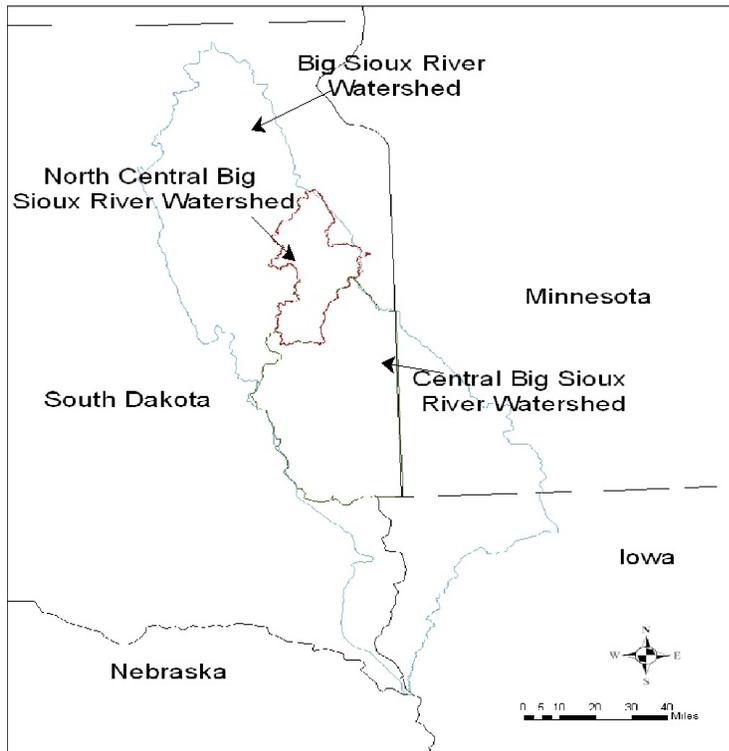


BIG SIOUX RIVER WATERSHED PROJECT



The Big Sioux River Watershed Project (Project) is a 10-year implementation strategy addressing the total maximum daily loads (TMDLs) which resulted from the assessment studies along the North-Central and Central Big Sioux River Watersheds (Figure 1). The Project will restore and/or maintain the water quality of the Big Sioux River (BSR) and its tributaries to meet its designated and beneficial uses. The Assessments completed by East Dakota Water Development District (EDWDD) covering the North Central and Central portions of the BSR main stem and tributaries from Watertown to the north and Brandon to the south as failing to meet designated uses due to impairments from total suspended solids (TSS), fecal coliform bacteria (FCB), and trophic state index (TSI) (Figure 2). Twenty-six (26) separate TMDLs were developed for these segments (Figure 2 and Table 1). This project will use a variety of best management practices (BMPs) to address the impairments listed below in Table 1. The guidelines in this book are intended to provide cooperating entities with information specifying the rule of the BMP programs.

Activities to reduce current sediment and bacteria loadings will target sub-watersheds within the project area. An information and education campaign will be conducted to keep the public informed on project progress and to provide information on BMPs and water quality.



An advisory ranking committee comprised of one representative from each participating conservation district and EDWDD will prioritize BMPs submitted for funding. EDWDD will have the final voice on funding decisions, but will take advice from the advisory ranking committee.

Figure 1. Map of the North-Central and Central Big Sioux Watershed area.

The committee will meet in person or via phone at regularly schedules times to discuss applicants for BMPs under this project.

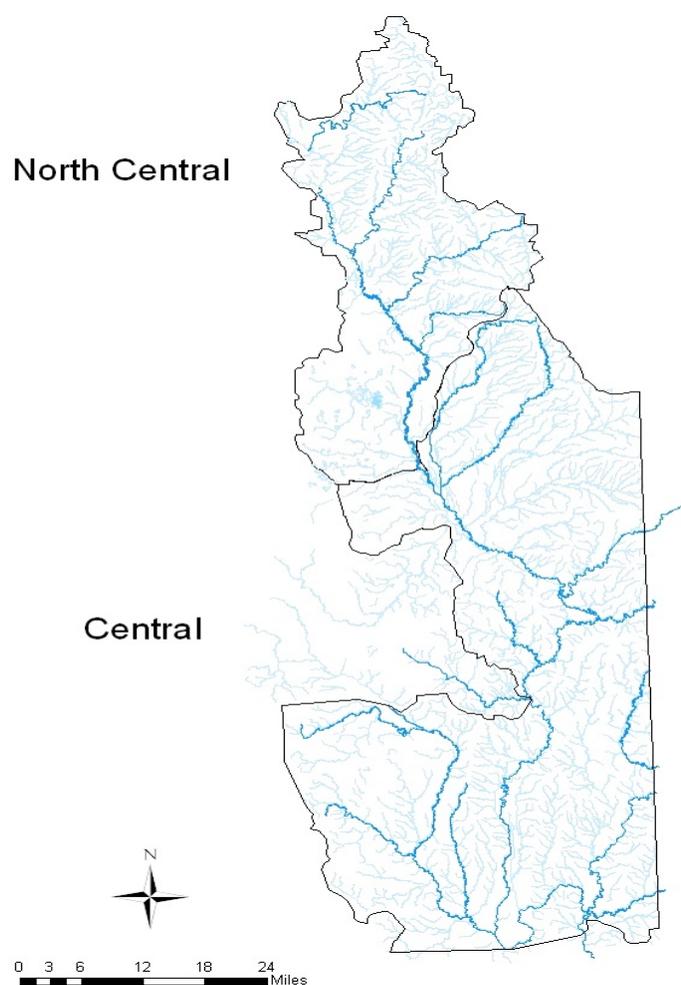


Figure 2. North Central and Central Big Sioux River showing segments with TMDLs.

Table 1. North Central and Central Big Sioux River segments with TMDLs and reduction needed to achieve TMDL.

