PROJECT SUMMARY SHEET

PROJECT TITLE NAME: South Central Lakes Watershed Assessment Project
NAME AND ADDRESS OF LEAD PROJECT SPONSOR:

South Central Water Development District
P.O. Box 43
Armour, SD 57313

STATE CONTACT PERSON: William C. Stewart TITLE: Environmental Senior Scientist

PHONE: (605)773-4254 FAX: (605)773-4068

STATE: South Dakota WATERSHED: Missouri River Basin

PROJECT TYPES : [] BASE [x] WATERSHED [] GROUNDWATER [] I&E

WATERBODY TYPES	NPS CATEGORY
[ ] Groundwater	[x] Agriculture
[x] Lakes/Reservoirs	[ ] Urban Runoff
[ ] Rivers	[ ] Silviculture
[x] Streams	[ ] Construction
[ ] Wetlands	[ ] Resource Extraction
[ ] Other	[ ] Stowage and Land Disposal
	[ ] Hydrologic Modification
	[ ] Other

PROJECT LATITUDE LONGITUDE

SUMMARIZATION OF MAJOR GOALS:,

The long term goal of the South Central Lakes Watershed Assessment Project is to locate and document sources of nonpoint source pollution in the watersheds and produce feasible restoration alternatives in order to provide adequate background information needed to drive watershed implementation projects to improve sedimentation and nutrient problems with the creeks and lakes. This project will result in TMDL reports for six 303(d) listed waters.

PROJECT DESCRIPTION:

The South Central Water Development District (SCWDD) is a special purpose water district located along the Missouri River. Included in the boundaries of the SCWDD are several small lakes and reservoirs which are included in the South Dakota 303(d) list of impaired waters. The purpose of this project is to assess 6 small lakes and reservoirs and their watersheds in the SCWDD area. The waters to be assessed include Geddes Lake, Lake Andes, Dante Lake, Academy Lake and Platte Lake in Charles Mix County and Corsica Lake in Douglas County. The watershed sizes for these lakes range from 2,844 acres for Dante Lake to 349,384 acres for the watershed of Lake Platte. This total project will be a two year effort. All of the watersheds for the lakes are primarily agricultural land use with croplands, grazing lands and livestock feeding areas.

This project is intended to be the initial phase of a series of watershed wide restoration projects. Through water quality monitoring, stream gauging, stream channel analysis and land use analysis, the sources of impairment to the streams and the watersheds will be documented and feasible alternatives for restoration will be presented in the final project reports. Each lake will have an individual final project and TMDL report.

FY00 319 funds requested $113,663 Match $75,775
Other Federal Funds $ 0 Total project cost $189,438

2.0 STATEMENT OF NEED

2.1 The purpose of this Pre-Implementation Assessment is to determine the sources of impairments to Geddes Lake, Lake Andes, Dante Lake, Academy Lake and Platte Lake in Charles Mix County and Corsica Lake in Douglas County, South Dakota, and the tributaries in their watersheds. The watersheds ultimately drain to the Missouri River. The creeks and small tributaries are streams with loadings of sediment, nutrients and metals related to snowmelt or rainfall events.

2.2 All of the watershed streams drain predominantly cropland and grazing lands acres. Winter feeding areas for livestock are present in the watershed with some confined animal feeding areas for hogs and cattle. The streams carry sediment loads and nutrient loads, which degrade water quality in the lakes, and cause increased eutrophication.

The surface watershed area for Geddes Lake is approximately 76,476 acres, Lake Andes watershed is approximately 141,031 acres, Dante Lake watershed is approximately 2,844 acres, Academy Lake watershed is approximately 19,880 acres, Platte Lake watershed is approximately 368,502 acres, and Corsica Lake watershed is approximately 56,038 acres.

Local communities in the project area include Geddes (population 280), Platte (population 1,311), Academy (population unknown), Lake Andes (population 846), Dante (population 98), and Corsica (population 619).

2.3 See map in Figure 1.

2.4 Land use in the watersheds is primarily agricultural with grazing land and cropland. Row Crops, wheat and hay are the main crops on cultivated lands. Some winter animal feeding areas and some concentrated feeding areas are located in the watershed.

Major soil associations found in the watersheds include Eakin-Highmore-Ethan, Highmore-Eakin, Highmore-Walker, DeGrey-Walker, Agar-Lowry, Beadle-Eakin, Oakaton, Highmore-Java-Glenham, Ethan-Betts-Clarno, Clarno-Ethan, Houdek-Stickney, Blendon-Macken, Houdek-Prosper, Lamo, and Hemme-Ethan-Onita.

The average annual precipitation in the project area is 21.55 inches of which 80% usually falls in April through September. Tornadoes and severe thunderstorms strike occasionally. These storms are local and of short duration and occasionally produce heavy rain fall events. The average seasonal snowfall is 25 inches per year. Andes, Choteau and Platte Creeks are the major drainageways in the project area. Land elevation ranges from about 1,220 feet msl in the southeastern part of the project area to about 1,350 msl in the northeastern part of Charles Mix County.

Geddes Lake Watershed

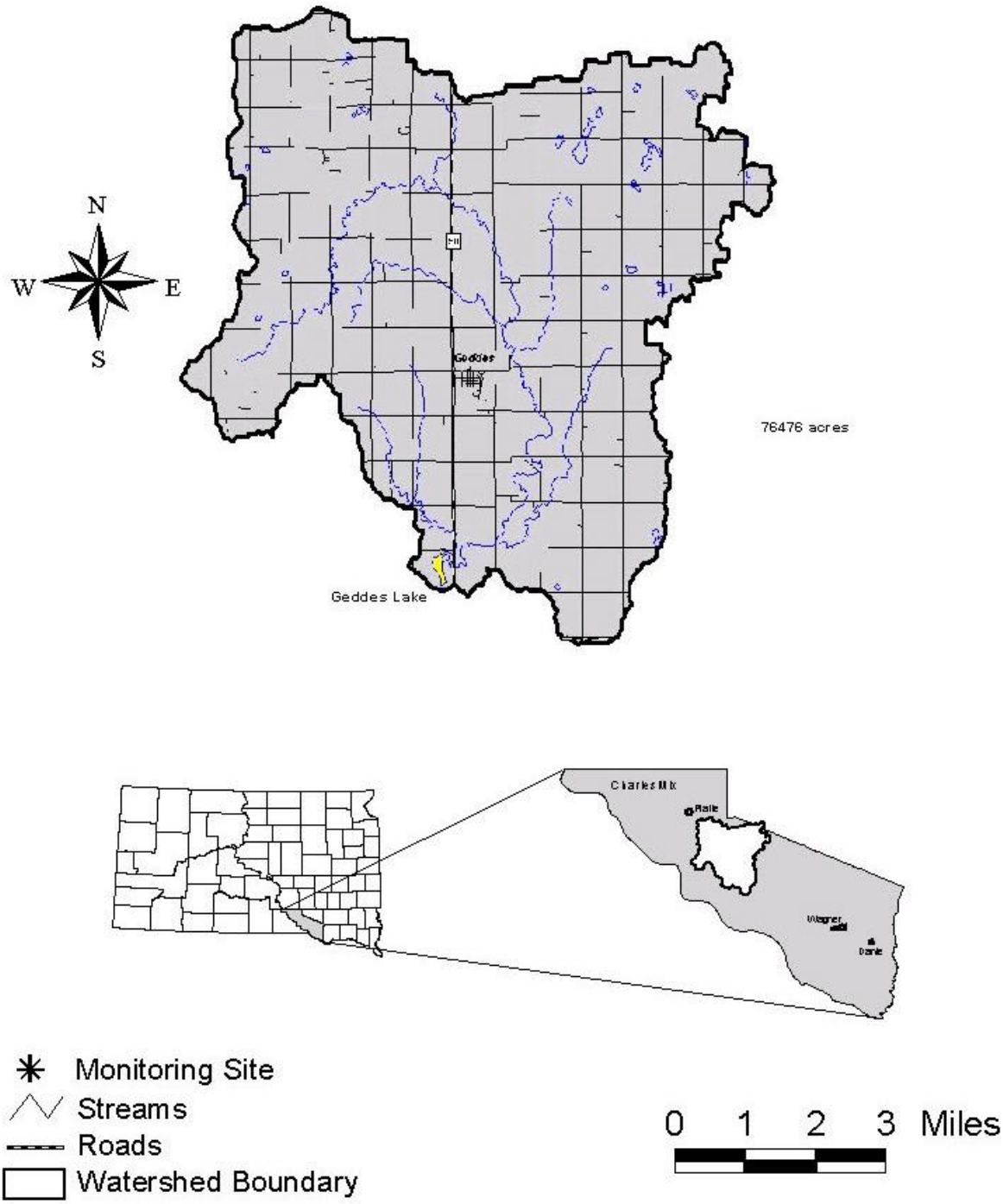


Figure 1a.

