will typically be required when DNR and/or BCPC staff believe a possible adverse water quality impact may occur, when unique or critical natural resources are involved, or when mitigation or enhancement activities are proposed.

It is very important to note that while the 2002 Brown County Sewage Plan provides a means to amend and revise environmentally sensitive areas, the Brown County Planning Commission strongly recommends that such actions not be undertaken lightly or resorted to frequently. NR 121 states that ESAs not be developed due to environmental concerns. Research and practical application have long shown that natural resource features and systems are very difficult to recreate. While significant success has been experienced with enhancing previously damaged features or resources or mitigating some of the ongoing impacts upon these resources from adjacent development, this success often requires a substantial commitment of financial resources and technical expertise.

In general, the following guidelines should be considered during any proposed ESA amendment:

- First, try to avoid any impact on or need for an amendment of an ESA. Document these efforts.
- Second, if an impact or amendment is unavoidable, try to minimize it. Document these efforts.
- Third, if an impact and amendment cannot be avoided or minimized, undertake appropriate mitigation and/or enhancement efforts. Guidance for mitigation and/or enhancement efforts can often be obtained from local DNR staff. BCPC staff will place great consideration upon such input and the following guidelines.
 - Loss or degradation of particularly high quality natural resources will typically not be supported by BCPC staff, even with mitigation or enhancement efforts. Such resources would typically include DNR-identified Outstanding Resource Waters, Exceptional Resource Waters, and state-identified Natural Area Sites.
 - The emphasis for mitigation/enhancement efforts should be placed first upon maintaining or improving local water quality, second upon water quantity, third upon aquatic resources, fourth upon public recreation, and last upon terrestrial resources.
 - All such efforts should include appropriate erosion control and stormwater management practices both during and after

construction. These practices should be in accordance with the Wisconsin Construction Site Best Management Practice Handbook, the Wisconsin Stormwater Manual, and the USDA-NRCS Wisconsin Technical Guide. These practices should establish standards that achieve no increase of erosion, sedimentation, and stormwater runoff volumes and velocities greater than those present under pre-development conditions and, preferably, no greater than those present under pre-settlement conditions. Applicable nonpoint source performance standards and guidelines must also be noted. Those more natural practices, such as infiltration areas, vegetated buffers, or vegetated swales, are preferred over those more man-made practices, such as catch basins and storm sewers.

- Within the ESA features to remain or to be created, establishment of native habitat should be undertaken. Use of pre-settlement vegetation native to the subject area is preferred over all others.
- When creating or recreating a setback/buffer, a three tiered system should be undertaken. The target of the first tier, closest to the water body, should be eventual establishment of a mature riparian forest that can provide shade, leaf litter, woody debris, and erosion protection to the nearby water body. This tier should extend at least the size of two mature trees in width (about 25 feet) and should remain undisturbed. The target of the middle tier should also be the establishment of a mature riparian forest. This tier should vary in width depending upon stream order but would ideally extend the width of the 100-year floodplain or 50 feet, whichever is greater. Disturbance of this area for such activities as stormwater management and recreation should be allowed. The third tier, furthest from the water body, should be comprised of grasses; although, some trees, shrubs, and bushes could be allowed. This tier should extend about 25 feet in width and could be comprised of the backyards of adjacent development. However, target vegetation and buffer width of each of these three tiers should also take into account and often reflect the vegetation native to the specific area and the historic development patterns within lands immediately adjacent to the subject area.

Amendments that fail to provide the appropriate ESA impact analysis that indicates that there will be no significant adverse water quality impact will not meet this criterion.

K. Erosion Control and Stormwater Management Analysis

Most amendments shall be required to provide an erosion control and stormwater management analysis. Such an analysis is not necessary for amendments that meet the requirements of Policy #1 (except SSA exchanges).

For all other amendments, the analysis should generally describe what erosion control and stormwater management practices will be implemented. Such practices should describe and be in compliance with any local, county, and state requirements.

All amendments which contain an ESA, but which do not propose to impact that ESA, should also indicate what and where specific erosion control measures will be implemented to ensure such ESA protection.