Location	Segment	Impairment	Reduction Needed (%)
Central	Beaver Creek	TSS	20
	Split Rock Creek	TSS	62
	Brookings to I-29	TSS	2
	I-29 to Near Dell Rapids	TSS	5 grab samples
	SF WWTF to above Brandon	TSS	30
	Spring	FCB	45 (overall*)
	Skunk	FCB	95 (high)
	Bachelor	FCB	84 (high/moist)
	Beaver	FCB	86 (high/moist)
	Flandreau	FCB	91 (high/moist)
	Jack Moore Creek	FCB	82 (high/moist)
	BSR near Dell Rapids to below Baltic	FCB	29 (high)
	North Deer Creek	FCB	34 (high/midrange)
	Pipestone Creek	FCB	89 (high/moist), 87 (dry/low)
	BSR SF WWTF to above Brandon	FCB	76 (high/moist), 39 (dry)
	Six Mile Creek	FCB	12 (high/moist)
	Split Rock Creek	FCB	96 (overall)
North Central	BSR Lake Kampeska to Willow Creek	FCB	33 (high)
	BSR Willow Creek to Stray Horse Creek	FCB	30 (moist/dry)
	Willow Creek	FCB	78 (high), 4 (dry)
	Hidewood Creek	FCB	59 (high)
	BSR Stray Horse Creek to near Volga	FCB	2 grab samples
	Stray Horse Creek	FCB	99 (high), 14 (mid range/dry)
	Peg Munky Run	FCB	38 (overall)
	East Oakwood Lake	TSI, total phosphorus	61
	West Oakwood Lakes	TSI, total phosphorus	71

* description of what hydrologic conditions the reduction applies to.

ANIMAL WASTE MANAGEMENT SYSTEMS PROGRAM

The Animal Waste Management Systems (AWMS) Program is designed to reduce FCB loadings entering the BSR and its tributaries from animal feeding operations (AFOs) in the Project area. This will be accomplished by upgrading or relocating existing AFOs.

Program Criteria

1. All operators interested in the AWMS program must provide adequate information so that an application form can be completed. This application form will be used to rank all applicants to make funding decisions.
 - 1.1 The application form described above is located near the end of this document. When filling out the application form, please read all information, including the guide sheet associated with the application form.
 - 1.2 These application forms must be turned into EDWDD by April 30 for consideration. The date of April 30 is for the first year of funding and subsequent funding years may have a different due date. All entities will be notified of deadlines in subsequent years. Once all applications are received, a decision will be made within 30 days.
2. To be considered for funding, the AFO must not currently hold the South Dakota confined animal feeding operation (CAFO) General Permit. The State CAFO General Permit is required by facilities classified as CAFOs or by those facilities forced to acquire the permit as a result of legal action.
 - 2.1 AFOs not currently possessing the State CAFO General Permit will be allowed to make an application for the permit during the upgrading process.
3. Animal feeding operations must be existing facilities.
 - 3.1 Funding will cover partial or full upgrades to the existing facilities or moving expenses to move the feeding operation to a less environmentally sensitive location.
 - 3.1.1 For facilities currently operating in an environmentally sensitive area (creek bottom, over an aquifer, etc), a portion of the cost share will cover restoration of the original site. Restoration activities will include but are not limited to seeding and/or reshaping of stream/creek banks as is applicable.

- 3.1.2 For facilities moving from an environmentally sensitive area, if current operations have buildings, this program will provide reimbursement for the foundation, floor, drainage system, or building structure (walls, roof, etc.) of the previous facility and/or will provide funds for the relocation of the barn. An option may be to pay the operator for the value of the existing barn if moving it is not an option.
4. Animal feeding operations must be located in close proximity to river and/or stream segments identified as impaired in the BSR Watershed (Figure 2 and Table 1).
 - 4.1 Animal feeding operations located directly on a river and/or stream segment (within a mile) identified as impaired in the BSR Watershed will receive a higher priority than those located greater than one mile from a river and/or stream segment identified as impaired.
 - 4.2 Animal feeding operations located on a segment with the designated use of immersion recreation will receive the highest priority. These segments include the BSR near Dell Rapids to below Baltic and from the Sioux Falls Waste Water Treatment Facility (SF WWTF) to above Brandon and the tributaries of Split Rock and Pipestone Creek within the Central BSR Watershed .
5. Under the AWMS program, engineering designs and upgrades will be cost shared with operators.
 - 5.1 For the engineering designs, the operator will be responsible for 25%, East Dakota Water Development District (EDWDD) will be responsible for 10%, and the 319 grant will cover 65% of the total cost.
 - 5.1.1 EDWDD will be under contract with Eisenbraun and Associates for all initial engineering designs. In the future, EDWDD may use the South Dakota Association of Conservation Districts (SDACD) Nutrient Management Team for engineering designs as they become available.
 - 5.1.2 The operator will be required to provide 25% of the anticipated costs to EDWDD for the engineering designs before any engineering work will begin on their property. An estimated total cost of the engineering designs will be provided to the landowner. If the actual cost varies from the estimate, EDWDD and the landowner will come to an agreement regarding the final costs of the engineering designs.
 - 5.1.3 Engineering designs can be either conventional or alternative, depending upon operator interests.

- 5.1.4 EDWDD and/or an SDACD representative and/or the local soil conservation district representative will work with the landowner and the engineering firm to develop engineering designs that the landowner will be happy with and will meet the goals of the Project.
- 5.2 For construction upgrades, the operator will be responsible for 25% and the 319 grant will cover 75% of the total cost, not to exceed \$90,000. The 319 grant will not cover more than \$90,000 for any one upgraded facility and the operator will assume greater than 25% of the total cost if their facility upgrade requires a total cost of greater than \$112,500.
 - 5.2.1 A mixture of conventional and alternative upgrades have been proposed, depending upon the operator interests.
 - 5.2.2 In initial phases of this Project, Eisenbraun and Associates will be used to oversee all construction upgrades. They will be under contract with EDWDD and will handle the bidding of the construction upgrades and if possible the upgrades will be bid upon in bundles of 2 or more. As the SDACD Nutrient Management Team is able to work on this Project, they may be used to oversee construction upgrades also.
 - 5.2.3 Upgrades which will qualify for reimbursement include, but are not limited to waste storage facilities, roof runoff structure (rain gutters), clean water diversions, sediment ponds, waste treatment lagoons, wastewater treatment strips (filter strip), and vegetated treatment areas (VTAs). This project can pay for the same items that the USDA EQIP program can pay for. Waste storage facilities will be required to hold 270 days of manure. See attachment A for further details.
 - 5.2.4 If a facility is moving because of a poor environmental location that it is currently in, the operator may be compensated for existing structures at the abandoned lot. The reimbursement will only cover the replacement of existing features and if existing features can be moved, they are to be moved rather than replaced. (Attachment A)
 - 5.2.5 If an operator is moving and expanding, for example from 250 head to 500 head, the items which will qualify for reimbursement for moving will include those items which are capable of handling the original 250 head. Items which will accommodate the expansion will not be covered. (Attachment A)
- 6. If an animal feeding operation is planning to relocate, all applicable permits must be obtained by the landowner. The County Zoning Commission must approve the move of the animal feeding operation.