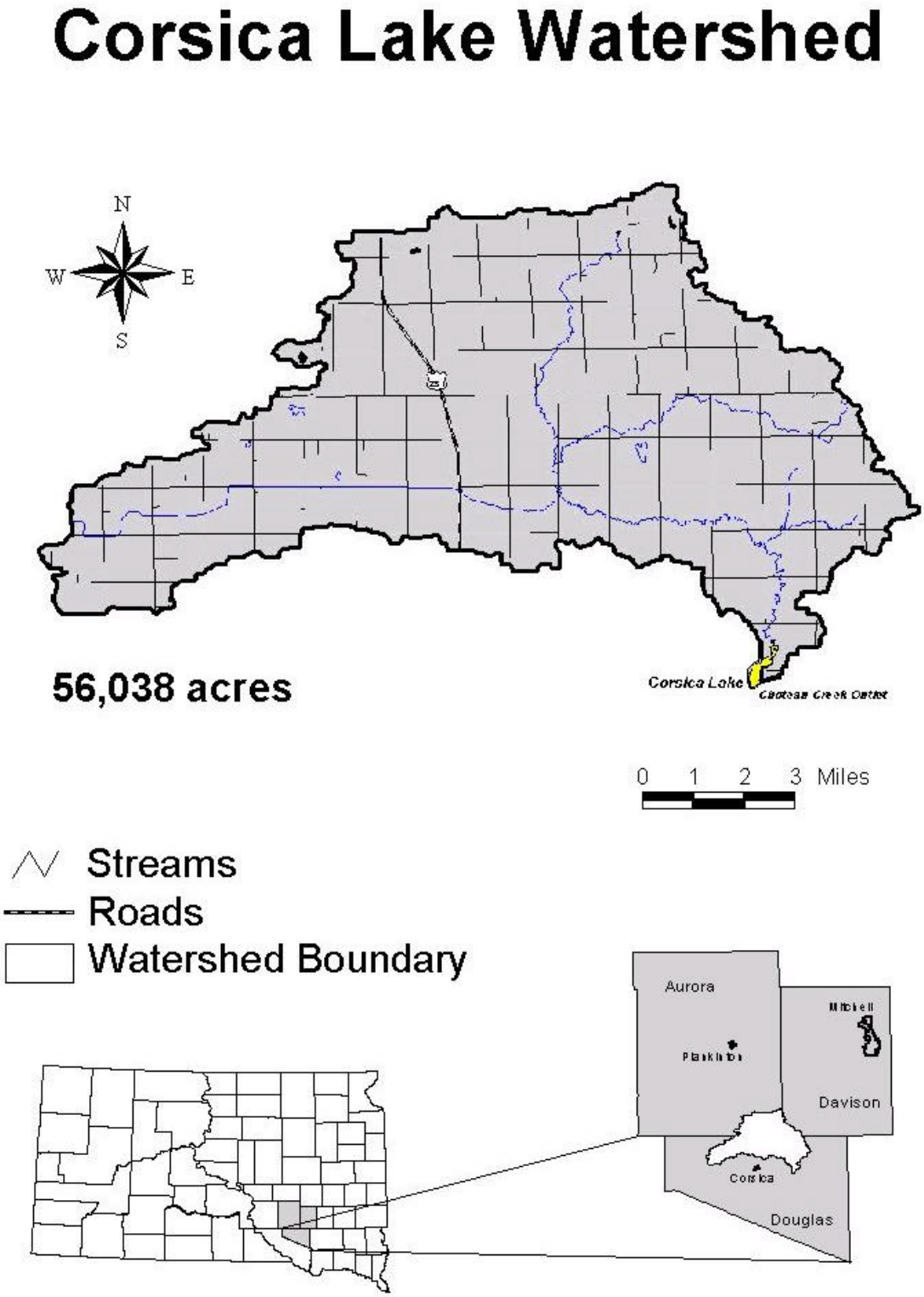

Corsica Lake Watershed
N
W
E
S
56,038 acres
Corsica Lake
Choteau Creek Outlet
0 1 2 3 Miles
Streams
Roads
Watershed Boundary
Aurora
Mitchell
Davison
Corsica
Douglas

Figure 1b.

Lake Andes Watershed

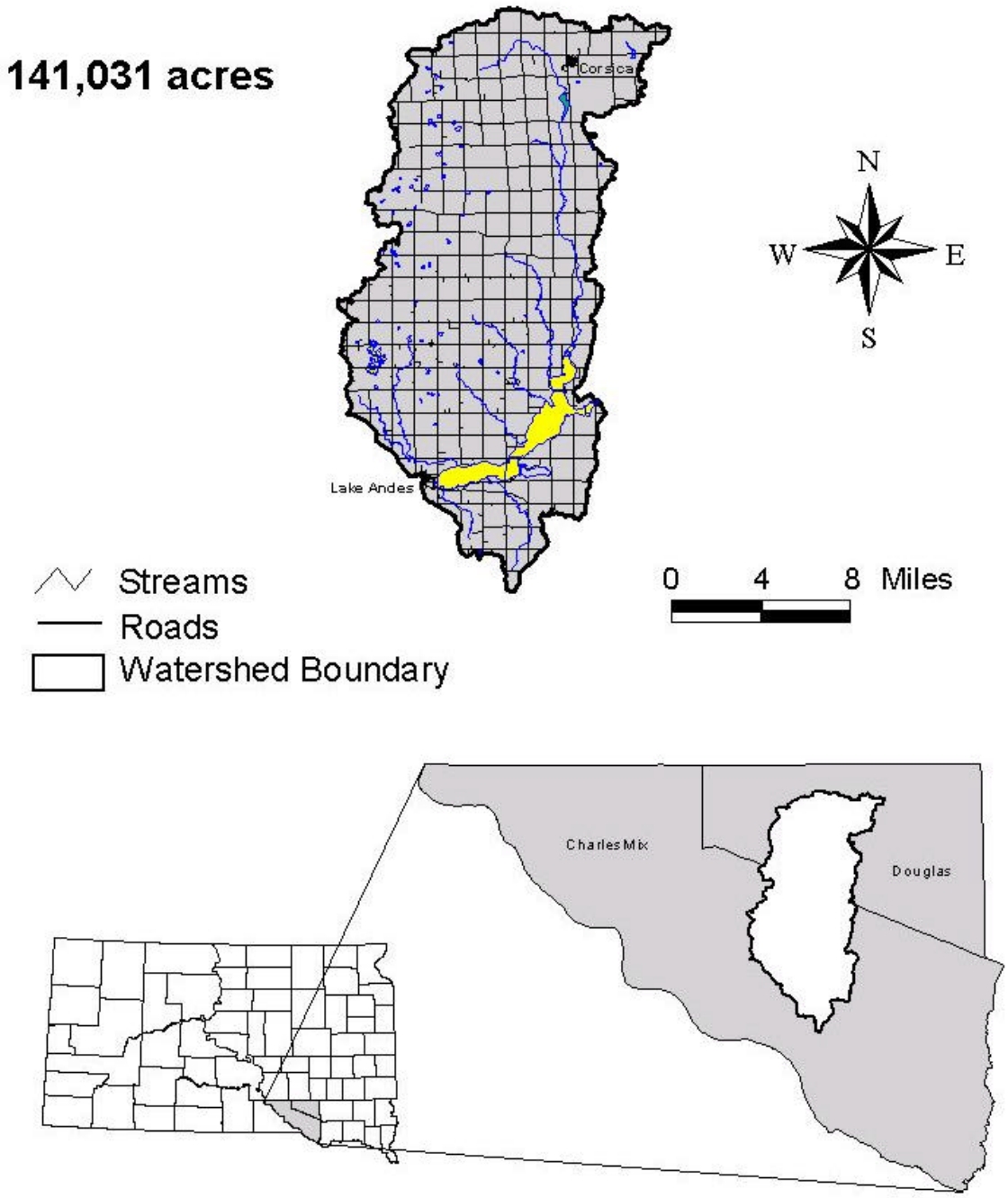


Figure 1c.

