

6.

WATERSHED DISTRICT ADMINISTRATION

6. Watershed District Administration

6.1 Plan Implementation Procedure

6.1.1 Overview

This Plan is intended to guide the activities of the District for a minimum of ten years following approval by BWSR. Responsibility for plan implementation rests with the District, although some action items are lead by other organizations The BRRWD plans to annually assess the extent of progress toward implementing the WMP and expects to periodically evaluate compliance with the permit program. If necessary, based on the assessment or review, the BRRWD will take steps to ensure the WMP is successfully implemented. The District may develop standards for implementation through the permit program, update Guidance Documents and/or Rules, initiate additional engineering and administrative studies, revise the annual or long term work plan, and add or subtract programs or improve communication and reporting procedures.

6.1.2 Role of Guidance Documents

6.1.2.1 General Intent

The BRRWD intends for the WMP to guide the annual and long range work efforts. The BRRWD does not anticipate substantive changes to the actual WMP. The WMP provides the structure and rationale for developing and using “guidance documents”. Likely guidance documents are Preliminary and Final Engineer’s Reports, documents describing District programs (e.g., water quality monitoring), policy documents, an information and education plan, and other potential studies, reports, and investigations. The use of guidance documents is intended to provide the BRRWD with the greatest degree of long term flexibility to develop or modify specific details within the WMP in the face of emerging issues and regulations, while maintaining clarity as to management intentions and expectations.

Given the existing and emerging issues discussed in this WMP, the BRRWD recognizes that much work remains within the watershed to manage all resource related issues. The WMP

provides the framework to implement this work by identifying issues, goals, action items, projects, and programs. The products and outcomes resulting from completing the action items and work efforts is not considered a significant change to the WMP, but are results that will be incorporated into the administration and operation of the District through guidance documents.

6.1.2.2 Criteria and Incorporation Process

Not all studies, reports, products, investigations or work products completed under the direction of the BRRWD will be considered guidance documents for supporting the WMP. Because of the significance of a guidance document in providing direction and guidance towards addressing an issue or topic, such studies, publications, or similar work products are expected to meet certain criteria to be considered a guidance document:

- ❖ The product should have a direct relationship with the WMP content. The relationship may be identified as an issue, goal, policies / actions, programs, or generally referenced and acknowledged within the WMP;
- ❖ The product should allow for formal input and / or review by one or more affected counties or cities, or other similar public input process; and
- ❖ The product content should provide adequate specificity in describing desired processes, outcomes, or recommendations so that implications of the proposed guidance document are clear to the Board and others.

Products proposed as guidance documents must be formally accepted by the BRRWD Board of Managers at a regularly scheduled meeting. When requesting acceptance by the Board, the BRRWD Administrator will make the Board aware that the product is intended to serve as a guidance document and generally state conformance with the criteria. Similarly, updates or adjustments to established guidance documents are anticipated to have Board acceptance.

Projects proposed in a guidance document will be programmed into the Long Range Work Plan and the Annual Work Plan and Budget for implementation. The Board shall determine the priority of any proposed project based on data specific to the issue provided in the guidance document and the priorities established by the Board within the Long Range Work Plan.

Access to completed guidance documents will be provided through the District's web site. Counties and cities within the District will receive formal written notice (electronic or mailed) regarding updates or availability of new materials. The BRRWD will maintain a distribution list of agencies and individuals who have received a copy of the notice and will distribute notices within 30 days of guidance document update or availability.

6.2 Plan Revisions and Amendments

6.2.1 General Approach

The District has carefully considered its goals and its needs extending through the effective date of this WMP. Amendments to the WMP are not expected because of the use of guidance documents, as previously discussed. However, should an amendment be required by an agency, based on perceived significant changes involving goals, policies, standards, or administrative procedures, an amendment to the WMP may be necessary.

The BRRWD may revise the WMP through an amendment prior to the next required plan update if either minor changes are required or if issues and problems arise that are not adequately addressed within the WMP. However, this WMP, the authorities, and the various programs will remain in effect until the amendment is processed or an update to the WMP is completed and approved by BWSR.

All amendments to this WMP will follow the procedures set forth in this section, or as required by Minnesota laws and rules (as revised). Plan amendments may be proposed by any person or County, but only the BRRWD may initiate the amendment process. All proposed plan amendments must be submitted to the BRRWD in writing, along with a statement of the problem and need, the rationale for the amendment, and an estimate of the cost for completing the amendment and an assessment of the financial ramifications.

The BRRWD recognizes that the WMP may need to be periodically amended to remain useful as a long-term planning tool. However, the structure and intent of this WMP provides flexibility to respond to short-term emerging issues and opportunities outside of the amendment process. The structure is provided by the use of guidance documents, concise identification of broad issues in **Chapter 3**, and related goals and actions in **Chapter 4** (which are captured in the Long Range Work Plan). The BRRWD will review and revise its long range work plan/implementation program through the development of an annual work plan and budget as well as through confirming the priorities established within the long range work plan.

New technical information, especially water quality data, will require periodic reconsideration of the efforts by the District. The BRRWD intends to post updated information on their website (www.brrwd.org) and make hard copies available upon request (in accordance with the Minnesota Data Privacy Act). Technical information produced through studies and contained in reports will be incorporated as an extension of this WMP through the acceptance of the report as a guidance document and be posted to the BRRWD website. An electronic notification system will be developed to inform relevant and interested parties of such updates. Generally,

these technical updates and studies are considered part of the normal course of District operations consistent with the intent of this Plan and not a trigger for a Plan amendment.

The BRRWD will keep records of all changes and supplemental data and will, as required for clarity, republish the Guidance Documents, or portions thereof, from time to time to provide an updated document for referral by others.

6.2.2 Amendments to This Plan

6.2.2.1 Criteria and Format

The WMP provides the framework for implementation by identifying issues and problems, goals, and action items, organized by management area. An amendment to the plan is not required for the following situations:

1. Implementation of a project to address either a subwatershed or watershed-wide issue discussed in the Plan, but not currently listed in the long range work plan;
2. An estimated cost for an action item that is different than shown in the long range work plan;
3. The addition or deletion of activities and/or studies to/from the long range work plan. Such additions or deletions will be proposed, discussed, and adopted as part of the annual work plan development and budgeting process. This process involves obtaining public input and must be consistent with the goals and policies of the Plan;
4. Reprioritization of action items or District activities;
5. The development of new programs or discontinuing a program; and
6. Identification and implementation of any recommended projects contained in a guidance document, which are thus eligible for implementation by the District. Upon completion of a study, including inventory, assessment, analysis, results, and recommendations, the BRRWD Board will accept the final report, which then becomes a guidance document of the District (See **Section 6.1.2.2** for further discussion of this process).

New projects initiated under MS 103D, and identified subsequent to the completion of this plan, will be implemented in accordance with **Section 6.5.10**

Should the need for an amendment be identified, the amendment process will follow MS 103D.411.

6.2.2.2 Plan Amendments

A plan amendment is anticipated for the following situations:

1. The addition of new goals or actions or revision of existing goals or actions which require revision of the BRRWD rules and regulations; and
2. Changes to the goals and/or actions that directly affect the programs or budgets of other local units of government within the District.

The process for completing a plan amendment is as follows:

1. The District will send copies of the proposed plan amendment to the affected cities and townships, the Counties, the state review agencies, and BWSR for review and comment; and
2. The BWSR will hold a public hearing per 103D.411 and 103D.401 Subd. 4.

6.3 Local Units of Government

6.3.1 Overview

Many local, state, and federal agencies and non-profit organizations are active within the BRRWD. Some of these agencies and organizations include:

LOCAL GOVERNMENTS

- Counties
- Townships
- Municipalities
- School Districts
- Soil and Water Conservation Districts
- Adjacent Watershed Districts
- Red River Watershed Management Board

STATE GOVERNMENTS

- Minnesota Board of Water and Soil Resources (BWSR)
- Minnesota Department of Natural Resources (DNR)
- Minnesota Department of Agriculture (MDA)

- Minnesota Pollution Control Agency (MPCA)
- Minnesota Environmental Quality Board (EQB)
- Minnesota Department of Health (MDH)
- Minnesota Department of Transportation (MNDOT)

FEDERAL GOVERNMENTS

- U.S. Army Corps of Engineers (USACE)
- United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS)
- United States Department of Agriculture (USDA) Farm Service Agency (FSA)
- U.S. Environmental Protection Agency (EPA)
- U.S. Fish and Wildlife Service (USFWS)
- U.S. Geological Survey (USGS)
- National Oceanic and Atmospheric Administration (NOAA)

NON-PROFIT ORGANIZATIONS

- The Nature Conservancy (TNG)
- Ducks Unlimited (DU)
- Minnesota Center for Environmental Advocacy (MCEA)
- Red River Basin Commission (RRBC)
- International Water Institute (IWI)
- Many more....

Most of the local, state, and federal agencies and non-profit organizations have developed some type of planning document to guide their efforts and activities within the BRRWD. By evaluating and analyzing the content of these plans, including the stated policies, goals and directives, the BRRWD hopes to maximize the opportunity for cooperative joint ventures where the goals of the organizations are common. This section of the WMP presents an analysis of other plans and indicates opportunities for cooperative, joint ventures.

6.3.2 Analysis of Plan Consistency

6.3.2.1 Adjacent Watershed Districts

There are other watershed districts in the area neighboring the BRRWD. The Wild Rice Watershed District borders to the north and includes portions of Clay and Becker counties. Pelican River and Cormorant Lakes Watershed Districts border to the east and are within Becker County. Pelican River also includes a small portion of Otter Tail County. In review of these neighboring watershed district WMPs, it appears that the goals and policies of these districts are consistent with the plans of the BRRWD.

6.3.2.2 Local Water Management Plans

Local water plans related to the BRRWD have been reviewed to identify goals of the associated agencies. These goals have been summarized in **Table 6.1** below, in relation to consistency with BRRWD WMP.

Table 6.1 Summary of Local Water Management Plans in the BRRWD.

Name of Entity	Document Name/ Reference	Goals	Consistent with BRRWD WMP Update?	BRRWD Role
Wilkin County	Wilkin County Local Water Management Plan	<ul style="list-style-type: none"> -protect and preserve groundwater in Wilkin County - protect and improve the quality of surface water Wilkin County - control surficial runoff and reduce flood damages in Wilkin County - reduce erosion and sedimentation in Wilkin County - promote wildlife habitat -control disposal of solid and hazardous waste in the county - establish educational programs to increase public awareness of protecting and improving our natural resources 	Yes	Cooperator
Becker County	Becker County Local Water Management Plan http://www.co.becker.mn.us/soil_water_conservation/d_soil_water.html	<ul style="list-style-type: none"> -provide protection of all surface waters in Becker County through enforcement of existing regulations, use of existing programs and development of new programs -protect our wetland resources from degradation -improve stormwater runoff quality by increased utilization of stormwater management practices throughout the County -promote compliance of stormwater rules and ordinances by continuing to educate landowners on the use of BMPs that reduce runoff -protect and preserve the ground water quality in Becker County -work with Becker County Planning and Zoning to increase ISTS 	Yes	Cooperator

		<p>compliance</p> <p>-Becker County will promote development patterns that protect agricultural land, forests, lakes and wetlands throughout the county</p> <p>-encourage development patterns and land use practices that protect, enhance, maintain or restore water quality</p>		
Clay County	<p>Clay County Local Water Management Plan</p> <p>http://www.co.clay.mn.us/Depts/SoilWatr/SWWtPI06.htm</p>	<p>-address the impaired and degraded waters within Clay County</p> <p>-address the issue of degrading water quality of surface waters in Clay County to limit future impacts of surface water quality</p> <p>-protect groundwater quality</p> <p>-focus natural resource enhancement and protection (NREP) by geomorphic regions</p> <p>-protect and enhance riparian corridors and buffers to allow habitat connections and wildlife migration</p> <p>-challenge increased NREP involvement from all landowners in the county</p> <p>-address and reduce soil erosion county-wide</p> <p>-reduce streambank and in-stream erosion</p> <p>-commit to a decade of County involvement in FDR process</p> <p>-involve communities in FDR process and strategies</p>	Yes	Cooperator
Otter Tail County	<p>Otter Tail County Local Water Management Plan</p> <p>http://www.co.otter-tail.mn.us/land/waterplan/default.php</p>	<p>-develop regulations, education, and incentives to ensure orderly development with minimal impacts to sensitive areas to preserve Otter Tail County's natural resources</p> <p>-protect groundwater quality in Otter Tail County</p>	Yes	Cooperator

		<ul style="list-style-type: none"> -compliance of sewage treatment systems (ISTS) county-wide -educate citizens in Otter Tail County regarding sustainable use of the natural resources -improve stormwater runoff management in Otter Tail County 		
City of Moorhead	<p>City of Moorhead Storm Water Pollution Prevention Plan</p> <p>http://www.ci.moorhead.mn.us/city_services/storm_water.asp</p>	<ul style="list-style-type: none"> -public education and outreach -public participation -illicit discharge detection and elimination -construction site storm water runoff control -post-construction storm water management in new development and redevelopment -pollution prevention/good housekeeping for municipal operations 	Yes	Facilitator
City of Moorhead	<p>City of Moorhead Source Water Assessment</p> <p>http://mdh-agua.health.state.mn.us/swa/surfwaterFile/1140008.pdf</p>	<ul style="list-style-type: none"> -focus limited resources within the community to protect the drinking water source -make informed decisions regarding land use within the community -make informed source water protection planning efforts for the cities of Fargo and Moorhead 	Yes	Facilitator

6.3.2.3 Plans Developed by State and Federal Agencies and Non-profit Entities

These plans detail some of the programs and initiatives of State, Federal, and Non-profit entities that relate to the BRRWD. A description is provided in **Table 6.2** and how they relate to the BRRWD.