7. If the animal feeding operation is planning to relocate, the operator will have to formally agree, in writing, that the previous facility will be abandoned and a deed, covenant, or restriction will be placed on the property to ensure that a feeding facility does not return to the location.
 - 7.1 The operator will agree to reseed all abandoned feed lots and perform any other reclamation activities the operator and EDWDD agree upon when abandoning an old site.
8. The operator will be required to sign a contract with EDWDD stating that he/she will complete all construction activities the two parties agree upon.
 - 8.1 The operator will be required to pay 50% of their portion (25% of total cost) up front to EDWDD before any construction activities will begin. The remaining balance owed to EDWDD by the operator will be collected as expenses are incurred by EDWDD. The initial 50% fronted by the operator will equate to 1/8 of the total cost of the construction upgrade. Once that money has been matched by the Project funds, the operator will be expected to make regular payments to EDWDD on the construction upgrades until all work is completed. EDWDD will provide the operator with a detailed statement identifying their portion of the funds needed to complete this project.
 - 8.2 The operator will be given 30 days to make payments once an invoice has been sent out. The invoice will detail the operators portion of the payment expected. If the operator has any questions regarding the invoice, he/she will be expected to notify EDWDD immediately.
 - 8.3 If the operator decides to abandon the construction upgrade, he/she will be required to repay EDWDD all monies previously paid by the district.
9. The operator will be required to follow a nutrient management plan which will be provided by EDWDD or the firm overseeing the construction upgrades.
 - 9.1 EDWDD will contract with a third party to provide nutrient management plans for the animal waste management system upgrades if needed.
10. A representative of SDACD, the local conservation district, and/or EDWDD will meet regularly with the operator receiving funds to ensure that the construction upgrad process stays on tract.
11. EDWDD reserves the right to perform an inspection of the constructed upgrade upon adequate notice to the operator. The operator will be expected to maintain the facility and follow the nutrient management plan provided by EDWDD for the life expectancy of the upgrade. If the operator decides to apply for a State CAFO

General Permit, SD DENR will be responsible for ensuring that the operator follows his/her nutrient management plan.

RESPONSIBILITIES OF THE SOUTH DAKOTA ASSOCIATION OF CONSERVATION DISTRICTS (SDACD)

1. SDACD will be responsible for promoting the Animal Waste Management Systems (AWMS) Program. They will act as the lead contact for operators requesting information on this program.
 - 1.1 SDACD will be responsible for ensuring that the operators understand the program criteria stated in the above section regarding the AWMS program.
2. SDACD will be responsible for obtaining information from the operator to complete an AWMS Program ranking sheet. SDACD will provide the ranking sheets to EDWDD for evaluation. The advisory ranking committee, composed on one representative from each conservation district and EDWDD, will meet on a regular basis to prioritize applications.
3. SDACD will be responsible for providing technical assistance to the operators regarding upgrades to existing animal waste management systems.

RESPONSIBILITIES OF EDWDD

1. EDWDD will be responsible for compiling all Animal Waste Management Systems ranking sheets provided to them by the SDACD.
 - 1.1 All applications will be ranked based on distance to nearest TMDL segment, distance from nearest receiving surface water, length of current filter strip, feedlot watershed area, depth to a useable aquifer, total animal units, and availability of funding by operator. Other criteria used by EDWDD to make decisions regarding funding include the targeted reduction defined for the TMDL of the nearest segment in the Assessment report (Table 1).
2. The advisory ranking committee will meet when needed to prioritize the applicants for the AWMS program. Once prioritized, EDWDD will make the final decision regarding the funding of applicants for this program.
3. EDWDD will be under contract with the engineering firm overseeing the engineering and construction upgrades for this program. EDWDD will also hold a contract with the operator for engineering and construction upgrades. This is discussed further in the above section entitled Program Criteria under the AWMS program.

4. EDWDD will be responsible for tracking the progress of the Animal Waste Management Systems Program and all reporting to the South Dakota Department of Environment and Natural Resources (DENR).
5. EDWDD reserves the right to monitor the upgraded facility for its expected life span. EDWDD will provide adequate notice to the operator before an inspection. If the operator applies for and obtains a State CAFO General Permit, the SD DENR will be responsible for inspecting the records of the operator to be sure he/she is following the nutrient management plan.

THE RIPARIAN AREA MANAGEMENT PROGRAM

The Riparian Area Management (RAM) Program is designed to reduce TSS and FCB loadings within the Project area by ensuring that tracts of land not eligible for a USDA CRP program become protected as riparian buffer areas.

Program Criteria

1. If the land under application is eligible for a USDA CRP program, the landowner is encouraged to seek funding from the USDA. This program is only for land which is not eligible for a USDA CRP program.
2. The land under application must be located on or in close proximity to an impaired river or stream segment (Figure 2 and Table 1).
 - 2.1 Impaired segments which will have a greater priority will be SF WWTF to above Brandon BSR segment, Flandreau Creek, Jack Moore Creek, Bachelor Creek, Split Rock Creek, Beaver Creek, Pipestone Creek, and Skunk Creek. These TMDL segments require significantly large reductions in fecal coliform and/or TSS to meet the standards for designated uses.
3. The rental rate as established by the county USDA FSA office for the CRP program will be used for payment under the RAM Program.
 - 3.1 Current rental rates are as follows: Brookings County - \$60/acre, Moody - \$66/acre, and Minnehaha - \$66/acre for acreage along permanent streams.
4. There are two ways that land can be enrolled in the RAM Program.
 - 4.1 If a landowner has applied for a USDA CRP Program and a small portion of land does not qualify, the landowner may apply for the RAM Program.