Dante Lake Watershed

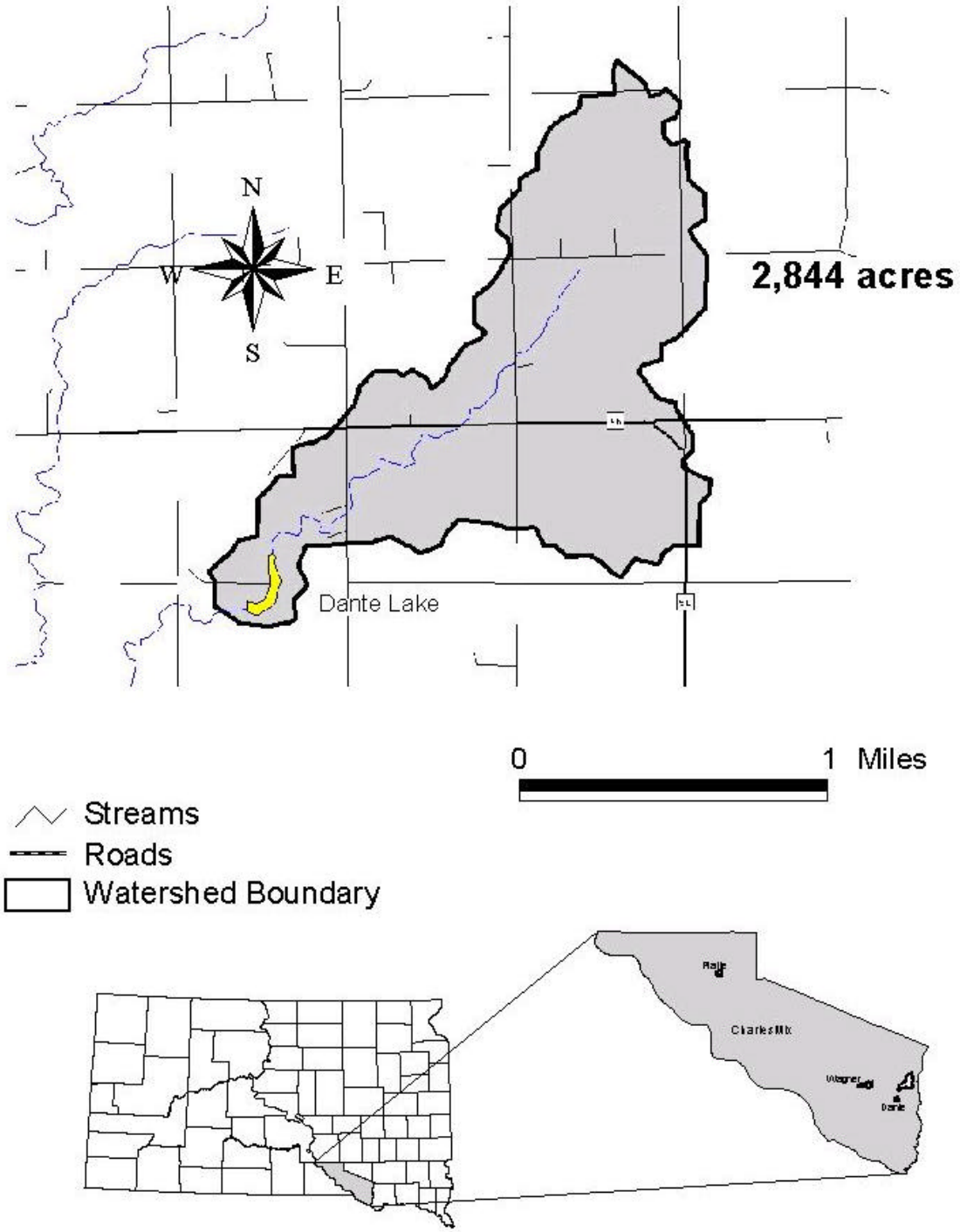


Figure 1d.

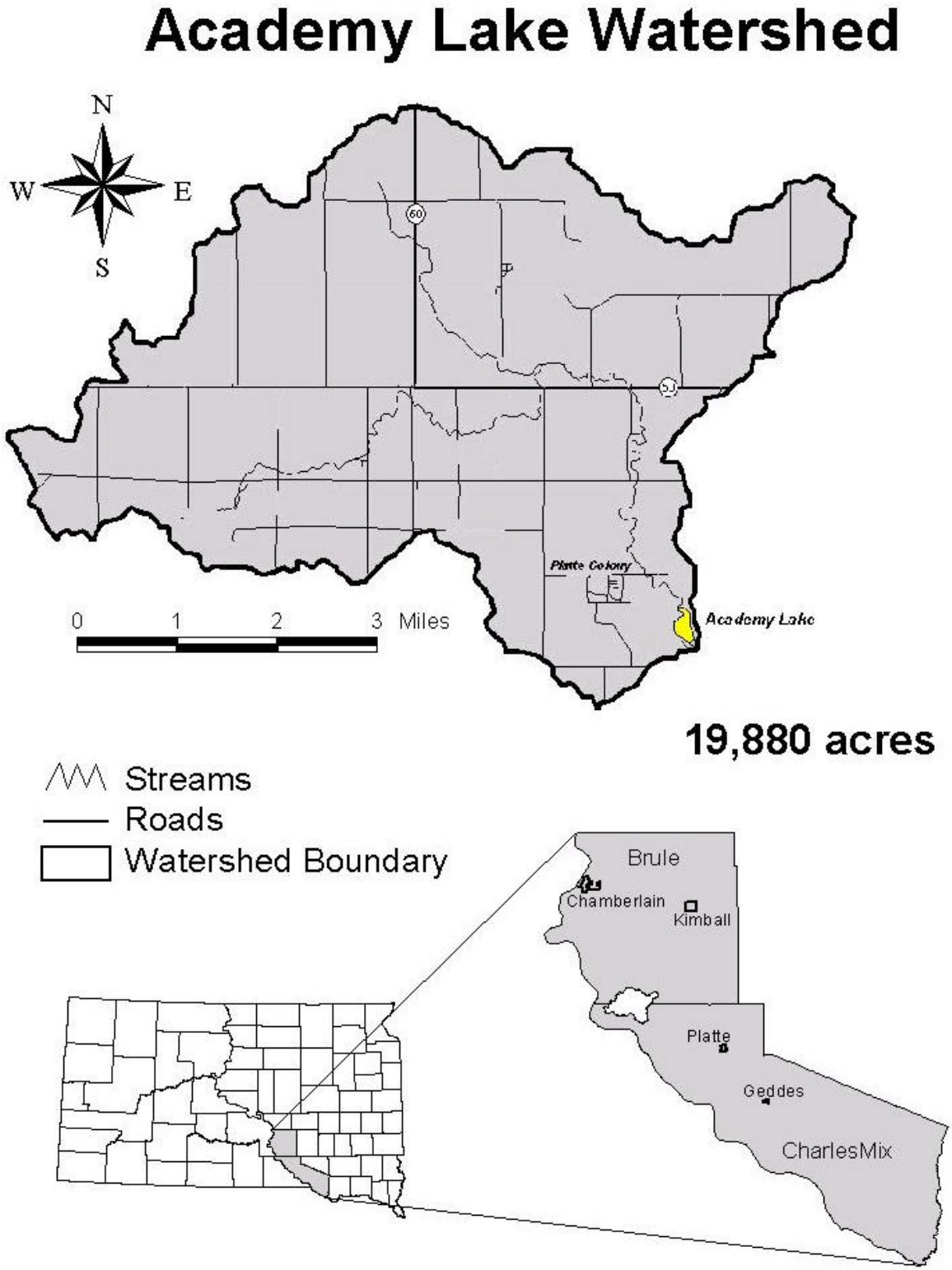
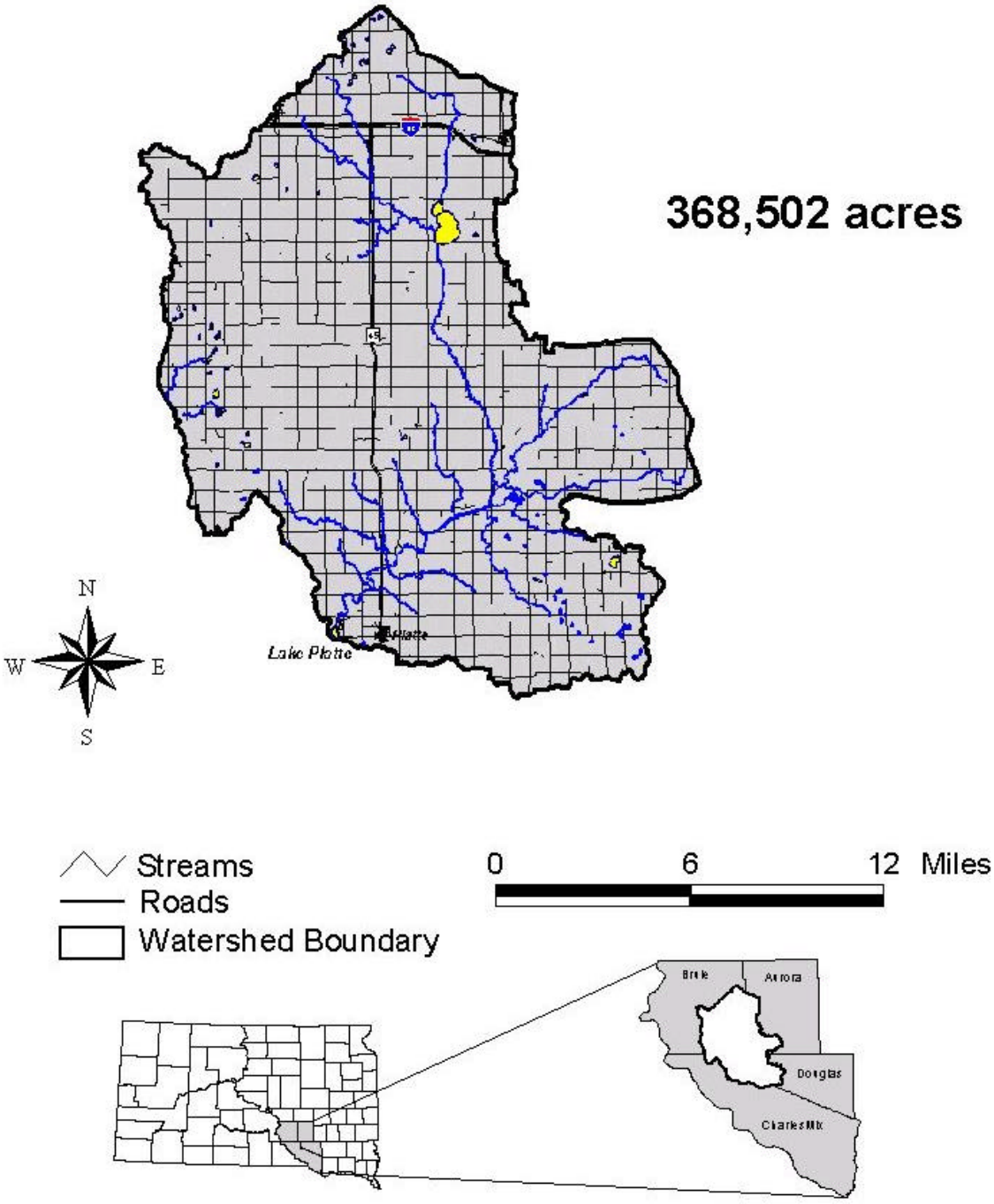