The Minnesota Water Plan (MWP), developed by the Minnesota Environmental Quality Board (EQB), sets out an agenda for protecting and conserving the water resources of the State. The MWP identifies principals, policies, and actions needed for managing water in the State. In accordance with general planning policies, more detailed water management plans have been developed at lower levels of government to be supportive and consistent with the overall WMP. In this lens, watershed districts in the State have developed their own WMPs accordingly. It is the intent that the BRRWD WMP will be consistent with and supportive of the MWP.

The Minnesota Statewide Conservation and Preservation Plan (MSCPP), released by the University of Minnesota's Institute on the Environment and the Legislative-Citizen Commission on Minnesota Resources, offers comprehensive assessments and recommendations pertaining to the future of Minnesota resources. The Statewide Conservation and Preservation Plan charts long-term strategies for addressing critical issues and trends impacting Minnesota's environment and natural resources. It is the intent that the BRRWD WMP will be consistent with and supportive of the MSCPP.

Table 6.2 Summary of Some Programs and Initiatives Related to the BRRWD.

Name of Organization	Name of Program or Initiative/ Reference	General Description of Program or Initiative	Consistent with BRRWD WMP Update?	Potential for Cooperative Efforts
Ducks Unlimited	<p style="text-align: center;">Living Lakes Initiative</p> <p>http://www.ducks.org/conservation/initiative84.aspx</p>	<p>Restore and improve waterfowl habitat</p>	<p>Yes</p>	<p>Moderate</p>
Ducks Unlimited	<p style="text-align: center;">Grasslands for Tomorrow</p> <p>http://www.ducks.org/Conservation/GrasslandsforTomorrow/49/GrasslandsforTomorrow.html</p>	<p>Acquire and restore grassland habitats</p>	<p>Yes</p>	<p>Moderate</p>
USFWS	<p style="text-align: center;">North American Waterfowl Management Plan</p> <p>http://www.fws.gov/birdhabitat/NAWMP/index.shtm</p> <p style="text-align: center;">Partners in Flight</p> <p>http://www.partnersinflight.org/</p> <p style="text-align: center;">U.S. Shorebird Conservation Plan</p> <p>http://www.fws.gov/shorebirdplan/</p> <p style="text-align: center;">Waterbird Conservation for the Americas</p> <p>http://www.waterbirdconservation.org/</p> <p style="text-align: center;">Prairie Pothole Joint Venture</p> <p>http://www.ppjv.org/</p>	<p>Protect wetland and grassland habitats for waterfowl, landbirds, shorebirds, and waterbirds</p>	<p>Yes</p>	<p>Moderate</p>
LCCMR	<p style="text-align: center;">Minnesota Statewide Conservation and Preservation Plan</p> <p>http://www.lccmr.leg.mn/statewideconservationplan/Final_plan/SCPPFinalReport.pdf</p>	<p>Provides an plan for protection of air, water, land, wildlife, fish and outdoor recreation</p>	<p>Yes</p>	<p>Moderate</p>

Name of Organization	Name of Program or Initiative/ Reference	General Description of Program or Initiative	Consistent with BRRWD WMP Update?	Potential for Cooperative Efforts
EQB	Protecting Minnesota's Waters: Priorities for the 2008-2009 Biennium http://www.eqb.state.mn.us/documents/2008-2009PrioritiesReportMay2007FINAL.pdf	Prioritizes areas to focus on for the coming biennium, which are water quality and the Clean Water Legacy Act, water supply, and wetlands	Yes	Moderate
EQB	Minnesota Water Plan http://www.gda.state.mn.us/pdf/2000/eqb/wtr_mrk.pdf	Statewide goals are to improve water quality, conserve the diverse characteristics of Minnesota's water, restore and maintain healthy aquatic ecosystems, and provide diverse recreational opportunities	Yes	High
DNR	Minnesota Wetlands Conservation Plan http://files.dnr.state.mn.us/eco/wetlands/wetland.pdf	Guide stewardship of wetlands, through using a geographic system approach to the issues	Yes	Moderate

Name of Organization	Name of Program or Initiative/ Reference	General Description of Program or Initiative	Consistent with BRRWD WMP Update?	Potential for Cooperative Efforts
DNR	Tomorrow's Habitat for the Wild and Rare http://www.dnr.state.mn.us/cwcs/strategy.html	A strategic plan focused on managing Minnesota's populations of species in greatest conservation need	Yes	Moderate
DNR	Long Range Duck Recovery Work Plan http://files.dnr.state.mn.us/outdoor_activities/hunting/waterfowl/duckplan_042106.pdf	Recover historical breeding and migrating populations of ducks in Minnesota for their ecological, recreational, and economic importance to the citizens of the state	Yes	Moderate
DNR	Drought Response Plan http://files.dnr.state.mn.us/natural_resources/climate/drought/droughtp.pdf	Respond to drought-related emergencies and prepare a statewide framework for drought response	Yes	Moderate

Name of Organization	Name of Program or Initiative/ Reference	General Description of Program or Initiative	Consistent with BRRWD WMP Update?	Potential for Cooperative Efforts
RRBB	Inventory Team Report http://www.redriverbasincommission.org/Committees/Inventory/Conservation_Final_Report.PDF	Reviews applicable planning efforts in the Red River Basin and summarizes initiatives to focus on	Yes	High
Red River Flood Damage Reduction Work Group	A User's Guide to Natural Resource Efforts in the Red River Basin http://files.dnr.state.mn.us/aboutdnr/reports/redriver_nrefforts_pdf4.pdf	Discusses strategies on how to achieve the goals of the Red River Basin Flood Damage Reduction Working Group Agreement	Yes	High
Red River Flood Damage Reduction Work Group	Technical and Scientific Advisory Committee: Technical Papers Nos. 1 through 15 http://www.rwmb.org/html/info.cfm?ID=10	Technical Papers providing guidance on how to achieve the goals of the Red River Basin Flood Damage Reduction Work Group Agreement	Yes	High

Name of Organization	Name of Program or Initiative/ Reference	General Description of Program or Initiative	Consistent with BRRWD WMP Update?	Potential for Cooperative Efforts
River Keepers	<p style="text-align: center;">Red River of the North Canoe and Boating Route Master Plan</p> <p>http://www.riverkeepers.org/pdf/red_river_master_plan_1_03.pdf</p>	<p>Increased canoeing and boating uses of the Red River of the North with emphasis on safety; interpretive, historical, and environmental awareness; and economic development</p>	Yes	Moderate
U.S. North American Basin Conservation Initiative	<p style="text-align: center;">Work Plan for 2007</p> <p>http://www.nabci-us.org/workplan.htm</p>	<p>Energize and provide focus for the Committee and the bird conservation community in their efforts to facilitate integrated bird conservation in North America</p>	Yes	Moderate

6.4 Financing and Funding

6.4.1 Funding Approach and Rationale

The BRRWD intends to distribute costs for administration, programs, and projects as equitably as possible. The BRRWD also strives to maintain an efficient and effective implementation process that does not include disproportionate administrative costs. Therefore, the financing and funding of the various watershed efforts is carried out using the various funding methods available to provide a balance between equity in paying for activities and an effective process that does not create unduly high administrative costs to implement. In order to serve the watershed as a whole, as well as address specific issues, the BRRWD uses a variety of funding mechanisms that are available to the District through MS 103D.

Various programs are needed in the watershed (see **Section 3**) to address resource issues. Programs are typically non-construction related efforts intended to address resource watershed issues and problems. Programs are generally implemented at the watershed level and, therefore, will be financed by the entire watershed. Watershed-wide collection of funds is also generally less costly, administratively.

The BRRWD completes investigations and prepares studies and plans necessary to implement construction projects intended to solve watershed issues and problems. Studies and plans are completed in order to identify potential problems, identify reasonable alternatives, and propose necessary actions. Construction projects are needed at times to prevent or correct problems that arise in the watershed or address opportunities that exist. The projects are a necessary part of the watershed's activities, which serve to provide effective management of the resources.

The processes and procedures identified by this WMP for developing, funding and completing action items are intended to be consistent with the funding procedures established by the RRWMB. This intent is to maintain consistency among watershed districts within the Red River Basin.

6.4.2 Funding the Watershed District

6.4.2.1 Overview

A variety of mechanisms are available to fund the administration and operation of the District and to complete studies, implement programs, and plan and construct projects. (Note: an excellent summary can be found within the *Watershed District Handbook* prepared by the Minnesota Association of Watershed Districts (see

<http://mnwatershed.govoffice.com/index.asp>). Only a summary of the various funds is presented, sufficient to generally understand the intended use. The discussion is largely from the *Watershed District Handbook*. The BRRWD has responsibilities under both Watershed District Law (103D) and Drainage Law (103E). It should be noted that more than one funding mechanism could be applied to a specific project.

6.4.2.2 Funds Generated by Ad Valorem Tax Levies

“Ad valorem” means a tax collected over an entire taxing district (e.g., a subwatershed or the entire District) based on property value “in proportion to the value” rather than the anticipated benefits received. Therefore, an advantage of an Ad Valorem tax is that the District does not need to appoint viewers/appraisers to determine benefits and divide the costs in proportion to benefits. The ad valorem tax rate is expressed as a percentage of the total value of real property. Several “funds” may be established by the BRRWD and supported financially through an ad valorem tax.

- Organizational Expense Fund (MS 103D.905 Subd. 2) – When a Watershed District is first established, or later enlarged, it may levy for an Organizational Expense Fund. The fund is to pay for organizational expenses and preparation of the WMP. Unspent funds remaining after organization and completion of the WMP may be transferred to the Administrative Fund. The District may levy only ONCE upon creation or expansion for this fund. (The District may levy each time it expands, but only in the newly included area.) The amount cannot exceed 0.01596 percent of taxable market value or \$60,000, whichever is less.
- General Fund (MS 103D.905 Subd. 3) - The purpose of this fund is to pay for general administrative expenses and for the construction, or implementation, and maintenance of projects that are of common benefit. A Watershed District may levy annually for a General Fund. The ad valorem tax levy may not exceed 0.048 percent of taxable market value or \$250,000, whichever is less. The amount of the annual levy for the fund must be determined and justified through the Watershed District’s annual budget process (M.S. 103D.911).

The Managers may annually levy to pay for the cost of basic water management features of projects initiated by petition of a political subdivision within the BRRWD or by petition of at least 50 resident owners whose property is within the Watershed District. The annual levy cannot exceed 0.00798 percent of taxable market value for not more than 15 consecutive years. Political subdivision means a county, city, township, soil and water conservation district, school district or other political subdivision of the state, but not a Watershed District. During the 2006 Legislative Session, the Minnesota Legislature passed a law that allowed the BRRWD to

increase the levy limit to 0.02394 percent of taxable market value for a three-year period (2007, 2008, and 2009). It is hoped the Legislature will continue this increased funding in the future. If not granted additional years by the legislature at this higher percentage, this tax would be limited to 0.00798 percent of the taxable market value.