4.1.1 Land not eligible for USDA CRP programs may be covered by this program as long as less than 35% of the total amount of land enrolled in both programs is under application for the RAM Program. See below for a further explanation.

4.1.1.1 The amount of land under application for the RAM Program must be adjoining land which is currently under application for a USDA CRP program and must not be more than 35 percent of the total amount of land under application for a USDA CRP program and the RAM Program.

4.1.1.2 The length of time for a RAM contract under this scenario will follow the length of time for the USDA CRP contract.

4.1.1.3 For example, in Figure 3, the landowner is applying to enroll 7 acres into a USDA CRP program and an extra 2 acres of adjoining land does not meet the requirements of the USDA CRP program. The 2 acres can be funded by the RAM Program as long as it is not more than 35% of the total 9 acres. If the USDA CRP contract is for 15 years, then the RAM contract would also be held for 15 years.

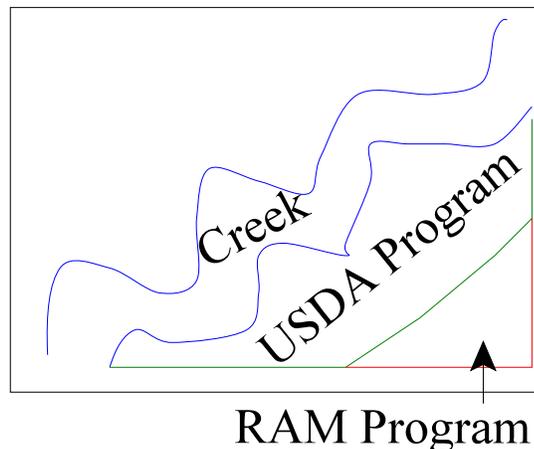


Figure 3. Diagram of hypothetical land under application for the RAM Program.

- 4.2 Land which does not qualify for a USDA CRP program because of current conditions of the land may be enrolled in the RAM Program.
 - 4.2.1 For example, if a tract of land is not eligible for a conservation practice because of the amount of tree canopy, this land can apply for the RAM Program.
 - 4.2.2 The length of the contract time for lands enrolled under these circumstances will be 15 years.
 - 4.2.3 Payment rates for land under this circumstance will follow the local County USDA rates, as noted above in Section 3.1 under Riparian Area Management program criteria.
5. The landowner will be required to follow a conservation plan for the tract of land enrolled in the RAM Program. This will be provided to the landowner by the conservation districts.
6. The landowner will be assessed penalties by the holder of the RAM contracts if the landowner is found to be not following the conservation plan for the land under contract.
7. Lands which are currently grazed or cropped up to the river or stream bank will be a high priority. Lands which are currently maintained as a riparian area will be a lower priority.

RESPONSIBILITIES OF THE CONSERVATION DISTRICTS

1. The conservation districts will be responsible for promoting the RAM Program. They will act as the lead contact for landowners requesting information about this program.
 - 1.1 The conservation districts will be responsible for ensuring that the landowners are aware of the program criteria for the RAM Program which are stated in the section above.
2. The conservation districts will be responsible for obtaining information from the landowner to complete a RAM Program ranking sheet.
 - 2.1 Please read all information relating to the ranking sheet for the RAM program, including the guide sheet associated with the ranking sheet.
3. The conservation districts will appoint a member of the advisory ranking committee to discuss application for the RAM program. This advisory ranking committee will

meet on a regular basis as needed to discuss applications. After this meeting, the conservation districts will turn in all ranking sheets to EDWDD.

4. The conservation districts will hold RAM Program contracts and disburse annual rental rates to the landowner in their district.
5. The conservation districts will provide the landowner with a conservation plan for the land enrolled in the RAM Program. This conservation plan will be similar or the same as the conservation plan for the land enrolled in the adjoining USDA CRP program (if applicable).
6. The conservation districts will be responsible for annual inspection of the land enrolled in the RAM Program. If the conservation districts find that the land owner is not following the conservation plan, they will take appropriate actions.
7. The conservation districts will be responsible for submitting a request for payment for the RAM Program and reimbursement of staff dollars to EDWDD. EDWDD will process payment request once monthly.

RESPONSIBILITIES OF EDWDD

1. EDWDD will be responsible for compiling all RAM Program ranking sheets submitted by the conservation districts. Applications will be ranked based on distance to nearest impaired segment, amount of land to be enrolled, and amount of time land will be enrolled. The reduction needed to meet the TMDL as described in the Assessment Report will also be used in the decision making process (Figure 2 and Table 1).
2. EDWDD will be responsible for making decisions regarding the awarding of funds to RAM Program applicants. A decision will be made within thirty (30) days once the advisory ranking committee has met to prioritize the applications.
3. EDWDD will be responsible for tracking all RAM Program progress and reporting to DENR.
4. EDWDD will be responsible for reimbursing funds to the conservation districts once monthly as request for reimbursements are made.

THE BIG SIOUX RIVER CONSERVATION EASEMENT PROGRAM

The Big Sioux River Conservation Easement Program is designed to reduce TSS and FCB loadings in the Project area. Conservation easements will be used to restrict or exclude

livestock grazing and other farming practices in the riparian area along the BSR and its named tributaries.