Academy Lake Watershed
N
W
E
S
60
50
Platte Colony
Academy Lake
0
1
2
3
Miles
19,880 acres
Streams
Roads
Watershed Boundary
Brule
Chamberlain
Kimball
Platte
Geddes
CharlesMix

Figure 1e.

Lake Platte Watershed



2.5 The purpose of this assessment is to develop restoration alternatives for the six lakes and their watersheds and serve as the foundation of a Section 319 implementation project.

3.0 PROJECT DESCRIPTION

3.1 GOALS

The goal of this assessment project is to determine and document sources of impairments to the watersheds of Geddes Lake, Corsica Lake, Lake Andes, Dante Lake, Academy Lake, and Lake Platte and to develop feasible alternatives for restoration.

3.2 OBJECTIVES AND TASKS

OBJECTIVE 1: The objective of this task is to determine current conditions in the lakes and calculate the trophic state of each lake. This information will be used to determine the total amount nutrient trapping that is occurring in each of the lakes and the amount of reduction of nutrients required to improve the trophic condition of the lakes.

Task 1. Nutrient and solids parameters will be sampled at a total of eight in-lake sampling sites which include all lakes in the project area. All samples will be analyzed by the South Dakota State Health Laboratory in Pierre. Samples will be collected from the surface only on the lakes in the project area once each month, except during periods of unsafe ice cover, for a period of 1 year, per lake. The total number of samples to be collected will be 80 for all lakes in the project area. Four Lakes will be sampled during the first year of the project and two during the second year.

Task 2. The purpose of the in-lake samples is to assess ambient nutrient concentrations in the lake and identify trophic states. Water column dissolved oxygen and temperature profiles will be collected on a monthly basis. Water samples will be collected with a Van Dorn sampler and the sample bottles will be iced and shipped to the lab by the most rapid means available. Fecal coliform samples will be analyzed by the SD State Health Lab in Pierre. All other biological samples will be analyzed by staff from Watershed Protection in the Matthew Training Center Laboratory, Pierre, SD.

Task 3. All samples will be collected using the methods described in the Standard Operating Procedures for Field Samplers by the State of South Dakota Clean Lakes Program. Figure 2 is a map of the lake sampling sites.

Geddes Lake

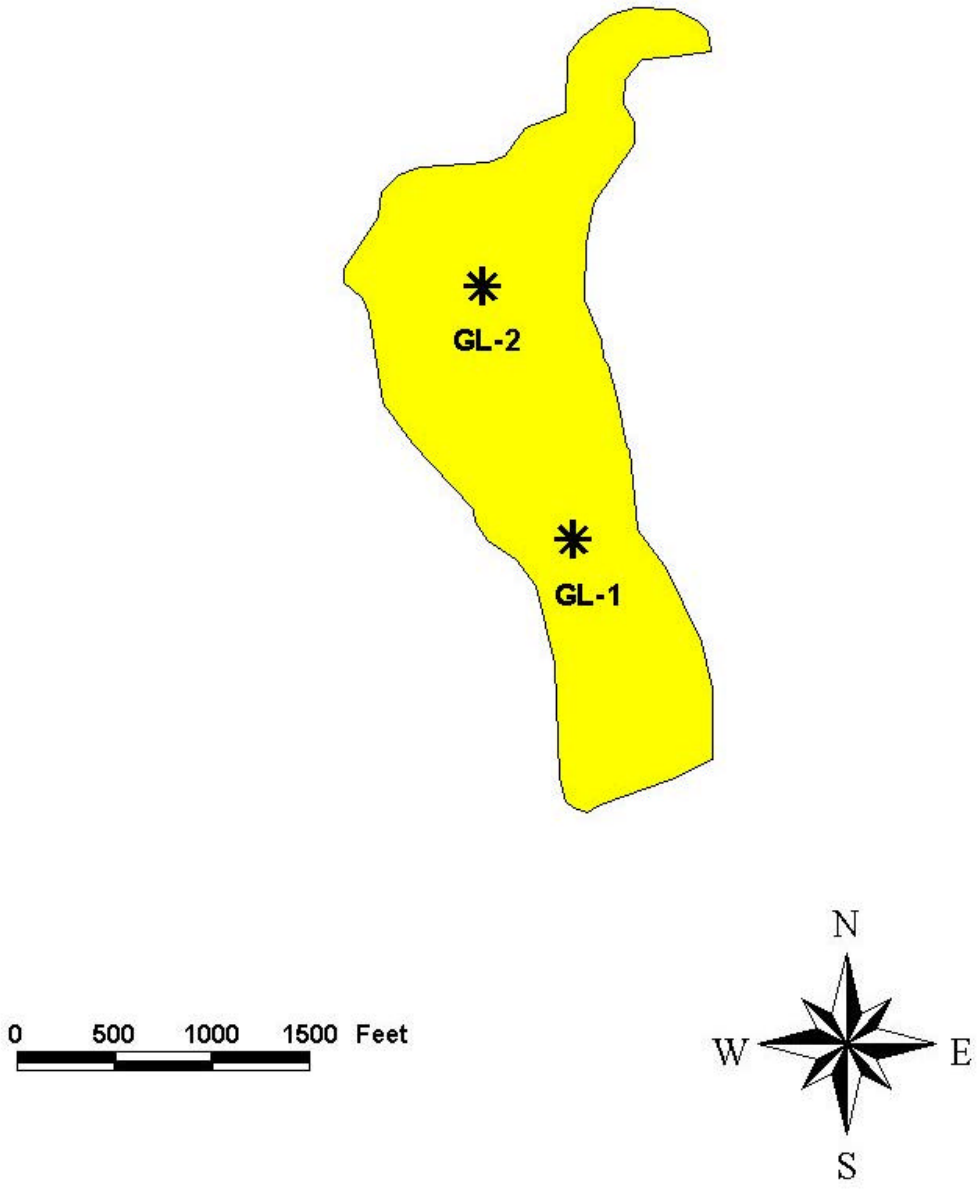


Figure 2a.