The BRRWD is permitted to levy outside of the administrative levy for liability insurance. Minnesota Statute 466.06 "Liability Insurance" gives Watershed Districts the same authority that cities and counties have to levy in excess of their local tax rate limitation for the purchase of liability insurance. In order to exercise this authority, a District must identify the liability insurance premium as a separate line in its levy certification to the county and indicate that the premium amount is being levied under MS Chapter 466.06.

- Survey and Data Acquisition Fund (MS 103D.905 Subd. 8) - The Survey and Data Acquisition Fund is designed to pay for making necessary surveys and acquiring data. This fund is to be established only if other funds are not available to the Watershed District. The Survey and Data Acquisition Fund is established by an ad valorem tax levy. The levy may only be collected once every five years. The maximum levy is 0.02418 percent of taxable market value of real property within the District or \$50,000, whichever is less. The fund balance cannot exceed \$50,000. At the end of a five (5) year period, any balance remaining in the fund should be accounted for in the new levy in order to keep the fund balance below \$50,000. For future projects where a survey has been paid for from this fund, the cost of the survey, as determined by the Board of Managers, will be included as part of the project work and the sum repaid to the Survey and Data Acquisition Fund.
- Emergency Projects of Common Benefit (MS 103D.615, Subd. 3) - The purpose of this levy is to pay the costs of projects that protect the interest of the Watershed District when associated with a declaration of an emergency. If the work is found to be of common benefit to the Watershed District, funding may be raised by an ad valorem tax levy upon all taxable property within the watershed if the cost is not more than 25 percent of the most recent general ad valorem levy of the Watershed District. This ad valorem authority may be combined with assessments against benefited property in order to pay costs associated with emergency work performed without a contract.

6.4.2.3 Funds Generated by Assessment Levies

An assessment levy is a special tax levied on a property to pay for a local public improvement that will benefit that property. The amount of the benefits is normally determined by appraisers (often called "viewers"). It is the responsibility of the viewers, not the

engineer, to determine the benefits and damages to the property. The engineer is responsible for providing the technical data needed by the viewers to complete their analysis. The technical basis for the benefits may be items that include the extent to which water levels are lowered, the change in the frequency of flooding, or the anticipated increase in property value. Damages typically include the loss of crops associated with constructing a project or the acquisition of land or right-of-way. An assessment may not be levied against property or corporations in excess of the amount of benefits received.

The assessments of benefits must be based upon the benefits to the property due to the project and must include:

- all property receiving direct benefits, including property owned by the state or a political subdivision;
 - all property that is contributing water to the project (i.e., within the hydrologic boundary);
 - all property for which the project provides improved drainage;
 - all property that contributes waters that are stored, handled, or controlled by the project;
 - benefits to the state by reason of improvement of lakes, streams or other bodies of water; and
 - situations identified by MS 103D.725.
- Preliminary Fund (MS 103D.905 Subd. 6) - This fund is used for preliminary work on proposed projects of the Watershed District. The fund must be established by District Court. The fund can be established both for projects that are petitioned and for projects the managers initiate. Further, the fund can be established both for projects that are to be paid for by assessment and for projects that are to be paid for by a combination of assessment and ad valorem, such as basic water management features of a project. When a project is ordered, the fund must be repaid by assessment. If a project is not ordered, repayment could be made from ad valorem.
 - Construction Fund (MS 103D.905 Subd. 5) - The purpose of the Construction Fund is to establish an account that consists of:
 - the proceeds of Watershed District bonds or notes or of the sale of county bonds;
 - construction or implementation loans from the MPCA under MS 103F.701-103F.761 or from any agency of the federal government;

- funds from special assessments, stormwater charges, loan repayments, and ad valorem tax levies levied or to be levied to supply funds for the construction or implementation of projects.

This fund is the primary repository for the construction of projects.

- Repair and Maintenance Fund (M.S. 103D.905, Subd. 7 and 103D.631) - The purpose of this fund is to provide money for maintaining the projects of a Watershed District. The cost of normal or routine maintenance of the projects and the cost of removing obstructions/foreign substances from a drainage system may be paid from the maintenance fund. Managers may assess all the parcels of property and municipal corporations previously assessed for benefits at the time of construction. The assessment must be made pro rata according to benefits determined at the time of project establishment. The collection (or levy) resulting from an assessment may be made annually. However, the fund may not exceed 20 percent of the original cost of construction of the project. Before ordering the levy, the Board of Managers may give notice of a hearing on making the assessment and establishing the maintenance fund.
- Emergency Projects for Benefited Property Fund (MD 103D.615, Subd3) – The purpose of this fund is essentially identical to the fund Emergency Projects of Common Benefit, with the exception that the benefiting properties are assessed.

6.4.2.4 Funds Generated through Bond Sales (MS 103D.904, Subd 4)

A Watershed District may establish a Bond Fund consisting of the proceeds of special assessments, storm water charges, loan repayments, and ad valorem tax levies pledged by the Watershed District for the payment of bonds or notes issued by the Watershed District. The fund is to be used for the payment of the principal, premium or administrative surcharge and the interest on the bonds and notes issued by the Watershed District, and for payments required to be made to the federal government.

6.4.2.5 Funds Generated through the Collection of Charges (MS 103D.729 and 444.075)

This provision allows a Watershed District, through the amendment of its plan or during an update to the WMP, the authority to establish one or more Water Management Districts for the purpose of collecting revenues and paying the costs of projects initiated under sections 103D.601, 103D.605, 103D.611, or 103D.730.

To establish a Watershed Management District, an amendment to the WMP or the WMP itself must describe the area to be included in the Water Management District, the

amount of the necessary charges, the methods used to determine the charges, and the length of time the Water Management District will remain in effect. After adoption, the amendment or WMP must be filed with the county auditor and county recorder of each county affected by the Water Management District. The Water Management District may be dissolved by the procedures prescribed for the establishment of the Water Management District.

An advantage of the Water Management District (over an assessment) is that the District assumes authority similar to that of a municipality – the ability to charge across some area. The funds generated are based, conceivably, on an equitable charge, rather than a benefit received. This can avoid the lengthy process of challenges in the court system about the extent of benefits received as determined through the assessment process.

6.4.2.6 Funds Generated through the Collection of Fees (MS 103D.345)

Watershed Districts are allowed by law to establish fees and charges for services provided. Fees cannot be charged to the federal government, state or a political subdivision. These fees include:

- Permit Fees: application fees for processing applications for a permit to do work in the District.
- Inspection Fees: fees charged for inspection of permitted work in the District. The fee is established by the hourly rate of the individual doing the inspection.
- Engineer Review Fees: fees charged for the review work done by the District engineer at the engineer's hourly rate.
- Wetland Delineation Fee: a fee for determining the type and boundary of a wetland. The fee suggested in statute is \$75. Some Districts have determined staff costs on an hourly rate and bill private individuals according to time involved in the delineation.

Permit fee records should be maintained in an organized manner.

The District can also collect a permit performance escrow to ensure performance of permit requirements. Escrow is generally set up so that it can be calculated by a number of different variables, depending upon which are the most appropriate to the characteristics of the District. Some Districts have set up wetland escrow accounts to cover the costs of wetland mitigation, including land acquisition, and attorney's fees.

6.4.3 Establishment of MS 103D.729 Water Management Districts

6.4.3.1 Overview

The BRRWD intends to consider the establishment of Water Management Districts (WMD). To use this funding method, Minnesota law (MS 103D.729) requires that the area to be included in the Water Management District be described, the amount to be charged identified, the methods used to determine the charges described, and the length of time the Water Management District is expected to remain in force specified.

6.4.3.2 Description of the Water Management Districts

By this update to the WMP, the BRRWD will establish the Planning Regions (as discussed in **Section 1.6**) as the Water Management Districts. The District may elect to treat the entire BRRWD as one WMD or may elect to establish numerous smaller WMDs under future plan amendments.

6.4.3.3 Proposed Method to Determine Charges

Table 6.3 shows the probable total revenue needed by the Water Management District. The method proposed to establish the charges may be based upon the proportion of the total annual runoff volume and/or solids load contributed by a parcel or may be based on the drainage area of the parcel, within a Water Management District.

Option 1: The runoff volume method will generally consist of:

- Use soils and land use data to determine the existing curve number for each parcel within a Water Management District;
- Use the curve number for each parcel and the annual average precipitation depth to compute the annual runoff volume for each parcel;
- Sum the annual average runoff volumes for all parcels within a Water Management District to determine the total annual runoff volume;
- Compute the percentage of the annual runoff volume from each parcel as the ratio of the annual average runoff volume from the parcel and the total annual average runoff volume for the Water Management District (i.e., the “runoff ratio”).

Option 2: The solids load contribution method will generally consist of:

- Use the Revised Universal Soil Loss Equation and a sediment delivery ratio representing the portion of the solids and sediment reaching a watercourse, to compute the annual average sediment and solids load for each parcel;

- Sum the annual average solids and sediment loads for all parcels within a Water Management District to determine the total annual average sediment and solids load;
- Compute the percentage of the annual average sediment and solids load from each parcel as the ratio of the annual average sediment and solids load from the parcel and the total annual average sediment and solid load for the Water Management District (i.e., the “sediment ratio”).

Option 3: Combination runoff volume and solids load method. The method used to consider both runoff volume and solids load contribution would follow the methodologies listed above for both solids contribution and runoff volume.

Calculation of charges for **Options 1 through 3** would be determined as follows:

- Add the runoff ratio and/or the sediment ratio to compute the “charge ratio” for each parcel within the Water Management District. The amount charged to a specific parcel is the sum of the runoff ratio and the sediment ratio for the parcel, divided by the sum of the runoff ratio and the sediment ratio for all parcels within the Water Management District.
- Apply the charge ratio to the total amount of revenue needed for the Water Management District to carry out the storm water related projects, programs, and activities of the BRRWD to achieve the storm water related goals within that Water Management District.

Option 4: The drainage area contribution method will generally consist of:

- Determine the drainage area contribution of each parcel of land within the planning region.

Calculation of charges for **Option 4** would be determined as follows:

- The amount charged to a specific parcel is determined based on the charge ratio. The charge ratio is determined by taking the drainage area of that parcel within the planning region divided by the total area of the planning region.
- Apply the charge ratio to the total amount of revenue needed for the Water Management District to carry out the storm water related projects and programs of the BRRWD to achieve the storm water related goals within that Water Management District.

Table 6.3 Probable Total Revenue by Water Management District if set up by Planning Region

Planning Region	Area (acres)	Probable Per Acre Charge*	Probable Total Revenue
Northern	144,102.5	\$0.50 to \$1.00	\$108,077
Mainstem	194,989.4	\$0.50 to \$1.00	\$146,242
Lakes	67,872.7	\$0.50 to \$1.00	\$50,905
Moorhead	40,086.4	\$0.50 to \$1.00	\$30,065
Central	209,048.7	\$0.50 to \$1.00	\$156,787
Southern	112,186.2	\$0.50 to \$1.00	\$84,140
Western	105,310.3	\$0.50 to \$1.00	\$78,983
Total			\$655,199

* Probable charge per acre for illustration purposes only. The actual charge will be per parcel and determined in accordance with the procedures described within this Section.

#The maximum WMD revenue limit within each is based on 0.05% of the taxable market value within each planning region. This value will change each year as property values increase or decrease over time.

6.4.3.4 Anticipated Duration for Existence of the Water Management Districts

The BRRWD anticipates that the Water Management Districts will provide a substantive amount of funding, to assist with the implementation of a variety of storm water related projects, programs and activities. The Water Management Districts are expected to remain in existence in perpetuity as a source of funding. Annual assessment of charges could vary from no charges to the maximum WMD revenue limit of the planning region. The maximum WMD revenue is proposed to be capped at 0.05% of the taxable market value within each planning region. This value would change each year as property values increase or decrease over time.

6.4.3.5 Probable Use of Funds

The anticipated primary use of the funds collected by establishing Water Management Districts are programs and projects benefitting residents within a Water Management District (also see **Section 6.4.4**). Funds collected within a Water Management District are expected to be used on storm water related projects and programs benefitting the planning region from which they are collected. In addition to spending WMD funds on projects within a WMD, funds may be

spent on projects physically located outside the WMD which benefit the WMD from which the funds were collected. For example, an upstream runoff reduction project within an upstream planning region WMD may be developed that benefits a downstream planning region WMD.