Program Criteria

1. Conservation easements will be sought along the mainstem of the Big Sioux River and named tributaries which are currently impaired.
2. Conservation easements will be held by Northern Prairies Land Trust (NPLT).
3. The land under application must be adjacent to or in close proximity to an impaired segment of the Big Sioux River or named tributaries (Figure 2 and Table 1).
 - 3.1 Segments which require significantly large reductions in fecal coliform and/or TSS to meet the standards for designated uses will have a greater priority and include: from the SF WWTF to above Brandon BSR, Flandreau Creek, Jack Moore Creek, Bachelor Creek, Split Rock Creek, Beaver Creek, Pipestone Creek, and Skunk Creek.
4. The land offered must currently be used as grazing land for livestock or must currently be cropped up to the stream bank. Land which is currently maintained as a riparian area will be considered a lower priority.
5. Easements will be held for a minimum of thirty (30) years or perpetually (permanent).
6. Easements can be placed on lands currently under a USDA CRP contract.
7. Riparian buffers developed by the easement will be a minimum of seventy-five (75) and a maximum of one hundred-fifty (150) feet from the river or stream bank.
 - 7.1 The width of the buffer to be enrolled will be used to calculate the acreage enrolled. The total acreage enrolled (calculated as described above) will then be used to square off the riparian buffer. When squaring off, the riparian buffer may be less than seventy-five (75) feet and may be greater than one hundred-fifty (150) feet in some locations..
8. The landowners will be required to follow a conservation plan which will be provided by NPLT.
 - 8.1 Under the conservation plan, management of the land under the conservation easement will be outlined. Some type of maintenance on the vegetation will be required.

9. The payment schedule for land enrolled in the conservation easement is presented in Table 2.

- 9.1 Briefly, payment will be a percentage of the Adjusted Assessed Land Value (AALV). An assessed value of the property will be obtained and corrected with a multiplier unique to each county. This multiplier is developed by the US Fish and Wildlife Service for use in their easements. The percentage of AALV listed in Table 2 corresponds to amount of time the land is enrolled in the Conservation Easement Program. The easement will restrict some property uses, as outlined above. Any other uses will be retained by the property owner.

Table 2. Payment schedule for conservation easements

Duration	Time left on USDA contract (if applicable)	Percentage of AALV
30 year		80
30 year	< 5 years	75
30 year	6-9 years	70
30 year	> 10 years	65
perpetual		95
perpetual	< 5 years	90
perpetual	6-9 years	85
perpetual	> 10 years	80

RESPONSIBILITIES OF THE CONSERVATION DISTRICTS

1. The conservation districts will assist in promoting the BSR Conservation Easement Program. The district staff will act as a primary contact for landowners requesting information. The conservation districts will forward information about interested landowners to NPLT.

RESPONSIBILITIES OF NORTHERN PRAIRIES LAND TRUST

1. NPLT will be responsible for contacting and providing information to landowners regarding conservation easements.

2. NPLT will be responsible for providing an Application for Conservation Easement to landowners.
3. NPLT will be responsible for conducting an initial property visit, recording property information, and providing a Preliminary Project Report (PPR) to EDWDD.
4. NPLT will provide a preliminary valuation per acre, the approximate number of acres, and a preliminary determination of NPLT Primary and Long-Term Cost Calculations to EDWDD.
5. NPLT will provide a draft conservation work plan to EDWDD if the PPR is approved.
 - 5.1 The draft conservation work plan will outline the measures to be completed by the property owner(s).
6. NPLT will provide the property owner(s) with an outline of the requirements of the work plan and information on potential funding/cost sharing programs. NPLT will also provide a model conservation easement to the property owner(s).
7. NPLT will be responsible for developing the work plan the property owner(s) must follow prior to finalizing the easement and preparing the final conservation easement.
8. NPLT will be responsible for all negotiations with the land owners pertaining to the specific conditions of the conservation easement.
9. NPLT will provide a final copy of the conservation easement to EDWDD for approval.
10. NPLT will hold the conservation easements and will be responsible for annual monitoring and enforcement.
11. NPLT will be responsible for requesting funds for the conservation easement program to be made available on the closing date.
 - 11.1 NPLT will be responsible for submitting payment request to EDWDD at least fifteen (15) working days in advance. EDWDD will process payment requests on the fifteenth and last day of each month.
12. Payments made to the landowner for the conservation easement can be made in one lump sum on the date of closing or may be made in two payments.

- 12.1 If the two payment option is chosen by the landowner, one payment will be made available on the date of closing and the second payment will be made the following year once the first annual inspection has occurred. Once NPLT has determined that the conservation plan has been followed, the second payment will be made.

RESPONSIBILITIES OF EDWDD

1. EDWDD will be responsible for filling out a ranking sheet for all applicants. EDWDD will use the ranking sheet to make decisions regarding funding of applicants.
2. EDWDD will be responsible for reviewing applications. EDWDD will make a **recommendation to purchase or not purchase** a conservation easement based upon the application, PPR provided by NPLT, and location of the proposed easement.
3. EDWDD will make decisions to purchase conservation easements within thirty (30) days once the PPR has been obtained by EDWDD and the ranking sheet has been completed by EDWDD. EDWDD will notify NPLT of its decision within five (5) days.
4. EDWDD will review the final conservation plan for each conservation easement and give NPLT approval/disapproval.
 - 4.1 If EDWDD does not approve of the final conservation plan, NPLT, EDWDD, and the landowner will negotiate revisions to the final conservation plan.
5. EDWDD will be responsible for tracking the Big Sioux River Conservation Easement Program progress and reporting to DENR.
6. EDWDD will process requests for funding on the **fifteenth and last day of each month**.

FENCING AND ALTERNATE WATER SOURCES

To help landowners establish fencing and alternate watering sources for areas of land under either of the riparian buffer programs mentioned above, EDWDD and the conservation districts are offering partial funding for landowners enrolling in the BSR Conservation Easement Program or Riparian Area Management Program.

Program Criteria

1. Fencing and alternate water source funding will be offered to landowners enrolling riparian buffers in the Big Sioux River Conservation Easement Program or RAM Program.
2. The costs of installing fencing or water sources will be shared by EDWDD (25%), the conservation districts (50%), and the landowner (25%).
 - 2.1 The US Fish and Wildlife Service has offered fencing material to landowners interested for free of charge. The requirements of the free fencing materials will need to be obtained from the US Fish and Wildlife Service.
3. The landowner will be responsible for submitting receipts for materials for reimbursement to the conservation districts. These receipts must be official receipts from vendors.
4. Information regarding landowners interests in the fencing and alternate water source program must be given to EDWDD before any BMPs can be installed.