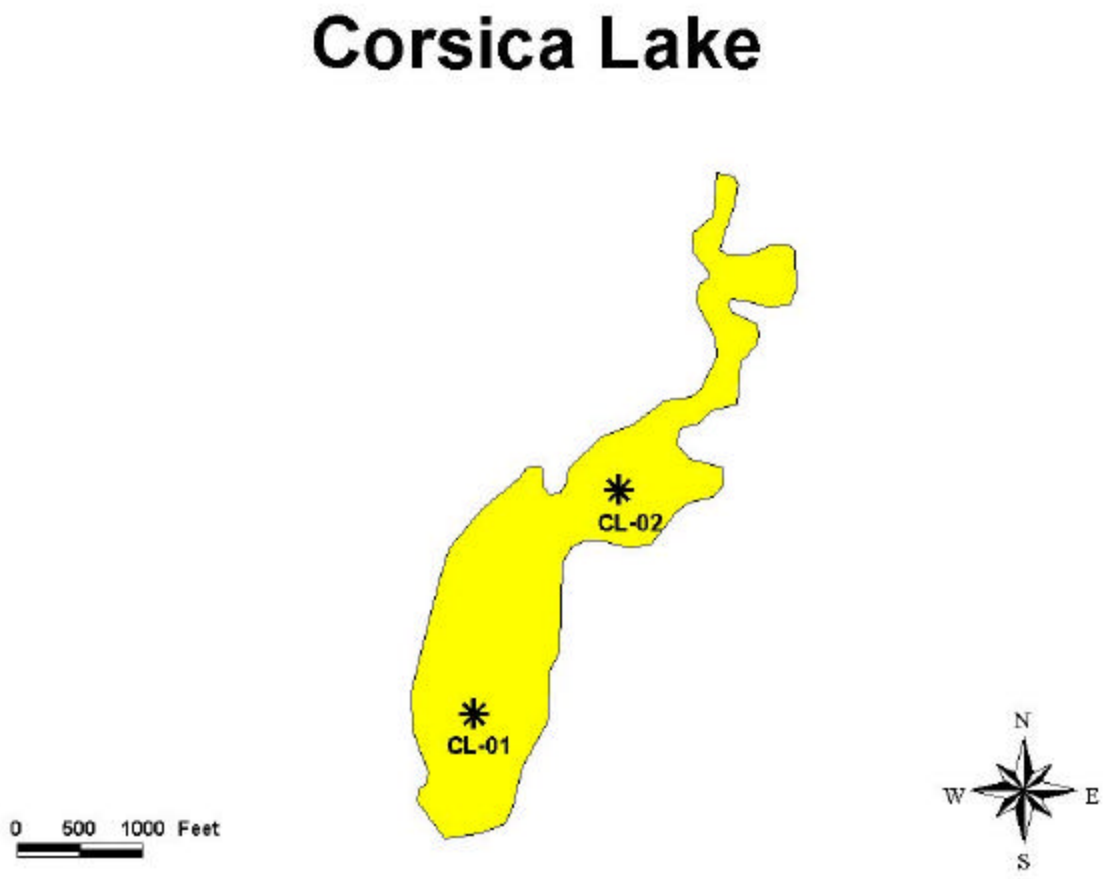


Figure 2b.

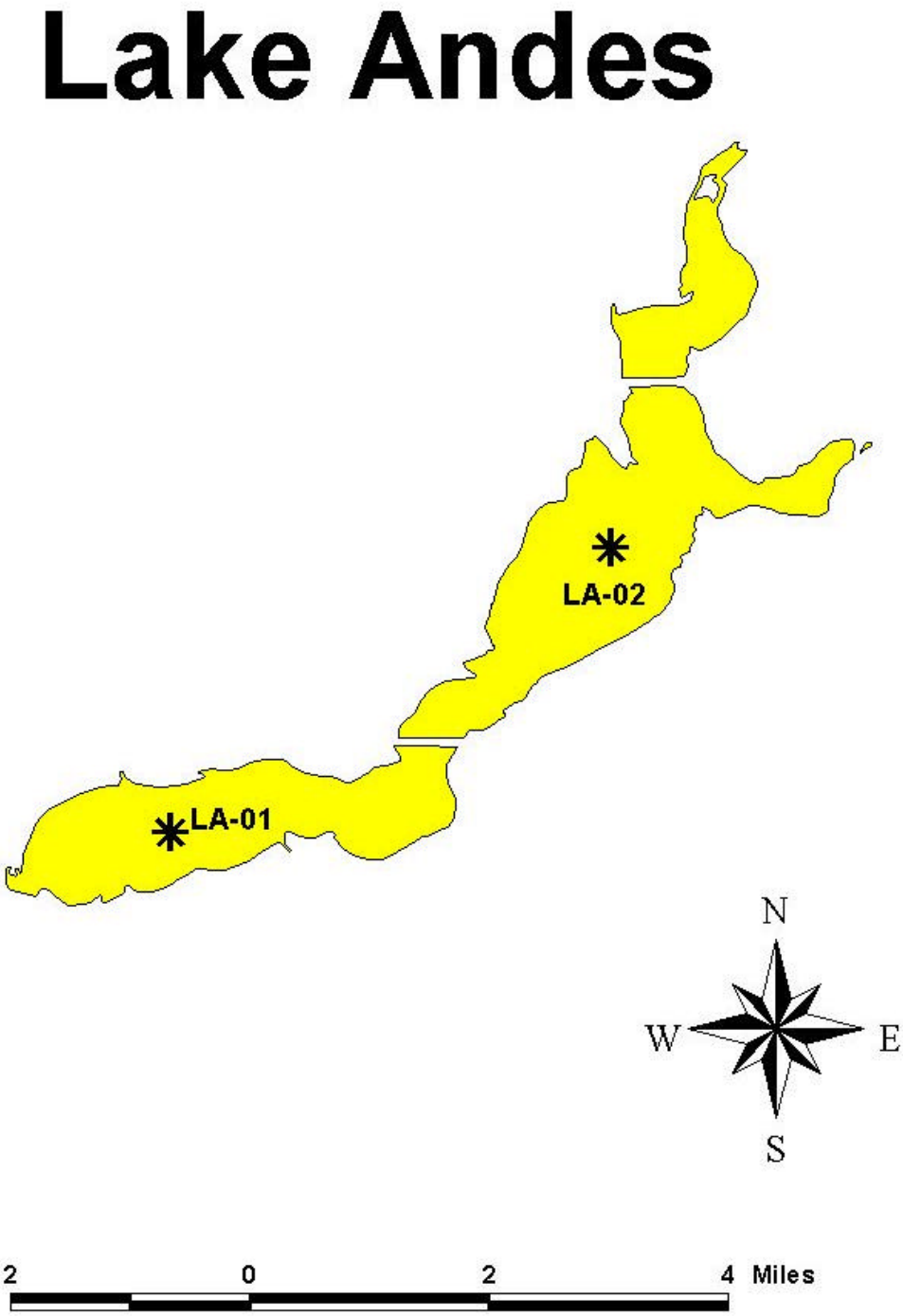


Figure 2c.