6.4.4 Financing District Activities

6.4.4.1 Overview

For administrative purposes, the BRRWD divides the activities of the District into the following categories:

- ❖ Administration and operations;
- ❖ Programs; and
- ❖ Projects.

Administration and operation activities include those activities necessary for the daily operation of the District. Programs are generally considered as cooperative efforts with other agencies or organizations where the funds of the BRRWD are used to encourage the pursuit of common goals through the completion of action items within this WMP. Projects are primarily the development, investigation, design, permitting, and construction of projects intended to manage the resource of the BRRWD.

6.4.4.2 Financing District Efforts

A summary of the probable primary funding mechanism by district program is summarized in **Table 6.4**. New programs and projects maybe developed by the District during the implementation of the WMP.

Table 6.4 Summary of Watershed District Programs and Activities and the Probable Primary Funding Sources.

Watershed District Program / Activity	Probable Primary Funding Sources	Existing or New Program	Description	Example(s) From Current District Activities
Administration and Operation	General Fund	Existing	Daily operation of the watershed district.	Not applicable
Programs				
Permitting	General Fund and Collection of Fees	Existing	Developing rules for the district, operating the permit program and completing inspections of permitted projects.	Existing Permit Program
Data Collection and Management	Survey and Data Acquisition Fund and Water Management District Funds	Existing	Monitoring activities intended to collect information about flow rates and stages, sediment loads, surface and ground water characteristics. General data collection efforts to better understand issues within the district. Maintaining and enhancing the district web page.	River Watch and current web page
Education and Information	General Fund and Water Management District Fund	Existing	Activities, programs, and efforts intended to inform stakeholders about District activities and programs.	Annual Report and web page

Watershed District Program / Activity	Probable Primary Funding Sources	Existing or New Program	Description	Example(s) From Current District Activities
Natural Resource Enhancement Cost Share	Water Management District Fund M.S.A. 103D-905, Subd. 3	Existing	Cost share program for natural resource enhancement projects as either cash or in-kind technical services. The natural resource enhancement activity may be initiated by others but must be consistent with the goals and the action items identified within this WMP. The amount of cost share is determined on a case by case basis by the Board of Managers.	Hay Creek/Stinking Lake CWL. Wolverton Creek/Comstock Coulee CWL. SBBR RIM Initiative
Farmstead Ring Dike	General Fund and M.S.A. 103D-905, Subd.3	Existing	Provide cost share for the construction of ring dikes to protect farms and farm buildings.	Current program. Approximately 25 ringdikes completed to date.
Drainage System Buffer Strip Cost Share	General Fund and 103E if required by law	Existing	Provide cost share to establish permanent vegetative strips along private and public drainage systems. The maximum cost share is 50% of the installation cost and requires a permanent easement.	Improved and redetermined systems since 1976.
Floodplain Management Program	Water Management District Fund M.S.A. 103D-905, Subsd. 3	Existing	Provide financial and technical assistance for floodplain management programs currently in operation in the District.	Current program. Clay County FIS. RRBMI.
Wellhead Protection Investigation Program	M.S.A. 103D-905, Subsd. 3	Existing	Provide technical assistance or financial support for developing wellhead protection plans.	City of Moorhead. City of Barnesville.

Watershed District Program / Activity	Probable Primary Funding Sources	Existing or New Program	Description	Example(s) From Current District Activities
Surface Water Quality Enhancement Program	Water Management District Fund M.S.A. 103D-905, Subsd. 3	Existing	Provide technical assistance or financial support for assessment of surface water quality and the development of implementation plans to improve water quality. Primary focus is 303(d) listed waters.	See Appendix I.
Projects				
Emergency	Emergency Projects of Common Benefit Fund and Emergency Projects of Benefited Property Fund	Existing	The planning, design, permitting, and construction of emergency projects.	Turtle Lake Water Level Project Grove Lake Emergency Outlet
Maintenance and Repairs	Repair and Maintenance Fund	New	The repair and maintenance of previously constructed watershed district projects.	None – new program.
Construction	General Fund, Const. Fund & Water Mgmt. Dist. Fund	Existing	The planning, design, permitting, and construction of watershed district projects.	Manston Slough, Deerhorn Creek , Riverton Township Retention, and others.

6.5 District Operations

Many activities are completed on a daily basis by the BRRWD to carry out the functions of the watershed district. This portion of the WMP provides a description of the most common activities.

6.5.1 Advisory and Related Committees

The BRRWD Board of Managers uses a Advisory Committee (AC) to guide the operation of the District, as a mechanism to obtain input from those residing within the District, and to provide direction during the WMP plan update process. The AC is also engaged in providing recommendations to the Board of Managers with regard to potential projects being considered.

The duties of the AC include:

- elect a chair from its membership;
- elect a recorder from its membership;
- establish a meeting schedule which, at a minimum, meets annually;
- consider issues pertinent to the functions and purposes of the watershed district (review and comment on reports, minutes, activities, and proposed projects of the managers);
- provide input on the annual work plan; and
- report to the managers the general content of advisory committee meetings and resulting recommendations.

The AC includes citizen members from across the Watershed District including multiple members from each of the four Counties within the BRRWD. In 2009, the BRRWD had 14 members on their AC. Membership included three members from Otter Tail County, three members from Wilkin County, four members from Becker County, and four members from Clay County.

The District utilizes three additional committees; i.e., a Technical Advisory Committee (TAC), a Citizen Advisory Committee (CAC), and a Project Team (PT). The primary role of the TAC is to provide honest and open technical input and suggestions to the BRRWD about the technical aspects of their proposed philosophy for managing the resources of the District. The CAC's role is to provide local citizen input to the watershed management planning process.

The concept of a "Project Team" was created through the Red River Basin Flood Damage Reduction Work Group mediation agreement, which outlines the project development process for reducing flood damage and improving natural resources in the

Minnesota portion of the Red River Basin. Project Teams are responsible for working with a project from the project concept stage to project construction and monitoring. A Project Team consists of appropriate stakeholders (watershed districts, state, federal, and tribal agency personnel, local government officials, affected landowners, and interested citizen group representatives) including at least one designated contact person from each agency. Members of the Project Team are appointed by the Watershed Board of Managers and may be added and subtracted as necessary over time. The members of the Project Team in 2009 include individuals from the following entities:

- City Engineering, Moorhead, MN
- MPCA – Detroit Lakes
- The Nature Conservancy
- USFWS – Detroit Lakes Wetland Management District
- DNR Wildlife – Fergus Falls
- DNR Waters – Detroit Lakes
- DNR Fisheries – Detroit Lakes
- BWSR – Fergus Falls
- Clay SWCD
- Becker SWCD
- NRCS – Fergus Falls
- USACOE
- BRRWD Advisory Committee
- Audubon Dakota

6.5.2 Long Range Work Plan

The long range work plan consists of action items based on policies within this WMP. The long range work plan provides only a general estimate of the cost range for an action item, the priority established by the Board of Managers for the action item and the potential implementation schedule. It is expected that as annual work plans (see **Section 6.5.3**) are developed, the cost range of action items will be improved. The implementation timeline provides a general frame of reference for District activities and is not intended to be an absolute schedule. Many factors influence the ability to initiate and complete action items, including funding availability, activities of partners or other interest groups, or other elements.

The long range work plan will generally guide District activities for the foreseeable future. The initial long range work plan anticipated by the BRRWD (based on this WMP and associated approach) is described for each planning region in **Appendices A-G**. While it is anticipated

that the overall long range work plan will be periodically reviewed and updated, action items may be added, removed, or reprioritized at any time.

The long range work plan contains a strong focus on assessing issues and providing a technical framework for resource management. The completion of assessments and / or studies will generate *outcomes* that will be added to the long range work plan. Thus, the long range work plan also provides for construction of improvements that have been identified in the District's past studies and assessments. Other construction projects may be identified through future studies and will be incorporated into the long range work plan, as updated from time to time.

6.5.3 Annual Work Plan and Budget

The annual work plan is intended to be a fluid document that may change from year-to-year according to the District's achievements, new opportunities, or emerging issues. The self assessment process detailed in **Section 6.5.6** provides feedback necessary to revise and adjust the annual work plan. The annual work plan allows the District to establish an operating budget range for the short term while maintaining connection to the overall long term actions targeted by the District. The initial annual work plan anticipated by the BRRWD (based on this WMP and associated approach) will be developed for 2009 Subsequent to this initial work plan and progress evaluation, new action items may be added, reprioritized, shelved, or similarly addressed.

The BRRWD Board will provide the annual work plan and budget to the Advisory Committee for review and comment. The Advisory Committee will convene annually. With input from the Advisory Committee, the BRRWD Board will prioritize the action items in the annual work plan and establish the preliminary budget (M.S.A. 103D.911) for certification to the County. The annual work plan and budget will provide detailed tasks and budgets for projects and programs. All tasks will relate to one of the eleven management areas described in the WMP. Once the annual work plan and budget is established, the BRRWD Board will consult with the PT for coordination of potential watershed projects and efforts.

The BRRWD develops an annual budget for the watershed district. The budget is developed from the action items identified within the long range work plan and summarized by management area. Before adopting the budget, the Managers hold a public hearing on the proposed budget. Notice of the hearing is published with a summary of the proposed budget in one or more newspapers of general circulation in each county comprising a part of the watershed. According to Minnesota Statute 103D.911, the BRRWD must hold a hearing and adopt a budget on or before September 15 of each year.

6.5.4 Annual Report

The BRRWD annually prepares a report describing the financial conditions of the District, the status of projects, the business transacted, and other matters affecting the interests of the District. The annual report includes a discussion of the plan for the coming year. Copies of the report are transmitted to BWSR, the DNR Commissioner, County Commissioners, and the Director of the Division of Waters.

Future annual reports completed by the District will include a self-assessment procedure (i.e., essentially a report card). The purpose of the self assessment procedure is to provide a framework for the Managers to assess the amount of progress made by the District toward completing the action items identified within the annual and long range work plans.

6.5.5 Annual Audit

The Board of Managers annually completes an audit (M.S.A. 103D.355) of the financial accounts of the BRRWD. The annual audit is completed by a public accountant or by the state auditor. The annual audit must be made by a certified public accountant, or the state auditor, at least once every five years or when cumulative District revenues or expenditures exceed an amount established by BWSR in consultation with the state auditor.

6.5.6 Self Assessment Process

The District will use several criteria to evaluate their degree of success in attaining goals for each management category. This will provide both objective (quantitative) and subjective (qualitative) benchmarks for assessing performance. Measuring success on an annual basis will provide feedback as to what adjustments the District may need to consider for improvement. A progress evaluation tool, using a range of numerical values, will enable the District to “score” success. While some level of bias may be introduced, flexibility is required in how the BRRWD can score its performance due to the numerous management areas. The progress evaluation tool is presented in **Table 6.5**.

Broadly, three levels of success are defined: less than 25% success (score 1-3), 25%-75% success (score 4-7), and greater than 75% success (score 8-10). For each criteria, specific illustrations and context are provided in relation to the level of success. The illustrations are to provide guidance for evaluation and should not necessarily be rigidly applied.

The BWSR has been developing a Performance Review and Assistance Program (PRAP). The purpose of PRAP is to review the performance of Minnesota’s delivery system of local conservation and water management organizations. The PRAP evaluation form is shown as **Table 6.6**. The District plans to self-review to the requirements of PRAP Level I. This will help to ensure completion of required annual reporting.

Table 6.5. Annual Evaluation Tool for Assessing the Success of District Activities and Programs.

Management Area	Policy Implementation (Total Points Possible for All Categories is 110)			Collaborative Measures (Total Points Possible for All Categories is 110)			Project Activities (Total Points Possible for All Categories is 110)			Grade	Comments
	< 25%	25 to 75%	> 75%	< 25%	25 to 75%	> 75%	< 25%	25 to 75%	> 75%		
Floodplain Management											
Flood Damage Reduction, Rate of Runoff, Volume of Runoff											
Agricultural Drainage Systems											
Water Quality											
Wetlands											
Natural Resources and Recreation											
Groundwater											
Erosion and Sediment Control											
Education											
Long Range Work Planning and Financing											
Data Collection and Management											

Perceived Success	Range of Scores	Perceived Success	Total Point Score
< 25%	0 – 3	A	> 297
25 – 75%	4 – 7	B	264 - 297
> 75%	7 - 10	C	231 - 264
		D	198 - 231
		F	< 196

Range of scores are for each management category within Policy Implementation, Collaborative Measures and Project Activities.