RESPONSIBILITIES OF THE CONSERVATION DISTRICTS

1. The conservation districts will be responsible for promoting the program and act as the lead landowner contact.
2. The conservation district will be responsible for providing technical assistance to landowners.
3. The conservation districts will be responsible for providing applicant information to EDWDD for potential funding.
 - 3.1 This information must be provided to EDWDD before any work is to be implemented on the landowner's property.
4. The conservation districts will be responsible for reimbursing landowners for applicable expenses related to materials for fencing or water source installation.
 - 4.1 Conservation district staff will be responsible for submitting a request for reimbursement for the fencing and alternate water source program and staff dollars to the Moody County Conservation District (MoCCD). The MoCCD will be the conservation district holding the Conservation Commission Grant which will support the efforts of the Project. The MoCCD will be responsible for submitting a request for payment to EDWDD for EDWDDs portion of the approved materials and/or reimbursement of conservation district staff time. EDWDD will process the request once monthly. The MoCCD will be

responsible for tracking all conservation district funds related to the Conservation Commission Grant.

5. The conservation districts will be responsible for monitoring the practices installed annually for the life of the practice. If the landowner is found not maintaining the practice properly, the conservation district will take appropriate action.

RESPONSIBILITIES OF EDWDD

1. EDWDD will be responsible for making decisions regarding awarding funds (within thirty (30) days of notice to EDWDD) to applicants applying for the Fencing and Alternate Water Source Program.
2. EDWDD will be responsible for tracking the Fencing and Alternate Water Source Program progress and reporting DENR.
3. EDWDD will be responsible for reimbursing funds to the conservation districts when requests are made. EDWDD will process reimbursement request once monthly.

ATTACHMENT A

EPA Region VIII -NONPOINT SOURCE SECTION 319(h)

POLICY PAPER # 2

July 20, 1994

ISSUE: 319(h) NPS Funding for Animal Feeding and Waste Systems

BACKGROUND

EPA Region VIII has developed guidelines to assist State water quality agencies and nonpoint source project sponsors in the planning, design, and implementation of confined animal feeding and waste management systems. The following information applies to dairies as well as feedlots.

The first portion of this guideline applies to the improvement of existing animal feeding facilities as well as the relocation of a feeding operation to a more acceptable site. The last portion of this guidance applies only to relocation of the animal facilities.

COST SHARE

Due to the high costs associated with reducing the pollution potential from confined animal feeding facilities, Region VIII encourages the State water quality agencies and project sponsors to be prudent in planning, designing, installing and cost sharing the proposed facilities.

Cost share should be limited to the minimum required in order to protect water quality and meet the best management practice (BMP) specifications.

All components listed as authorized in the USDA -Stabilization and Conservation Service (ASCS) national 1-ACP Guidance, WP4 Agricultural Waste Control Facilities (attached) or future revisions are eligible for Section 319 NPS funding. State ASCS Office revisions to 1-ACP WP4 can also be used to determine funding eligibility under Section 319. The State ACP WP4 document should be reviewed to determine how the State has defined paragraph G and any subsequent sections of the National guidance.

Any expenses that are incurred to improve livestock handling, to increase production, or other improvements not related to achieving water quality objectives will be assumed by the producer and not used as matching funds following the regulations outlined in WP4.

Cost sharing for buildings will be limited to the foundation, floor and drainage components where they are necessary for pollution control. In special situations, additional cost sharing may be negotiated, as outlined below. The balance of the building expenses will be the responsibility of the producer.

Additional eligibility and/or waivers to the WP4 requirements can be granted by the lead State NPS agency or if needed, the EPA project Office in conjunction with the State NPS Coordinator, on a site by site basis. A written justification as to the rationale or need for the waiver will be required.

ON-SITE IMPROVEMENTS VERSUS RELOCATION

It is important to establish priorities for funding the improvement or relocation of animal feeding operations. Section B1 in Chapter 2 of the "Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters", EPA, January 1993 may be useful for establishing prioritization criteria (Attached). The document also provides animal unit equivalents for different kinds of livestock.

Relocation

Relocation of a confined feeding operation may be a preferred alternative or a more cost effective alternative over the installation of necessary best management practices in an area currently being used. Section 319(h) NPS funding may be used for "Relocation" if the following guidelines are observed:

1. Materials and installation costs for all necessary structures and equipment can be reimbursed in accordance with WP4 and the approved project implementation plan. When feasible/ practical existing equipment and buildings should also be relocated to the new location.
2. The relocation site must be approved by the project sponsors and state water quality agency. Potential impacts on ground and surface water and related environmental concerns at the new site need to be reviewed/assessed. particular care should be taken to avoid adverse impacts to wetlands and other sensitive environmental areas.
3. Section 319(h) funds can not be used to expand the new

facility to handle more animals beyond the capacity'of the original location. The new operation may be expanded; but, the costs of such expansion will be assumed by the producer and can not be used.as match. 4. A legal document prohibiting the future use of the abandoned site for any confined feeding operation is required, unless an agreement specifies that all the best management practices required by the state water quality agency will be installed and maintained properly at the previously abandoned site. This may require a deed restriction or similar use-limiting document. 5. The previously used site must be reclaimed to protect water quality. 6. All required permits for the relocation must have been secured before any EPA funds are paid to the producer.

WASTE MANAGENENT

The Region encourages proper land application of animal waste as a part of a nutrient management plan. EPA funds can be used on a demonstration basis to lease or rent equipment for pond drainage and animal waste application. No EPA funds will be used for the private acquisition of equipment to drain animal waste facilities or for land application.

For watershed projects, it is appropriate for the project sponsor to purchase this equipment or service or other assure it is available to the project participants. Section 319 funds are available to cost share equipment for use by multiple producers.

Animal waste nutrient testing and field soil testing are eligible for Section 319 cost sharing on a demonstra,tion basis or over a restricted time period.

ELIGIBILITY RESTRICTIONS

Facilities having greater than 1,000 animal units are required to be permitted under Section 402 National Pollution Discharge Elimination System (NPDES) . Facilities which are qualified for or under a NPDES permit are not eligible for funding under Section 319(h). In addition, facilities under 1,000 animal units and have been issued a discharge permit by the appropriate State agency or if a notice of violation (NOV) has been issued by EPA or the State, are not eligible for funding under Section 319 (h) .