Dante Lake

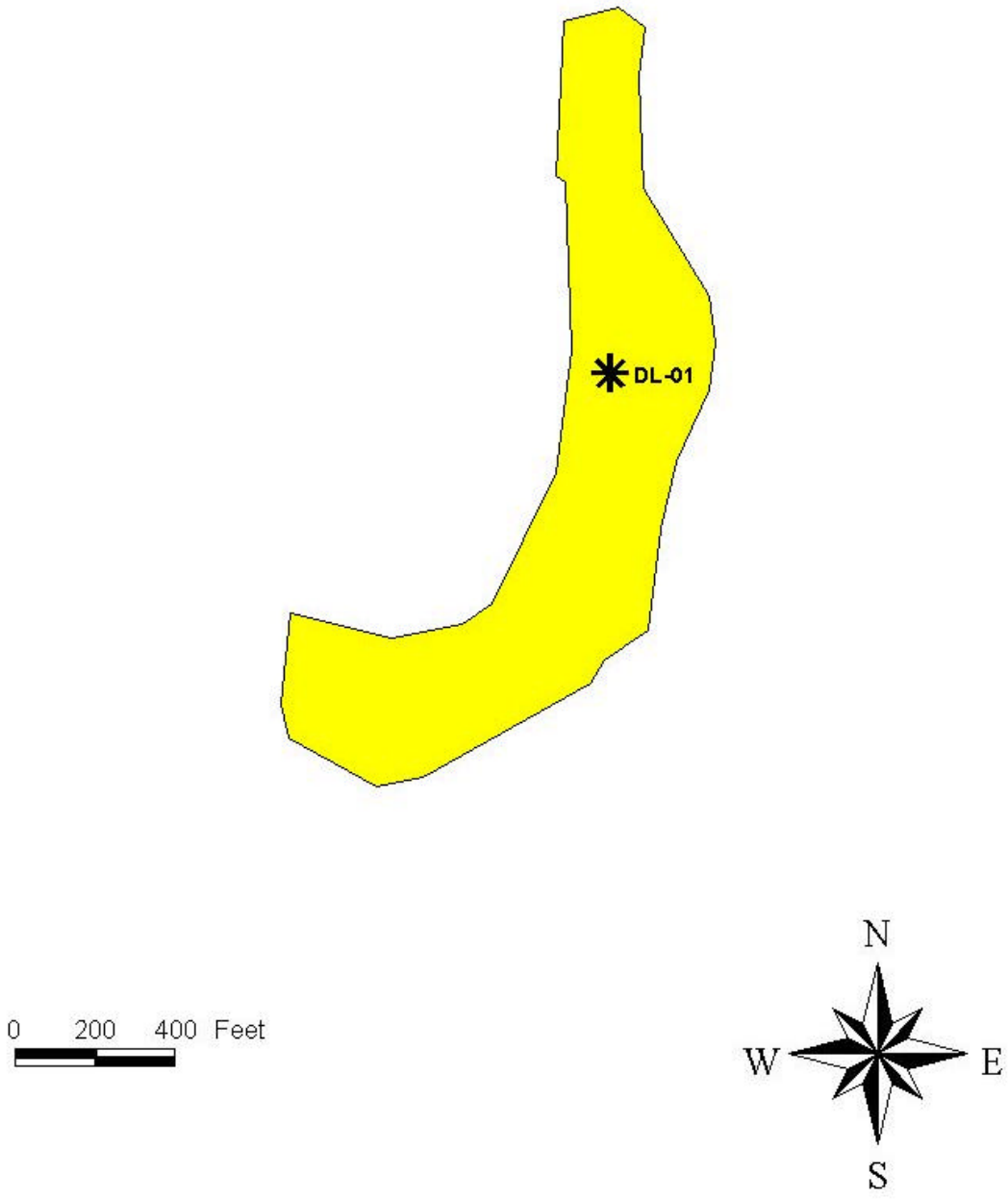


Figure 2d.

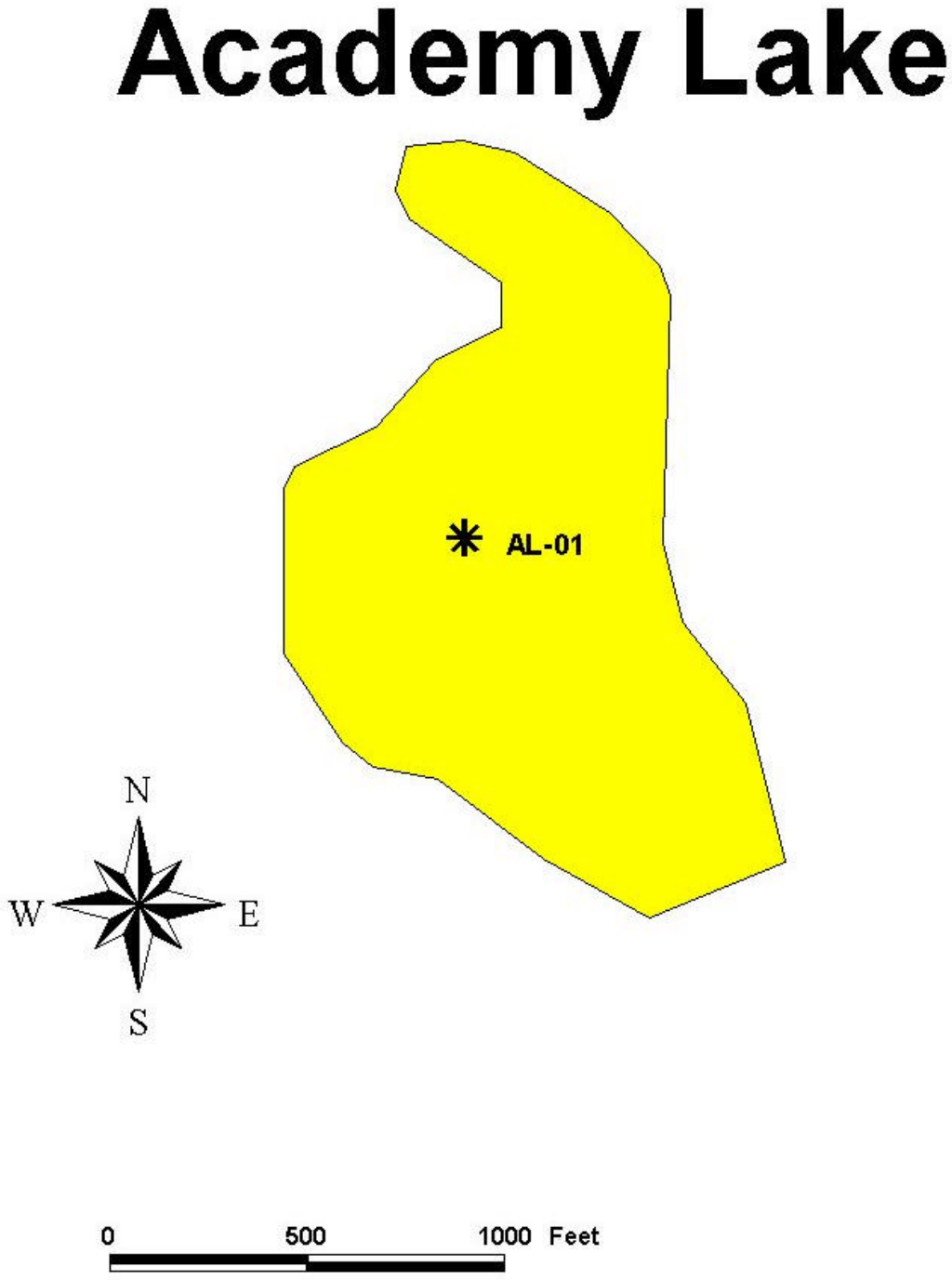


Figure 2e.