Table 6.6 PRAP Greater MN Watershed District Performance Standard Checklist.

GREATER MN WATERSHED DISTRICT PERFORMANCE STANDARDS

LGU Name: _____

Performance Area	Performance Standard	Level of Review	Rating	
	★ Target (high performance) standard	I Annual Compliance	Yes, No, or Value	
	■ Basic practice or Statutory requirement	II BWSR Staff Review & Assessment (1/5 yrs)	YES	NO
Administration	◇ Quantitative standard			
	■ Annual report: submitted by deadline	I		
	■ Annual report: contains progress report	I		
	■ Financial audit: completed within last 12 months	I		
	■ Rules: current and reviewed by BWSR	II		
	■ Personnel policies: written and reviewed/updated within last 5 yrs	II		
	■ Data practices policy: exists and reviewed/updated within last 5 yrs	II		
	■ Manager appointments are current and reported	II		
	★ Have in-house staff	II		
	★ Board training: ed and certifications, orientation plan and record for each board member	II		
	★ Staff training: ed and orientation plan and record for each staff member	II		
	★ By-laws, operational guidelines exist and current	II		
★ Public ditch records: modernized, usable, indexed (where applicable)	II			
Planning	■ Watershed management plan: up-to-date	I		
	■ Engineer Reports: submitted for DNR / BWSR review	I		
	★ Implementation and/or CIP review every 2-3 yrs	II		
	◇ Number of local water plans reviewed and/or approved	II		number
Execution	◇ Expenditure trend: net change past 5 yrs	II		%/ \$ amt
	◇ Project-program expense \$/total budget \$ (past 5 yrs)	II		%
	★ Water quality trend completed for key water bodies	II		
	★ Watershed yield trends monitored / reported	II		
Communication & Coordination	■ Functioning advisory committee: recommendations on projects, reports, attendance at Board mtgs	II		
	■ Stakeholder survey: within last 5 yrs	II		
	■ Coordination of Watershed Mgmt Plan with local water plans	II		
	■ Communication piece: sent within last 12 months	I		
	■ Website: annual report, annual budget, mtg minutes	I		
	★ Website: contains contact information for current mgrs and staff, mtg agendas, minutes, updated after each board mtg	I		
	★ Public education program: seminars, tours	II		
	★ Coordination with County Bd by Managers or staff	II		
★ Partnerships: cooperative projects/tasks done with other LGUs, state, fed agencies	II			

6.5.6.1 Policy Implementation

This criterion focuses on the degree to which the District is implementing its policies as outlined in **Section 4**. It is also an evaluation of the level that cities, counties, agencies and SWCD's within the watershed are considering the District's policies when reaching decisions.

Less than 25% success: Constituents may or may not be aware of the District's policies. If aware, they generally are not incorporating the policies into their decision making. Also, the District may only minimally be implementing actions defined under the policies.

25%-75% success: Constituents are cognizant of the District policies. There is considerable evidence of policies being incorporated into activities and decision making (establishing a case history). Also, the District may be moderately implementing actions defined under the policies.

Greater than 75%: Policies are formally being adopted and applied by constituents in their decision making process. Others are actively seeking District input on resource management issues. The District is consistently implementing actions defined under the policies.

6.5.6.2 Collaborative Efforts

This criterion is important because the District is dedicated to working with the stakeholders in the BRRWD to meet common goals when addressing resource issues. The District has many examples of successful collaborative efforts. It is expected that the level of collaboration and number of joint projects should increase as stakeholders understand the activities, programs, and projects being pursued by the District.

Less than 25% success: Stakeholders only minimally utilize the BRRWD as a resource for the various management areas (e.g., education, joint project implementation). The District receives only a small number of requests for assistance or partnering. A high level of controversy is apparent.

25%-75% success: There are a number of stakeholders working together to address several management areas outlined in **Section 4.1**. The district goals are moderately shared by the stakeholder group.

Greater than 75%: There is a high use of the plan framework in decision making processes. Coordinated joint projects are typical versus stand-alone resource projects done by a single entity. A low level of controversy is apparent.

6.5.6.3 Project Activity

This criterion focuses on how well the goals and action items identified within the WMP translate into specific activities, programs, or projects. This criterion is a measure of actions taken towards completing the activities within each management area.

Less than 25% success: There is minimal project activity or little or no action being pursued. Projects that are being done in the watershed are done by others but do not meet the district goals. If collaboration exists, efforts have not moved beyond a planning or discussion stage.

25%-75% success: Activity is occurring towards implementation in several management areas. Preliminary engineering reports are occurring. Permits and / or grant applications may be pending. Stakeholder resolutions may be in progress to authorize action.

Greater than 75%: Implementation activities are taking place frequently in many management areas. Construction documents are developed and issued for bidding.

6.5.7 Administration of the Legal Boundary

The description and bounds of the BRRWD is discussed in **Section 1.1**. A figure generated to display the extent of the BRRWD can be found in this section. Legal descriptions of watershed boundaries are cumbersome to develop and adjust. The BRRWD uses geospatial data established with a Geographic Information System (GIS) to convey the legal boundary. The BRRWD periodically reviews parcel data to verify existing properties and incorporate any new properties affecting the watershed, thus updating the legal boundary.

At times projects are proposed or issues occur within the legal boundary of the BRRWD, but are outside of the hydrologic drainage area. These projects are approached on a case-by-case basis. Typically, the BRRWD will assume the lead role on projects or issues that are within the legal boundary. Generally, the BRRWD will coordinate with the appropriate adjacent watershed entity (if present) to ensure effective administration, project oversight and the establishment of the legal boundary.

6.5.8 Rules and Permitting

The BRRWD has implemented rules and a permit program. The rules of the BRRWD are intended to effectuate the purposes of MS 103D. The rules are considered necessary by the Board of Managers to implement, and make more specific, the law administered by them.

The requirement for a permit from the Board of Managers for certain uses of water or work within the District is not intended to delay or inhibit development. Rather, the permits are

needed so that the Managers are kept informed of planned projects, can advise (and in some instances provide assistance), and to ensure that use of and the effects to the resources are orderly and in accordance with this WMP.

6.5.9 Responsibilities under Drainage Law (MS 103E)

All legal drainage systems within the BRRWD are operated in accordance with MS 103E. There is one judicial ditch system within the BRRWD - Clay-Wilkin Judicial Ditch No. 1. All of the remaining legal drainage systems are county ditch systems. The BRRWD has jurisdiction over all of the legal systems within watershed. A map showing the legal ditch systems under the Watershed District's jurisdiction is shown in **Figure 1.1**. The District plans to continue to operate in a manner necessary to address its obligations under MS 103E.

6.5.10 Process for Project Implementation

The BRRWD has developed a process for implementing projects consistent with MS 103D, the Flood Damage Reduction Mediation Agreement, the planning requirements of others, and the U.S. Army Corp of Engineers permit requirements for an individual permit. This process is described within **Section 6.6**.

6.6 Project Implementation Process

6.6.1 Overview

The process of “developing” a project within the BRRWD requires not only satisfying the requirements of Watershed District Law (i.e., MS 103D), but many additional planning, permitting, approval and funding requirements. Some of these requirements include:

- Policies, goals, objectives and action items identified within the Watershed Management Plan (WMP);
- Watershed Law (i.e., MS 103D);
- Red River Basin Flood Damage Reduction Workgroup Agreement (December 9, 1998) and subsequent guidance information some of which includes:
 - Technical and Scientific Advisory Papers;
 - Project Compatibility and Readiness Evaluation; and
 - Project Implementation Process and Procedures.

- Red River Watershed Management Board Funding Requirements contained within *Application Procedures for Funding Flood Damage Reduction Projects and Related Programs* (March 16, 2004);
- State Environmental Review (Minnesota Environmental Policy Act);
- Federal Environmental Review (National Environmental Policy Act);
- Federal Laws (e.g., cultural resources, Threatened and Endangered species, water quality standards);
- State Laws (e.g., work in protected waters); and
- Local approvals (e.g., zoning, consistency with land use plans).

Considerable effort is being made to develop a single, unified, consistent process capable of simultaneously addressing the alternatives analysis and sequencing requirements of several of these laws (e.g., environmental review, Section 404).

The project development process begins with the identification of a problem, then proceeds to identification of alternative concepts and selection of a project concept, and ends either with the abandonment of the concept or ultimately constructing the project and implementing the mitigation and monitoring requirements. A project concept is simply an idea intended to address one or several of the Flood Damage Reduction (FDR) and / or Natural Resource Enhancement (NRE) issues or problems identified within the WMP. More thought, technical analysis, information and certainty about a concept's features, operation, the maintenance required and the adverse and beneficial affects results as a project proceeds from the concept stage through preliminary engineering and analysis, final design, the development of construction documents and construction. A limited number of answers about the project features, how the project will work, and the effects, is common early in the project development process. However, the lack of answers should be substantively reduced to seemingly minor details by the time construction documents are prepared.

Some of the proposed projects require an individual Section 404 permit under the Clean Water Act from the U.S. Army Corps of Engineers. One requirement of the Section 404 permit is evaluating consistency with the 404(b)(1) guidelines, including demonstrating the need for the project, an analysis of the alternatives to satisfy this need, identifying the Least Environmentally Damaging Practicable Alternative, and designing to avoid and minimize unavoidable impacts. Several steps in this process have recently been coined "Points of Concurrence" by those participating in and bound by the Flood Damage Reduction Mediation Agreement. State and Federal Environmental Review requirements typically contain similar requirements for demonstrating need, evaluating alternatives and avoiding and minimizing

adverse environmental impacts. A single process is needed to demonstrate compliance with the myriad number of requirements.

6.6.2 Project Implementation Process

The BRRWD is intent on developing an efficient project development process. The perspective of the BRRWD is that this process must:

- Be based on a process identified within the Watershed Management Plan intended to achieve specific goals and objectives;
- Recognize the statutory authority given Watershed Districts by the State of Minnesota and codified in MS 103D;
- Address the planning, permitting, approval and funding requirements;
- Engage the public in the decision-making process; and
- Define clear, unambiguous criteria that can be used to determine whether the requirements for each specific step in the project development process, including the Points of Concurrence, are attained.

Figure 6.1 shows the anticipated project development process to be used by the BRRWD. The process includes specific steps intended to satisfy the Points of Concurrence. The process is based upon early (see *Project Review and Permitting Process*, Page 26, Red River Basin Flood Damage Reduction Work Group Agreement, December 9, 1998) and subsequent guidance provided by the FDR Work Group and the U.S. Army Corps of Engineers. The BRRWD also developed specific criteria it intends to use to demonstrate compliance with the Points of Concurrence (essentially 404(b)(1) consistency) (see **Table 6.7**). These criteria will be used by the BRRWD to demonstrate “need” (Point of Concurrence No. 1), determine whether an alternative is “Practicable” (Point of Concurrence No. 2), and evaluate the relative impacts to the aquatic ecosystem to identify the Least Environmentally Damaging Practicable Alternative (Point of Concurrence No.3).