**PRIORITY EVALUATION WORKSHEET
ANIMAL WASTE MANAGEMENT SYSTEMS**

Operator Name: _____ Phone: _____

Mailing Address: _____

Legal Description of Facility: _____ County: _____

Nearest TMDL Segment*: _____ AGNPS Rating: _____

ANIMALS IN FACILITY: (See Factor Table on Page 4)

TYPE	WEIGHT	NUMBER	FACTOR	NUMBER OF AUs

TOTAL NUMBER OF AU FOR PREDOMINATE ANIMAL TYPE = _____

RATING CRITERIA

RATING POINTS

- (1) Operation is: Existing (no expansion)___ Existing (expanding)_____ (1)
- (2) Distance from nearest TMDL segment: _____ miles _____ (2)
- (3) Distance from nearest receiving surface water: _____ miles _____ (3)
- (4) Length of a filter strip immediately adjacent to source: _____ feet _____ (4)
- (5) Depth to a useable, pumpable aquifer: _____ feet _____ (5)
- (6) Watershed Area (including lots): _____ acres _____ (6)
- (7) Total Animal Units (from above): _____ number _____ (7)
- (8) Funding is: Available___ Pending___ Not Identified___ _____ (8)
- (9) Applying for permit ___Yes _____No _____ (9)

TOTAL RATING POINTS = _____

(Maximum of 115 points)

*Priority will be given to operations which are located near TMDL segments possessing an immersion recreation designated use by the SD DENR. Those segments include Split Rock Creek, Pipestone Creek, near Dell Rapids to below Baltic segment of the BSR, and SF WWTF to above Brandon segment of the BSR.

RATING CRITERIA TABLE:

(1) Reply	Points	(2) Distance	Points	(3) Distance	Points
Existing (No Exp)	10	< 1 Mile	25	< 1/4 Mile	15
Existing (Exp)	5	1 to 1.5 Miles	15	1/4 to 1/2 Mile	10
		1.5 to 2 Miles	10	1/2 to 1 Mile	5
		> 2 Miles	5	> 1 Mile	3
(4) Distance (feet)	Points	(5) Depth to Aquifer	Points	(6) Area (acres)	Points
0 - 100	15	0 to 10 feet	10	Over 15	15
101 - 500	10	10 to 50 feet	5	5 to 15	10
501 - 1500	5	> 50 feet	0	< Five	5
>1500	0				
(7) AU #'s	Points	(8) Funding	Points	(9) Permit	Points
500-1000	5	Available	15	Yes	5
< 500	10	Pending	8	No	0
		Not Identified	0		

Form Completed By: _____

Date: _____

Applicant Signature: _____

Date: _____

**GUIDE SHEET FOR PREPARATION OF
PRIORITY EVALUATION WORKSHEET
ANIMAL WASTE MANAGEMENT SYSTEMS**

HEADING: Complete all requested information to identify the applicant.

LEGAL DESCRIPTION OF FACILITY: Identify the location of the proposed system to the nearest quarter section.

ANIMALS IN PROPOSED FACILITY: List all animals that the system needs to be designed to handle.

Examples:

TYPE - Feeder Cattle, Stock Cows, Dairy Cows, Feeder Pigs, etc.

WEIGHT - Average weight of each type of animal

NUMBER - Total number of each type of animal

FACTOR - The factor from page 4

TOTAL NUMBER OF AU FOR PREDOMINATE ANIMAL TYPE - The sum of the number of animal units for only the predominate type of animal (dairy, beef, swine, poultry, etc). This is the method now used by DENR to determine the size of an animal feeding operation.

(1) OPERATION IS : - This question refers to the livestock operation.

(2) DISTANCE FROM NEAREST TMDL : - What is the **drainage distance** from the nearest TMDL segment to the facility? Refer to the Big Sioux River Watershed Program Guidelines for segments with TMDLs.

(3) DISTANCE FROM NEAREST RECEIVING SURFACE WATER : - What is the **drainage distance** in the direction that runoff would travel to the nearest stream, lake or jurisdictional wetland? These waters may be identified on hydrography maps as the "blue line".

(4) LENGTH OF FILTER STRIP : - What is the distance, in feet, of a natural filter, such as a grass strip, that runoff would travel through prior to being channelized. This filter must be located adjacent to the contamination source, and serve to filter runoff in sheet flow. Concentrated flow such as in a dry draw will not serve as an effective filter. For clarification of what constitutes a filter strip refer to the USDA conservation practice 393 - Filter Strip.

(5) DEPTH TO A USEABLE, PUMPABLE AQUIFER : - What is the depth, in feet, to a shallow aquifer that is used as a water supply, according to the first occurrence map?

(6) WATERSHED AREA : - The size of the area in acres that contributes water which will be contaminated by lot runoff. How many acres of watershed would the management facility have to handle if no clean water were diverted?

(7) TOTAL ANIMAL UNITS : - The sum of Animal Units (AU's) for only the predominate type of animal from the table above.

(8) FUNDING : - This question refers to the availability of money for paying construction costs.

**GUIDE SHEET FOR PREPARATION OF
PRIORITY EVALUATION WORKSHEET
ANIMAL WASTE MANAGEMENT SYSTEMS Cont'd**

(9) PERMIT : -This question refers to the operators intentions for a permit. If he plans to apply or is in the process of obtaining a permit, award 5 points. If he has no intentions of obtaining a permit, award zero points. Remember, permitted CAFOs will not be allowed to receive assistance.

NOTE: Assign rating points using the rating criteria table on page 22.