All ESA amendments should include an erosion control and stormwater management plan. For minor ESA amendments, the erosion control plan should include both text and a map indicating the timing, placement, and the party responsible for implementation of the erosion control and stormwater management practices. Implementation of practices in accord with the Wisconsin Construction Site Best Management Practice Handbook, the Wisconsin Stormwater Manual, and the USDA-NRCS Wisconsin Technical Guide will be assumed to provide adequate protection of the subject ESA.

For all major ESA amendments, the erosion control and stormwater management plan should be more comprehensive and detailed. It should address erosion control and stormwater management both during and subsequent to construction. It should include a general site plan of the development, which depicts site boundaries, lot and road locations, existing structures, vegetative cover, soil types, watershed boundaries, direction of surface water flow, location of bridges, culverts, waterways, storm sewers, detention basins, etc., topography at 2-foot contour intervals, and drainage easements. It should also include a map of the site depicting the above features after the proposed development. This map should also include the location of the proposed erosion control and stormwater management practices. It should also include calculations of pre-construction and post-construction peak flows and rates, assumed runoff curve numbers, time of concentration, etc. Additionally, it should identify the timing and the parties responsible for implementation and maintenance of the practices.

The construction phase stormwater management facilities should by design reduce the average annual sediment load carried in runoff by 80%, as compared to no practices in place.

The post-construction phase stormwater management facilities should by design control 80% of the total suspended solids that would normally run off the site.

The stormwater management facilities should also be in conformance with the erosion control and stormwater management guidelines set forth under the ESA Impacts Analysis criteria, as well as the following guidelines:

- Maintain or reduce pre-development peak runoff volumes and velocities for the 2-year, 24-hour storm event in Brown County.
- Maintain or reduce pre-development peak runoff volumes and velocities for the 25-year, 24-hour storm event in Brown County.
- Safely pass the 100-year, 24-hour storm event in Brown County.
- Provide 80% reduction of sediment loadings resulting from the 1-year, 24-hour storm event in Brown County assuming no sediment resuspension.

Amendments that fail to provide the appropriate erosion control and stormwater management analysis that indicates there will not be a significant increase of erosion or stormwater runoff above pre-development conditions will not meet this criterion.

L. Intergovernmental Cooperation and Coordination Analysis

Most amendments shall be required to provide an intergovernmental cooperation and coordination analysis. Such an analysis is not necessary for amendments that meet the requirements of Policy #1.

For all other amendments, the analysis should include documentation that indicates that adjacent local units of government which might be impacted by the proposed amendment have been informed of the proposal and have been provided an opportunity to comment on this matter. Efforts undertaken to resolve any concerns should also be noted.

It is intended that this approach will encourage adjacent communities to work together on such issues as land use planning and the provision of urban services. Although such local support should always be sought on these matters, it is recognized that such support might not always be obtainable. In those cases, the DNR and the BCPC will have to weigh the positions of the concerned parties and make a final determination based on the issues involved.

Amendments that fail to provide the appropriate intergovernmental cooperation and coordination analysis that indicates that adequate opportunities were provided to solicit adjacent community input will not meet this criterion.

IV. Summary

It has always been the intent of the Brown County Planning Commission to promote the sewer service area planning process for Brown County in as consistent and equitable a fashion as possible using the best engineering, planning, and environmental practices and principals available. In that regard, the BCPC has committed itself to preparing a document which promotes the efficient provision of urban services while, at the same time, protecting and preserving the natural resource features of the County.

While there are numerous federal, state, and local rules and regulations which must guide this type of planning process and while the efficient provision of sewer service and the protection and preservation of the natural environment are complicated and sensitive issues, it is the Brown County Planning Commission's hope that this plan, the latest in a series of plans which sets forth the sewer service areas and environmentally sensitive areas of Brown County, is as helpful as possible.

The Brown County Planning Commission stands ready to work with all parties interested in implementing this plan and its recommendations. Such assistance will always strive to achieve the community's goals and desires while encouraging the efficient provision of urban services in a cooperative fashion and encouraging the protection and preservation of our county's valuable natural resources.

Please join us in this effort and participate in making Brown County a better place to live and work.