6.6.3 Determining the Least Environmentally Damaging Practicable Alternative

6.6.3.1 General Approach

The purpose of this section is to present a summary of the technical approach the BRRWD plans to use to determine the Least Environmentally Damaging Practicable Alternative. The RRBFDRWG Technical Scientific Advisory Committee Paper No. 11 will be used as an initial screening in evaluating practicable alternatives to arrive at the selection of the Least Environmentally Damaging Practicable Alternative. **See Section 7 for more information on**

Figure 6-1
Buffalo Red River Watershed District
Project Review and Approval Process

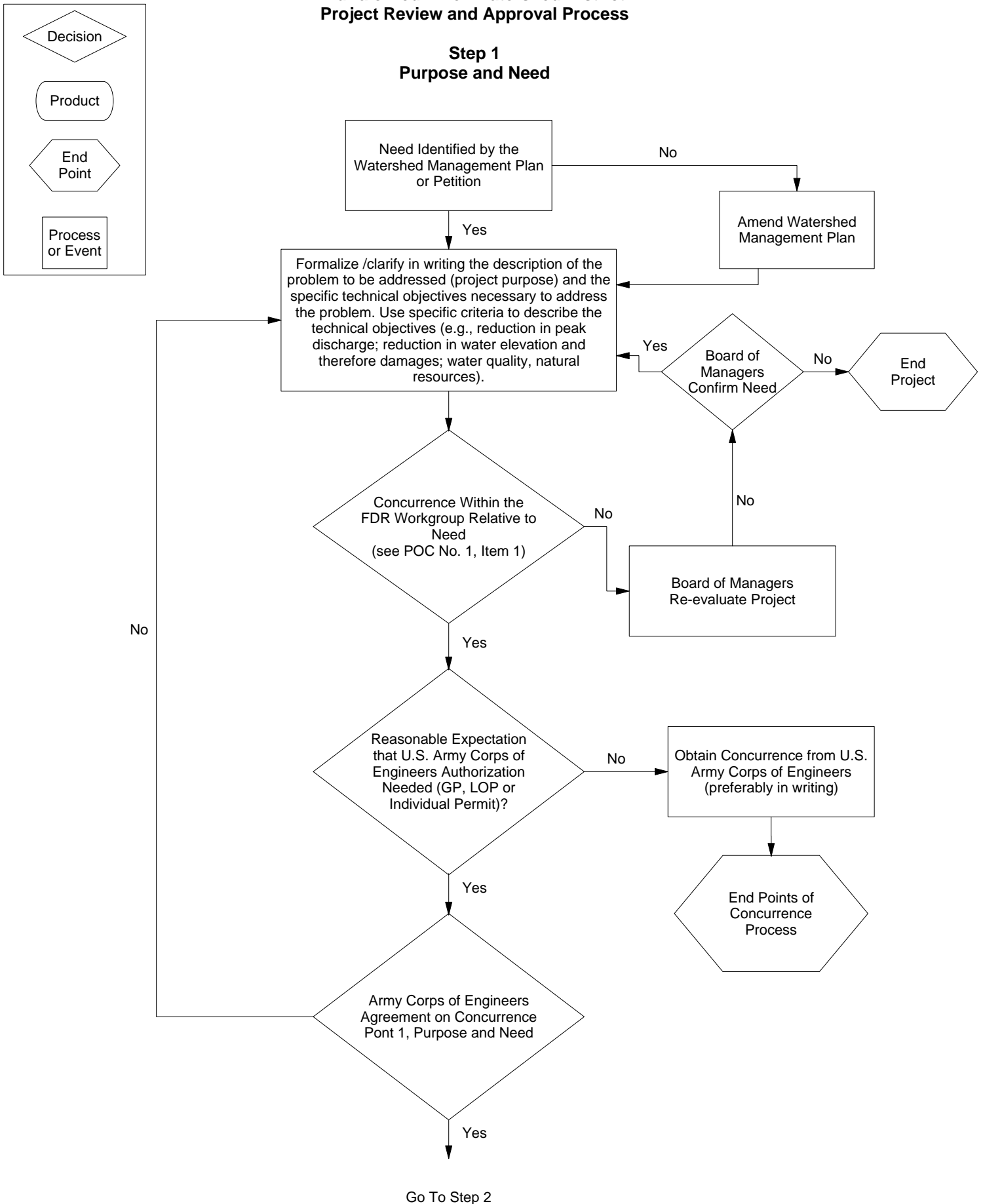
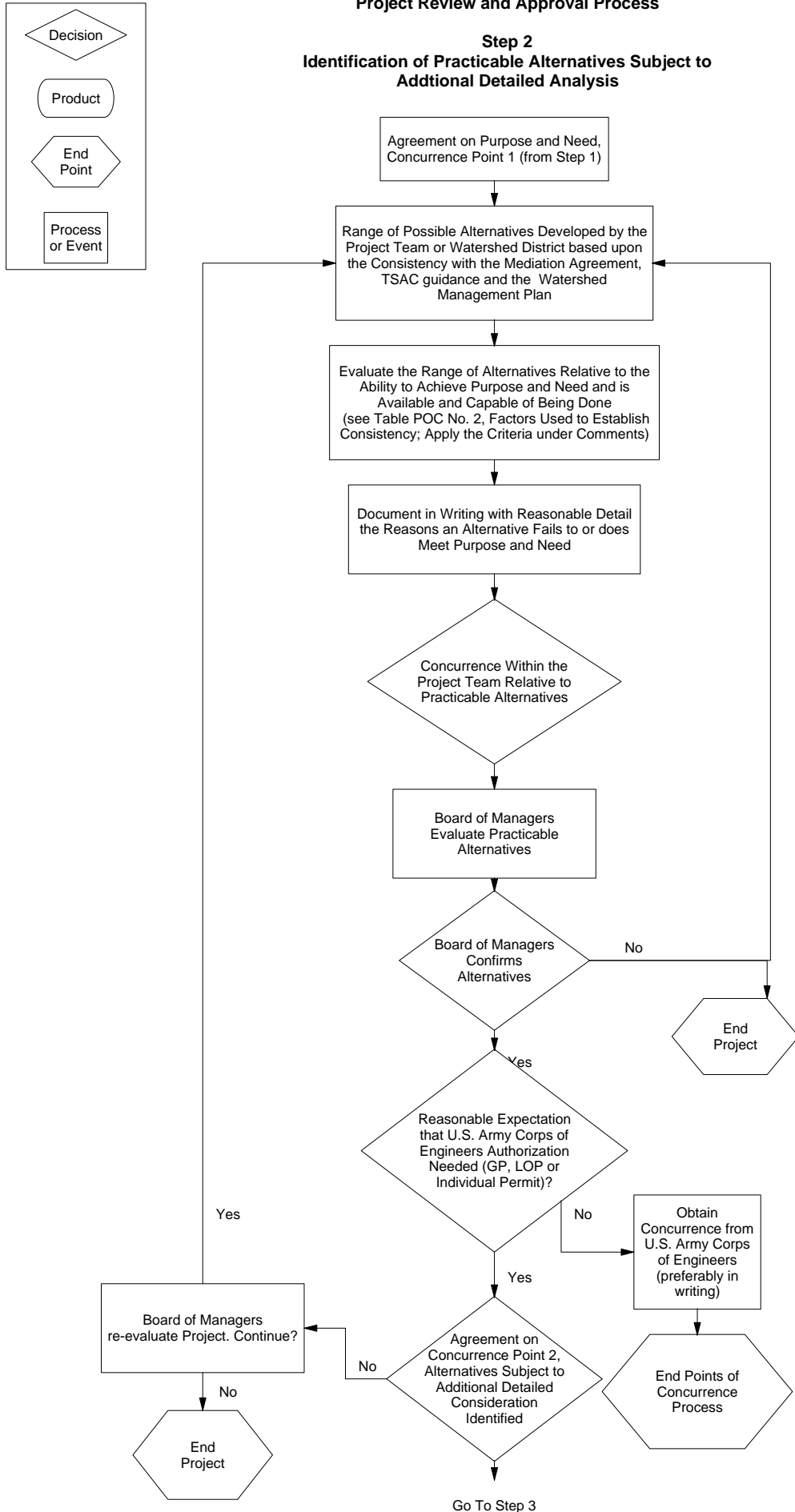
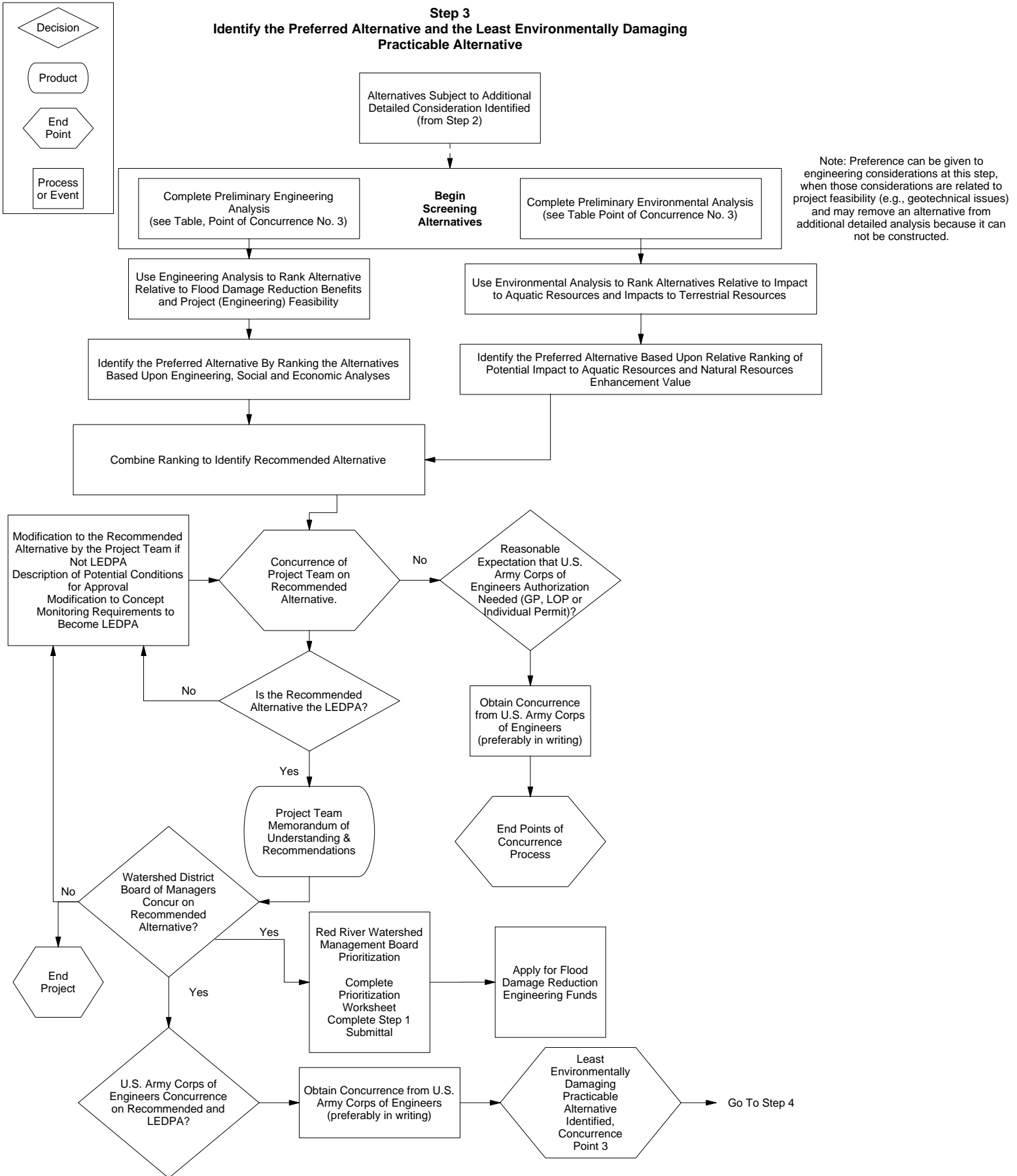


Figure 6-1 (cont.) Buffalo Red River Watershed District Project Review and Approval Process

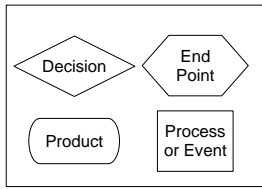
Step 2 Identification of Practicable Alternatives Subject to Additional Detailed Analysis