**ANIMAL UNIT FACTORS FOR
PRIORITY EVALUATION WORKSHEET
ANIMAL WASTE MANAGEMENT SYSTEMS**

Animal Unit Factor Table

<u>Livestock Type</u>	<u>Factor</u>
Horses	2.0
Mature Dairy Cows	1.43
Beef Cow/Calf Pair	1.0
Mature Beef Cows	1.0
Beef or Dairy Bulls	1.0
Beef or Dairy Steers	1.0
Replacement Heifers	1.0
Cattle in Feedlot	1.0
Veal Calves	1.0
Sheep or Lambs	0.1
Swine (Under 55 lbs)	0.1
Swine (Over 55 lbs)	0.4
Turkeys	0.0182
Laying Hens or Broilers ¹	0.0333
Chickens ²	0.008
Laying Hens ²	0.122
Ducks ¹	0.2
Ducks ²	0.0333
Geese	0.0333

¹With liquid manure system

²With waste handling system other than liquid

**PRIORITY EVALUATION WORKSHEET
BIG SIOUX RIVER CONSERVATION EASEMENTS**

Operator Name: _____ Phone: _____

Mailing Address: _____

Legal Description of Facility: _____ County: _____

Nearest TMDL Segment: _____

Acres of Land to be Enrolled _____ Length of Buffer _____

RATING CRITERIA:

RATING POINTS

- (1) Is the land in question on a TMDL segment? yes no _____ (1)
if no,
- (2) Is the land in question on a direct drainage to a TMDL segment yes no _____ (2)
- (3) Is the buffer located near an immersion recreation segment? yes no _____ (3)
- (4) Width of buffer to be enrolled _____ feet _____ (4)
- (5) Amount of time land will be enrolled _____ years _____ (5)

TOTAL RATING POINTS = _____
(Maximum of 80 points)

RATING CRITERIA TABLE:

(1) <u>TMDL</u>	<u>Points</u>	(2) <u>Direct Drainage</u>	<u>Points</u>
Yes	30	Yes	10
No	15	No	0

(3) <u>Immersion Segment</u>	<u>Points</u>	(4) <u>Width (feet)</u>	<u>Points</u>
Yes	10	101 - 150	15
No	5	75 - 100	10

(5) <u>Time (years)</u>	<u>Points</u>
Perpetual	15
30	10

Form Completed By: _____

Date: _____

Applicant Signature: _____

Date: _____

**GUIDE SHEET FOR PREPARATION OF
PRIORITY EVALUATION WORKSHEET
BIG SIOUX RIVER CONSERVATION EASEMENTS**

HEADING: Complete all requested information to identify the applicant.

LEGAL DESCRIPTION OF FACILITY: Identify the location of the proposed system to the nearest quarter section.

(1) IS THE LAND IN QUESTION ON A TMDL SEGMENT?: If the land in question is **draining directly** into a TMDL segment, the answer is YES. If the land in question is **not draining directly** into a TMDL segment, the answer is NO. Refer to the Big Sioux River Watershed Program Guidelines for segments with TMDLs.

(2) IS THE LAND IN QUESTION ON A DIRECT DRAINAGE TO A TMDL SEGMENT?: If the land in question is located on a **direct drainage** to a TMDL segment, the answer is YES. If the land in question is **not located on a direct drainage** to a TMDL segment, the answer is NO. The direct drainage lines are the blue lines on the topographic maps.

(3) IS THE LAND IN QUESTION LOCATED NEAR A TMDL SEGMENT WITH AN IMMERSION RECREATION DESIGNATED USE: These would include BSR near Dell Rapids to below Baltic, SF WWTF to above Brandon, Pipestone Creek and Split Rock Creek

(4) WIDTH OF BUFFER TO BE ENROLLED: What is the width of buffer to be enrolled in this program?

(5) AMOUNT OF TIME LAND WILL BE ENROLLED: How many years is the landowner willing to enroll the land in the riparian buffer protection program?

NOTE: Assign rating points using the rating criteria table on page 26.

**PRIORITY EVALUATION WORKSHEET
RIPARIAN AREA MANAGEMENT PROGRAM**

Operator Name: _____ Phone: _____

Mailing Address: _____

Legal Description of Facility: _____ County: _____

Nearest TMDL Segment: _____

Acres of Land to be Enrolled _____ Is this land under consideration for USDA CRP* _____

* If yes, the land under this application is _____ percent of the total amount of land under this application and a USDA CRP application.
(For example, if 2 acres are under application for RAM and 7 acres are under application for a USDA CRP contract, the total number of acres under application for both programs is 9. The 2 acres under RAM application is 22% of the total amount of 9 acres under both applications.)

RATING CRITERIA:

RATING POINTS

- (1) Is the land in question on a TMDL segment? yes no _____ (1)
if no,
- (2) Is the land in question on a direct drainage to a TMDL segment yes no _____ (2)
- (3) Amount of time land will be enrolled _____ years _____ (3)

TOTAL RATING POINTS = _____
(Maximum of 55 points)

RATING CRITERIA TABLE:

<u>(1) TMDL</u>	<u>Points</u>	<u>(2) Direct drainage</u>	<u>Points</u>
Yes	30	Yes	10
No	15	No	0

<u>(3) Time</u>	<u>Points</u>
15	15
10	5

Form Completed By: _____

Date: _____

Applicant Signature: _____

Date: _____

**GUIDE SHEET FOR PREPARATION OF
PRIORITY EVALUATION WORKSHEET
RIPARIAN AREA MANAGEMENT PROGRAM**

HEADING: Complete all requested information to identify the applicant.

LEGAL DESCRIPTION OF FACILITY: Identify the location of the proposed system to the nearest quarter section.

(1) IS THE LAND IN QUESTION ON A TMDL SEGMENT?: If the land in question is **draining directly** into a TMDL segment, the answer is YES. If the land in question is **not draining directly** into a TMDL segment, the answer is NO. Refer to the Big Sioux River Watershed Program Guidelines for segments with TMDLs.

(2) IS THE LAND IN QUESTION ON A DIRECT DRAINAGE TO A TMDL SEGMENT?: If the land in question is located on a **direct drainage** to a TMDL segment, the answer is YES. If the land in question is **not located on a direct drainage** to a TMDL segment, the answer is NO. The “blue line” on a topology map will determine if the land is on a direct drainage path.

(3) AMOUNT OF TIME LAND WILL BE ENROLLED: How many years is the landowner willing to enroll the land in the riparian buffer protection program?

NOTE: Assign rating points using the rating criteria table on page 29.