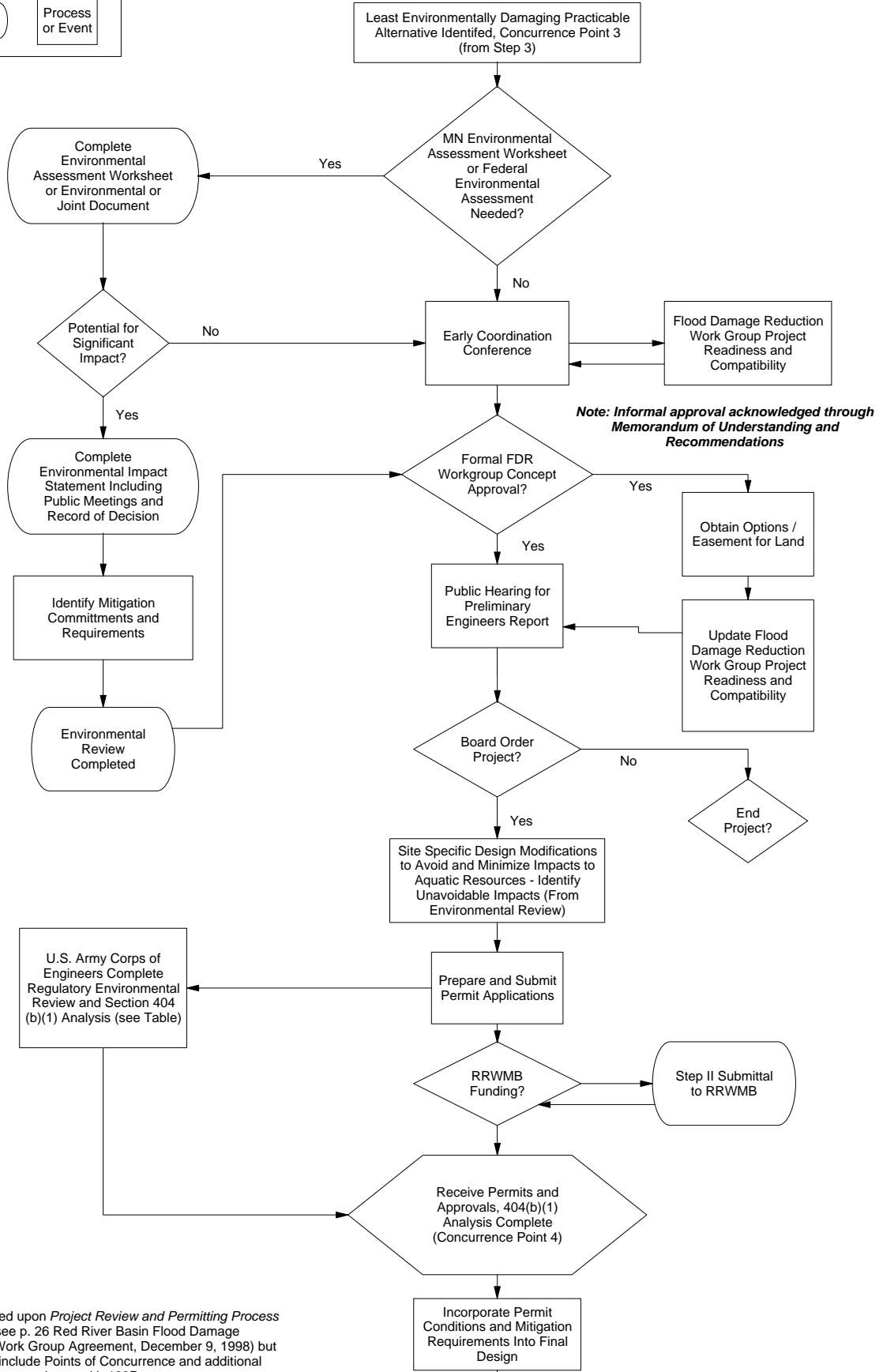
**Figure 6-1 (cont.)
Buffalo Red River Watershed District
Project Review and Approval Process**



**Figure 6-1 (cont.)
Buffalo Red River Watershed District
Project Review and Approval Process**

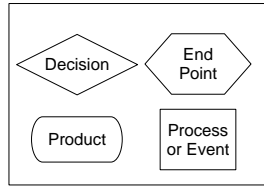


**Step 4
Order Project, 404(b)(1) Analysis and Recieve Permits**



Largely based upon *Project Review and Permitting Process* flow chart (see p. 26 Red River Basin Flood Damage Reduction Work Group Agreement, December 9, 1998) but modified to include Points of Concurrence and additional processes in accordance with 103D.

**Figure 6-1 (cont.)
Buffalo Red River Watershed District
Project Review and Approval Process**



**Step 5
Final Engineering, Environmental Mitigation and Construction**

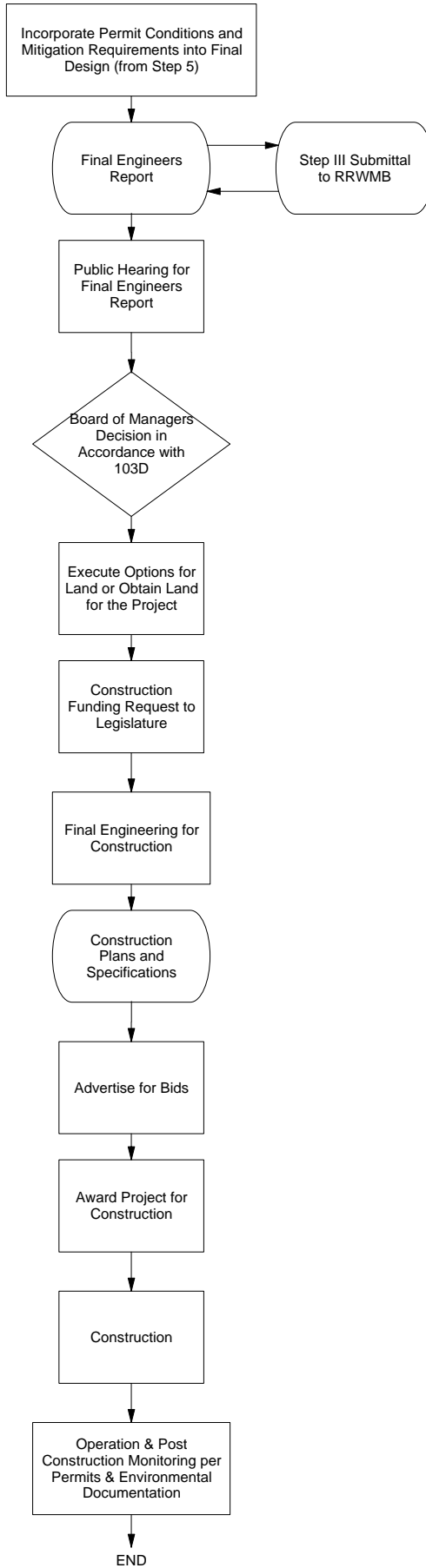


Table 6-7. Criteria established by the Buffalo Red River Watershed District for completing the 404(b)(1) consistency analysis and evaluating consistency with the Points of Concurrence established by the U. S. Army Corps of Engineers.

Point of Concurrence No.	Factor(s) Used to Establish Concurrence Point	Comments
<p>No. 1 – Demonstration of Need and Project Purpose</p>	<p>Need is demonstrated if an existing condition is identified within the Watershed Management Plan as either an issue or problem, leading to a specific policy, goal, action item, project, or program. Need for action may also be established by, the work of the Flood Damage Reduction Project Team or based on the planning or technical documents of other local, state, federal agencies or a non-governmental organization. If petitioned projects can not demonstrate a direct relation to an identified issue or problem identified in the plan “need” will need to be proven on its own merits.</p> <p>Purpose can be demonstrated if the Proposed Action addresses an issue or problem identified within the Watershed Management Plan and can show that progress will be made towards achieving the desired future conditions or goal described in the Plan.</p>	<p>1) The impetus for establishing need may come from several sources:</p> <ul style="list-style-type: none"> • Formal recognition by the Watershed District Board of Managers as an issue or problem of sufficient importance to pursue resolution through the watershed management planning process; • Acknowledgement in some written form, of agreement among the Project Team members based upon the collective professional judgment of the Project Team members. Formal recognition by the Project Team as an issue or problem of sufficient importance to pursue resolution through the mediation process; • Identified within other planning documents (e.g., those of other agencies) provided these plans have been subject to solicitation of input from the Watershed District and a formal public review and comment process. <p>Meeting any one of the above items listed will be considered sufficient to constitute need in accordance with the National Environmental Policy Act/</p> <p>2) Establishing need for a project petitioned through MS 103D is only necessary if requiring Clean Water Act Section 404 Authorization (Letter of Permission, General Permit or Individual Permit) from the U.S. Army Corps of Engineers;</p> <p>3) For projects petitioned through MS 103D requiring Clean Water Act Section 404 Authorization from the U.S. Army Corps of Engineers that cannot show a direct relationship to an identified issue, problem or goal identified in the Watershed Management Plan, need can be established in accordance with “<i>Guiding Principles</i>” (See sec. 4). Petitions presented to the Board of Managers per MS 103D subject require concept approval (see Figure 6-1).</p> <p>4) At the discretion of and request of the Board of Managers, projects petitioned under MS 103E can be voluntarily subjected to the points of concurrence process. Provided these projects are the maintenance of a legal drainage system they may be exempt from requiring Clean Water Act Section 404 authorization from the U.S. Army Corps of Engineers. Drainage improvement and establishment projects may require this authorization from the U.S. Army Corps of Engineers.</p> <p>5) The nature and extent of need is to be expressed in accordance with the following:</p> <p style="padding-left: 40px;">Flood Damage Reduction and/or Natural Resource Enhancement need(s) for a problem may be expressed solely as a local need (i.e., planning region), mainstem/basin wide need, or combination of local and mainstem/basin wide need. Flood Damage Reduction will be expressed as or as a combination of peak flow reduction, runoff volume reduction, reduction in stage or general land experiencing the issue or problem relative to an established goal. This goal can be a goal established at a key locations including the designation of problem or flood damage areas and Regional Assessment Location in the Watershed Management Plan. Natural Resource Enhancement need to be expressed in some quantifiable resource metric (e.g., acres of wetland; pollutant load reduction) relative to a definable and quantifiable goal.</p>

Point of Concurrence No.	Factor(s) Used to Establish Concurrence Point	Comments
<p>No. 2 – Range of Alternatives Subject to Detailed Analysis</p> <p><i>Note: the range of alternatives needs to consider location (on the landscape and within the watershed).</i></p>	<p>The following guidance is provided for assessing the flood damage reduction and natural resource enhancement practicability of the alternatives.</p> <ul style="list-style-type: none"> • Ability of an alternative to meet need may be evaluated relative to the goals established at regional assessment locations within the Watershed Management Plan. • An alternative must meet need to be considered practicable and to be carried forward and subjected to detailed analysis. • Range of alternatives considered for flood damage reduction are those identified and described by Technical Scientific Advisory Committee Paper No. 11, <i>Red River Basin Flood Damage Reduction Framework</i>. Alternatives should include the type of feature (e.g., wetland restoration, off-channel impoundment) as well as the location within the watershed relative to the location of the problem area). • A range of Natural Resource enhancement efforts for consideration are identified in “A user’s Guide to Natural Resource efforts in the Red River Basin” and to further assess the project area for natural resource enhancements Technical Scientific Advisory Committee Report Paper No. 14, <i>Incorporation and Evaluation of Natural Resource Benefits in Red River Basin Flood Damage Reduction Projects</i>. • An Alternative is practicable if it is “available” and “capable” of being done (see comments for various criteria). • Natural Resource Enhancement and Flood Damage Reduction alternatives not capable of achieving need are eliminated from additional detailed analysis (i.e., is no longer considered). 	<p>Use of the following criteria is anticipated for determining whether an alternative is available and capable of being done. The criteria will be applied to alternatives differing in types (e.g., storage versus levee) and location. An alternative must attain all of the following criteria to be considered available and capable of being done. Failure to meet a single criteria is sufficient to conclude an alternative is not practicable.</p> <ul style="list-style-type: none"> • Reasonable expectation of obtaining land. The following constitute a reasonable expectation: <ul style="list-style-type: none"> ○ Absentee landowner. ○ Non-active farm. ○ Non-cultivated land lacking quality natural resources. ○ Known landowner willing to execute legal documents for option to buy, provide easement or participate. ○ State or federally owned and support for project. • Position in the watershed relative to the problem area. <ul style="list-style-type: none"> ○ Alternatives with local benefit. <ul style="list-style-type: none"> • Must be located in sufficient proximity to influence the problem area. • The relative contribution of peak flow and runoff volume to the problem area from the contributing drainage should exceed some minimum threshold (e.g., 10% of the peak discharge for the design event). ○ Solutions with mainstem benefit <ul style="list-style-type: none"> • RRWMB STAR Value acceptable for funding • Subject to Mainstem Effectiveness Analysis per TSAC Technical Paper No. 11, Figure 26. • Technical feasibility. All of the following must apply to be considered technically feasible. <ul style="list-style-type: none"> ○ Suitable soils and subsurface conditions ○ Physically possible (i.e., topography and hydraulic gradeline work) ○ Operationally feasible (e.g., if dependent upon the operation of other facilities, obtain written agreement; operation is not so complex as to create doubt about realizing anticipated benefits). • Willingness to pay and cost. Those alternatives failing the following will no longer be considered available and capable of being done. <ul style="list-style-type: none"> ○ Local cost component can be no greater than the 75th percentile unit costs for similar projects (e.g., \$ per acre-foot, \$ per acre of wetland restored) evaluated separately for Flood Damage Reduction and Natural Resource Enhancement benefits. ○ Willingness to pay for local benefits received exemplified by acceptance at Preliminary Hearing under 103D. • Existing Technology. Reasonably demonstrated technique, method or approach within the practitioner community. Technique, method or approach should not be untested or considered experimental. There should be some example(s) of application of the technique, method or approach in a similar landscape setting showing some reasonable measures of feasibility and success. • Logistics. The following are necessary to achieve affirmation of logistics. <ul style="list-style-type: none"> ○ Reasonable expectation of obtaining the financial resources necessary for project component construction/implementation (i.e. structure construction/ag. BMP installation). ○ Reasonable expectation of obtaining permits and necessary approvals (i.e., project is not contrary to agency statute or rule, requiring revision of statute or rule) nor requiring special legislative authorization to proceed. ○ Some level of assurance that voluntary participation in applying identified needed BMP’s will take place. ○ Materials necessary for constructing the project are available. • Environmental <ul style="list-style-type: none"> <i>Related to Ability to Implement the Project</i> <ul style="list-style-type: none"> ○ Jeopardy to continued existence of federally listed endangered and threatened species or their critical habitats ○ Potential impact to lands with special protection or management status (e.g., state or national park) ○ Special resource designation (e.g., wild and scenic river; state natural and scientific area) ○ Resource with special protection status under state or federal laws (e.g., outstanding resource value water) ○ Potential impact to lands with special protection or management status (e.g., state or national park) <i>Likely Affecting Alternative Selection Process</i> <ul style="list-style-type: none"> ○ Documented high quality ecological resource (e.g., from Minnesota Biological Survey) ○ Native American or other substantive cultural resources ○ Relative amount of aquatic resources impacted (e.g., wetland acreage)

Point of Concurrence No.	Factor(s) Used to Establish Concurrence Point	Comments
<p>No. 3 – Identify the Preferred Alternative</p>	<p>Using Environmental Factors to Rank Alternatives</p> <ul style="list-style-type: none"> • Determine the Least Environmentally Damaging Practicable Alternative by ranking the relative impacts of the alternatives to the <i>aquatic ecosystem</i>. • Use the relative ranks to identify the Least Environmentally Damaging Practicable Alternative to the <i>aquatic ecosystem</i>. • Determine the potential impacts of each alternative by ranking the relative impacts of the alternatives to other resources including protected species, water quality and terrestrial. • If you select an alternative other than the Least Environmentally Damaging Practicable Alternative to the <i>aquatic ecosystem</i> justify why (e.g., impact to terrestrial or Threatened and Endangered Species). • Demonstrate sequencing based on the process used to evaluate the practicability of the alternatives and selection of the preferred alternative. <p>Using Additional (Social, Economic and Feasibility Factors) to Rank Alternatives</p> <ul style="list-style-type: none"> • Land availability (How challenging will it be to acquire the needed property to meet the project purpose(s) and need) • Cost of total project (project component costs should be know as well for purposes of downsizing the project to reduce project total cost) • Public acceptance (what is the project acceptance of landowners up and down gradient from project area) • Legal/political issues • Other permit concerns • Technically feasible <p>Project Purpose: After the environmental and technical analysis and related issues are identified and project modifications are made to satisfy these concerns can the project purpose still be met?</p>	<p>The Preliminary Engineering analysis is expected to be functional in nature, completed for each of the alternatives subject to detailed analysis, and should include at a minimum:</p> <ul style="list-style-type: none"> • Identify Location and Characteristics of Primary Project Features • Describe Proposed Operation • Complete Functional Analysis <ul style="list-style-type: none"> ○ Change in Peak Flow at: <ul style="list-style-type: none"> ▪ Project Location ▪ Damage locations ▪ Subwatershed Outlet ▪ Regional Assessment Locations ▪ Nearest Mainstem Population Center ○ Change in annual runoff volume at: <ul style="list-style-type: none"> ▪ Damage locations ▪ Subwatershed Outlet ▪ Regional Assessment Locations ▪ Nearest Mainstem Population Center ○ Change in water surface elevation at: <ul style="list-style-type: none"> ▪ Damage locations ▪ Subwatershed Outlet ▪ Regional Assessment Locations ▪ Nearest Mainstem Population Center <p>The initial environmental analysis is expected to be “screening” in nature for use now in completing the 404(b)(1) consistency analysis. The analysis is to be completed for each of the alternative subject to detailed analysis, and should include at a minimum:</p> <ul style="list-style-type: none"> • Quantify Physical Alteration to the Aquatic Resource <ul style="list-style-type: none"> ○ Change in wetland acreage ○ Change in riverine habitat ○ Modification of geomorphic flows and stream stability ○ Modification in riparian flows ○ State aquatic species of special concern ○ Federally listed threatened and endangered species • Quantify Physical Alteration to the Terrestrial Resource <ul style="list-style-type: none"> ○ Change in acres of native prairie ○ Change in acres of woodlands • Quantify Physical Alterations to Geological Formations <ul style="list-style-type: none"> ○ Impacts to calcareous fens ○ Impact to rich fens • Change in Water Quality <ul style="list-style-type: none"> ○ Use annual runoff volume to estimate change in total suspended solids load ○ Use annual runoff volume to estimate change in total phosphorus load ○ Assess likelihood of causing or contributing to water quality standards exceedance • Identify Relative Progress toward NRE Goals Identified within the WMP

		<p>Note: The use of a ranking system or some other defensible method (for example Minnesota Routine Assessment Method or MNRAM) is preferred for describing and documenting the advantages and disadvantages of the alternatives subject to detailed analysis. Reasonable methods which can be defended and described are acceptable. These may include un-weighted numeric scoring, weighted numeric scoring, the use of plus or minus or similar methods.</p> <p>Use a formal ranking system based upon the anticipated impacts with equal weight assigned to each aquatic resource category (see <i>Project Implementation Process</i> for a description of the ranking methods). The ranking process will consist of:</p> <ul style="list-style-type: none">• Rank the potential adverse and beneficial impacts of the alternatives with regard to <i>aquatic ecosystem</i> for:<ul style="list-style-type: none">○ Shellfish and fish habitat○ Wetland impacts○ Riparian areas• Rank the potential adverse and beneficial impact of the alternatives with regard to terrestrial habitats and species for:<ul style="list-style-type: none">○ Grasslands○ Woodlands• Rank the potential adverse and beneficial impacts of the alternatives with regard to Threatened and Endangered species and Species of Special Concern<ul style="list-style-type: none">○ Presence / absence of species○ Presence / absence of critical habitats○ Potential for jeopardy of species or habitats if present• Rank the potential adverse and beneficial impacts of the alternatives with regard to water quality.<ul style="list-style-type: none">○ Potential to cause or contribute to violations of a water quality standard○ Consistency with the nondegradation provision of the Clean Water Act
--	--	--

Point of Concurrence No.	Factor(s) Used to Establish Concurrence Point	Comments
<p>No. 4 –Permit Application, Impact Mitigation During Design and Documentation of 404 (b)(1) Analysis</p>	<p>Applies to site-specific design modifications of the project features to avoid and minimize adverse impacts preferentially to the <i>aquatic resource</i>. Can include the site-specific design modifications to avoid and minimize adverse impacts to other resources. The mitigation detail shall be formally stated and identified within the U.S. Army Corps of Engineers Individual Permit or other applicable Environmental Review documents.</p> <ul style="list-style-type: none"> • Analyze Consistency with the 404(B)(1) Guidelines. <ul style="list-style-type: none"> ○ Aquatic ecosystem resources ○ Terrestrial Habitats and Species ○ Surface water quality ○ Threatened and Endangered Species and Critical Habitats 	<p>This analysis may be completed by the applicant and provided to the U.S. Army Corps of Engineers for their independent review prior to use or completed by the U.S. Army Corps of Engineers. Submission to the U.S. Army Corps of Engineer's by the applicant in no way obligates the U. S. Army Corp of Engineers to accept or use the analysis. The U. S. Army Corp of Engineers however, may use the information provide as a base for their independent analysis.</p> <p>The 404(b)(1) consistency analysis is expected to be based on the environmental analysis completed during Step 3, with site specific modification and input from the environmental review process (if one was completed). The 404(b)(1) consistency analysis consists of evaluating and ranking each alternative subject to detailed environmental analysis, including the preferred alternative, relative to the:</p> <ul style="list-style-type: none"> • Potential adverse impact to aquatic ecosystems based on ranking analysis • Potential to cause or contribute to violations of State water quality standards • Consistency with water quality non-degradation provisions • Demonstrating a lack of jeopardy to continued existence of federally listed endangered and threatened species or their critical habitats • Documenting deliberate sequencing for the selection of the desired alternative and provide for mitigation of unavoidable impacts to aquatic resource <p>Documenting sequencing is expected to come from Concurrence Point No. 3. The consideration and use of mitigation measures, adaptive management or monitoring can be included in this analysis.</p>

the recommendations of TSAC Paper No. 11.

The BRRWD anticipates using two approaches to: 1) assess and summarize the impacts to aquatic and terrestrial resources; 2) identify the Least Environmentally Damaging Practicable Alternative; and 3) assess the ability of each alternative to provide the intended benefits. Using two independent approaches increases the certainty that the Least Environmentally Damaging Practicable Alternative is identified (see **Section 6.6.3.2** for a description of the approaches). The actual quantified impacts will form the basis for both approaches.

Desirable characteristics of any approach used to summarize impacts will include the ability to:

- Reflect the true “direction” of the impacts (i.e., a beneficial impact to a resource is reflected by a positive value, and an adverse impact reflected by a negative value);
- Reflect the true magnitude (severity) of the impacts. For example, a large positive value reflects greater beneficial impact to a resource than a smaller positive value.
- Compare and sum impacts across resource types. Each resource (e.g., wetlands, aquatic habitat) impacted should be treated in a consistent manner so no resource is given more weight than another in the determination of the least environmentally damaging alternative.

6.6.3.2 Description of the Approaches

The two approaches are simple ranking and scaled scoring. A summary of each approach follows.

- Simple Ranking - The simple ranking approach consists of assigning a value of 1 to the alternative with the least impact and a value of 8 to the alternative with the greatest impact for each resource. The potential impact to aquatic resources is based on summing the ranks across several resource types:
 - Fish and aquatic habitat in the specific river or stream where the project will be constructed;
 - Fish and aquatic habitat downstream of the river or stream where the project will be constructed;
 - Riparian areas;
 - Wetland acreage directly impacted (by fill) by the project; and
 - Wetland acreage indirectly impacted by the project.

A separate evaluation of the water quality impacts and terrestrial impacts is anticipated.

The alternative with the lowest overall sum is the alternative with the Least Environmental Impact. The primary disadvantage of the simple ranking approach is the failure to portray the direction and magnitude of the impact. Using a simple (positive) rank fails to provide an indication of whether the impact is beneficial (positive) or adverse (negative).

Assigning a simple rank also fails to reflect the magnitude of the impact since the ranks are 1-8 regardless of the actual quantity of impact.

- Scaled Scoring - The scaled scoring approach uses the actual impact values. The difference between the least and greatest impacts is computed. These impacts are then scaled using the difference between the least and greatest impacts to a predetermined number of impact units (in this case, ten impact units). This approach essentially “scales” the impact to a consistent range. The scaled scores can then be added across resource types, giving equal weight to each resource. The primary advantage of the scaled scoring approach is the ability to portray both the direction and magnitude of the impact. Beneficial impacts are represented by positive values and adverse impacts are represented by negative values. The approach also reflects the magnitude of the impact (just scaled to 10 impact units). The potential impact to aquatic resources came from summing the scaled scores across several resource types:
 - Fish and aquatic habitat in the specific river or stream where the project will be constructed;
 - Fish and aquatic habitat downstream of the river or stream where the project will be constructed;
 - Riparian areas;
 - Wetland acreage directly impacted (by fill) by the project; and
 - Wetland acreage indirectly impacted by the project.

The potential impact to terrestrial resources is based on summing the scaled scores for grassland and woodland habitats. Summing the scaled scores for all resources provides an index of the alternative with the least environmental impact (i.e., the alternative with the lowest overall score or sum of the ranks).