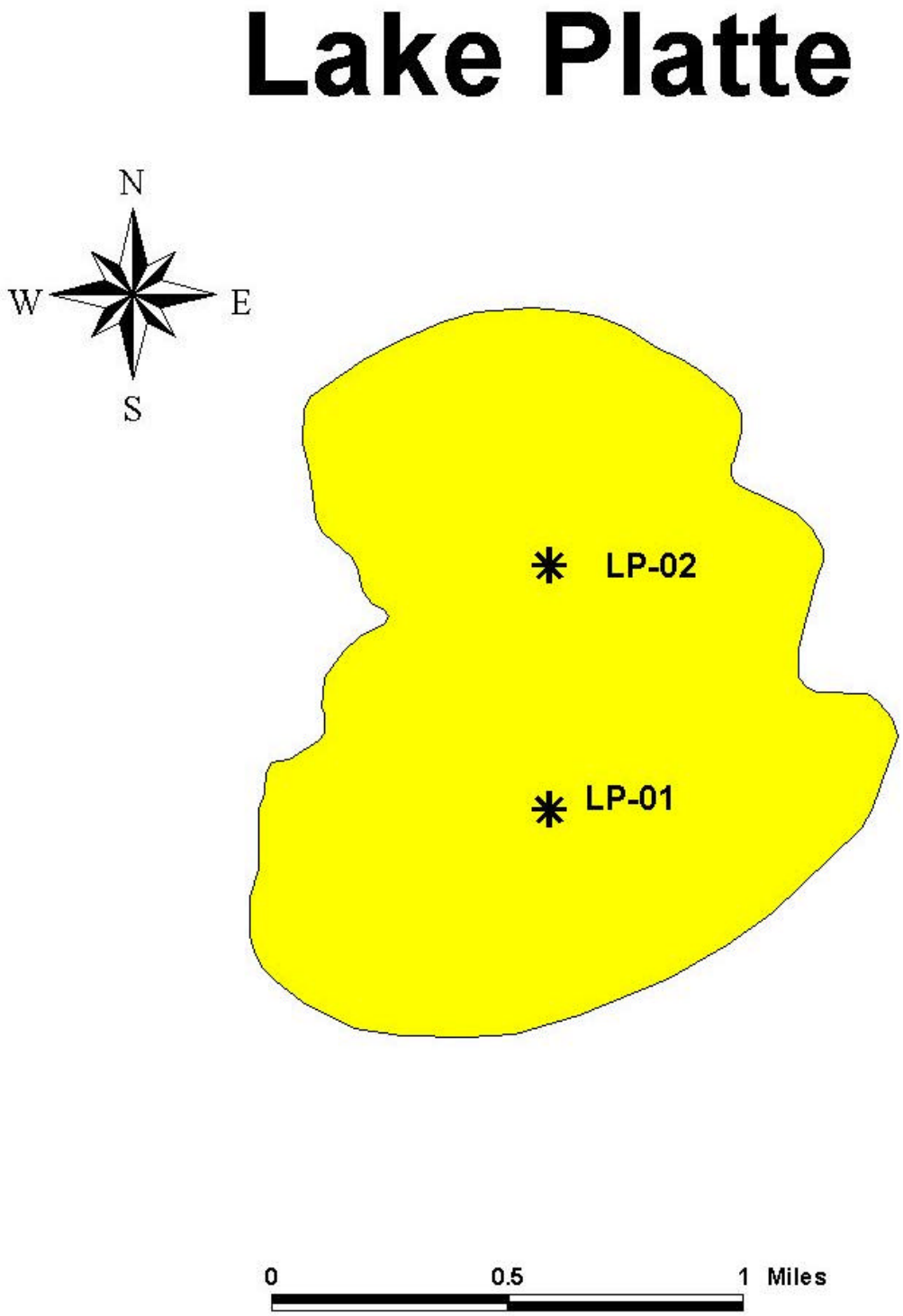


Figure 2f.

Lake Sampling Locations – Geddes Lake

SITE	LOCATION	
GL-1	Lat.	43.190784
	Long.	–98.712705
GL-2	Lat.	43.194321
	Long.	–98.714409

Lake Sampling Locations – Corsica Lake

CL-1	Lat.	43.411063
	Long.	-98.295964
CL-2	Lat.	43.415917
	Long.	-98.291132

Lake Sampling Locations – Lake Andes

	Lat.	43.156957
	Long.	-98.504457
	Lat.	43.193193
	Long.	-98.429522

Lake Sampling Locations – Dante Lake

DL-1	Lat.	43.068368
	Long.	-98.176060

Lake Sampling Locations – Academy Lake

AL-1	Lat.	43.462999
	Long.	-99.110819

Lake Sampling Locations – Lake Platte

LP-1	Lat.	43.663642
	Long.	-98.773538
LP-2	Lat.	43.669808
	Long.	-98.773981

PARAMETERS MEASURED

Physical	Chemical	Biological
Air Temperature	Total Alkalinity	Fecal Coliform
Water Temperature	Field pH	Chlorophyll a
Secchi Transparency	Dissolved Oxygen	Algae Enumeration and I.D.
Depth	Total Solids	
Visual Observations	Total Dissolved Solids	
	Total Suspended Solids	
	Ammonia	
	Un-ionized Ammonia	
	Nitrate-Nitrite	
	Total Kjeldahl Nitrogen	
	Total Phosphorus	
	Total Dissolved Phosphorus	
	Conductivity	

C. OUTPUTS:

Six In-lake water quality reports.
Calculations of trophic state index using Carson's Trophic State Index.
Dissolved oxygen and temperature profiles.
Estimates of internal loading from bottom sediments

D. BUDGET:

LINE ITEMS	NON-FEDERAL		FEDERAL
	CASH	IN-KIND	
Personnel (@ $24/hr)	4,000		
Travel			1,100
Water Quality Analysis			10,400
Supplies and Shipping			200
Boat and Motor		960	
Equipment			1,000
Total	4,000	960	12,700

RESPONSIBLE AGENCIES:

Task Prioritization:

Project Coordinator
Project Sponsor

Design and Technical Assistance:

South Dakota Department of Environment and Natural Resources

OBJECTIVE 2: Estimate the sediment and nutrient loadings from the individual tributaries in the six watersheds through hydrologic and chemical monitoring. The information will be used to locate critical areas in the watershed to be targeted for implementation.

TASK 4 Install water level recorders on 27 tributary monitoring sites and maintain a continuous stage record for one year per watershed during the project period, with the exception of winter months after freeze up (Figure 3).

Monitoring sites for the Geddes Lake Watershed:

Site	Location	
GLO-1	Lat.	43.186344
	Long.	-98.713385
GLT-2	Lat.	43.194061
	Long.	-98.705797
GLT-3	Lat.	43.204752
	Long.	-98.708767
GLT-4	Lat.	43.257343
	Long.	-98.675251
GLT-5	Lat.	43.285727
	Long.	-98.681151

Monitoring sites for the Corsica Lake Watershed:

Site	Location	
CLO-1	Lat.	43.407548
	Long.	-98.296599
CLT-2	Lat.	43.427834
	Long.	-98289827
CLT-3	Lat.	43.456784
	Long.	-98.297336

CLT-4	Lat.	43.471192
	Long.	-98.371741
CLT-5	Lat.	43.391001
	Long.	-98.391001

Monitoring sites for the Lake Andes Watershed:

Site	Location	
	Site	Location
LAO-1	Lat.	43.151007
	Long.	-98.529435
LAT-2	Lat.	43.191698
	Long.	-98.467691
LAT-3	Lat.	43.212266
	Long.	-98.447689
LAT-4	Lat.	43.212820
	Long.	-98.413489
LAT-5	Lat.	43.245144
	Long.	-98.425575
LAT-6	Lat.	43.254446
	Long.	-98.401684

Monitoring sites for the Dante Lake Watershed:

Site	Location	
DLO-1	Lat.	43.066056
	Long.	-98.179525
DLT-2	Lat.	43.074517
	Long.	-98.167348

Monitoring sites for the Academy Lake Watershed:

Geddes Lake Watershed

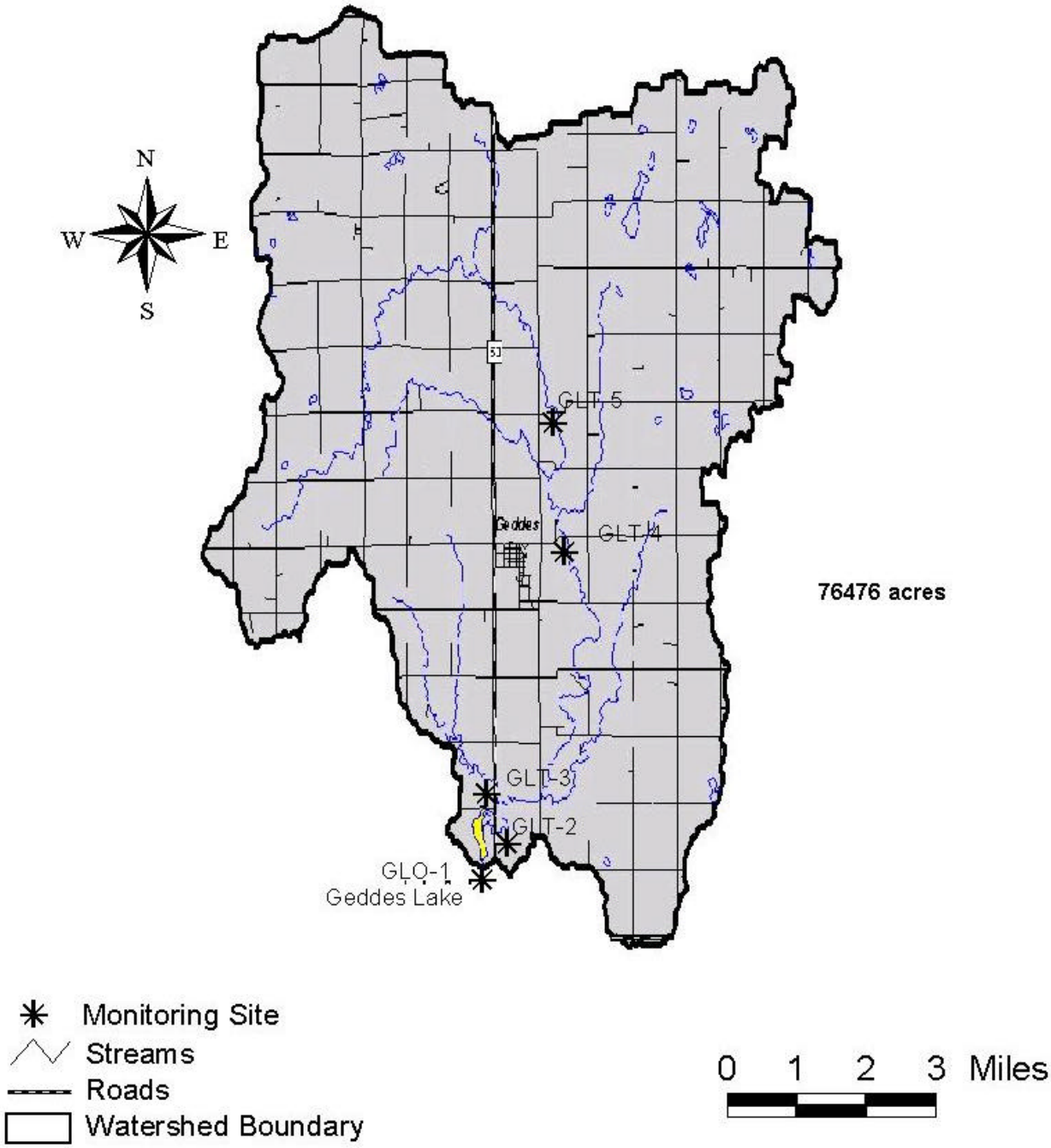


Figure 3a.

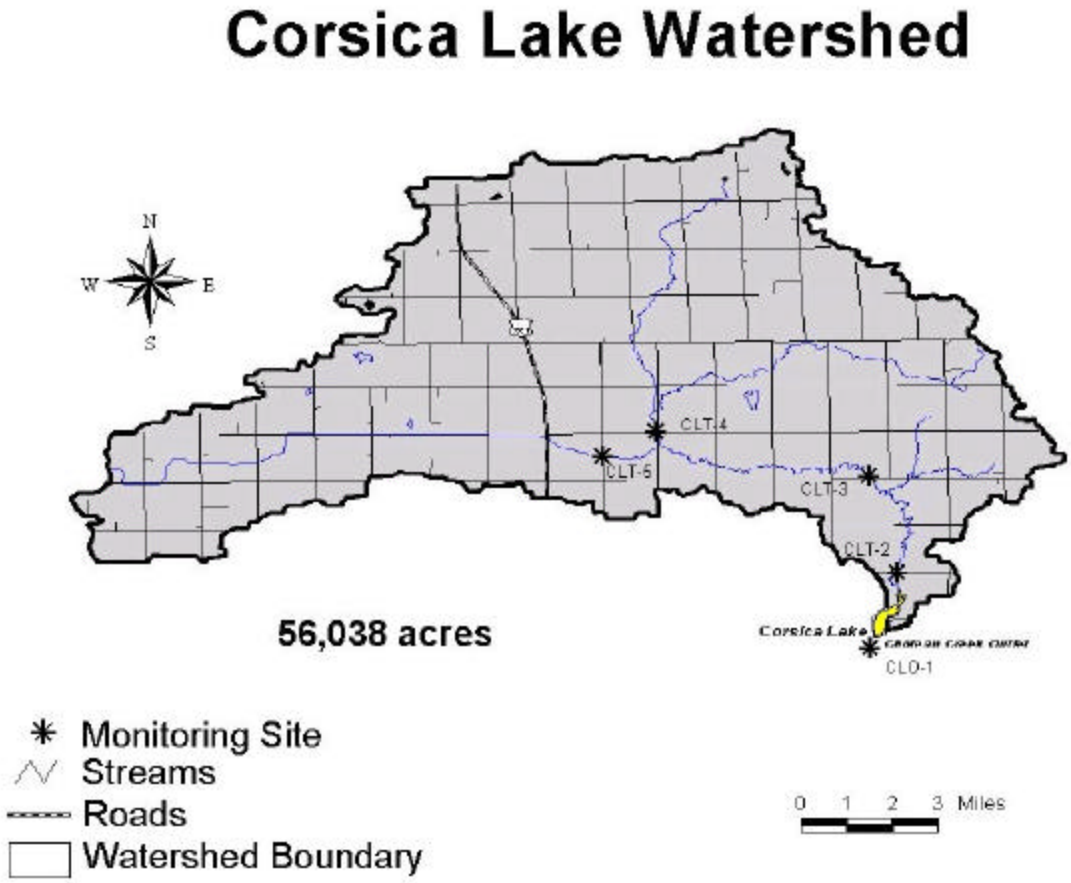

Corsica Lake Watershed
N
W
E
S
CLT-4
CLT-5
CLT-3
CLT-2
56,038 acres
Corsica Lake
CLO-1
Monitoring Site
Streams
Roads
Watershed Boundary
0 1 2 3 Miles

Figure 2b.

Lake Andes Watershed

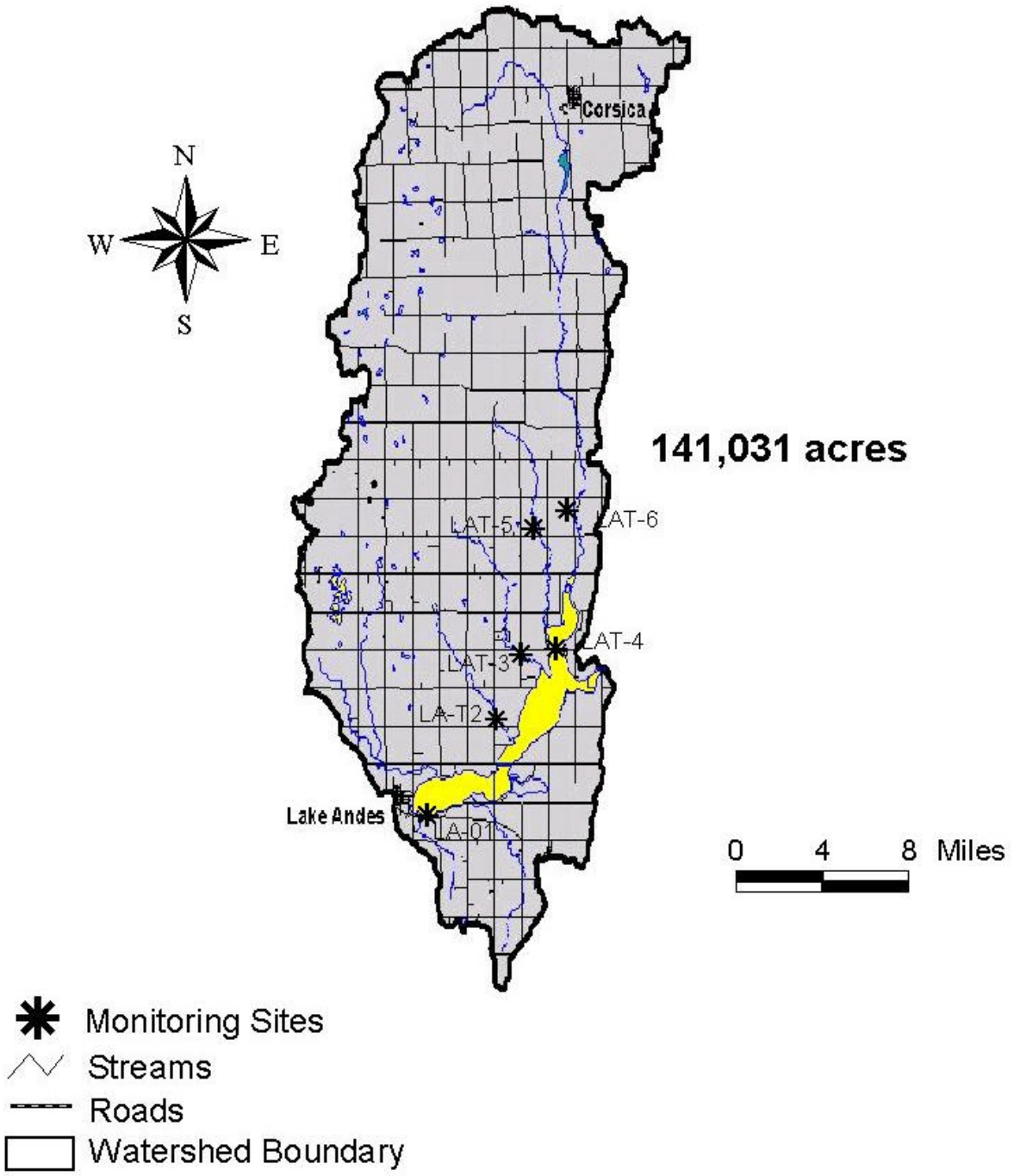


Figure 3c.

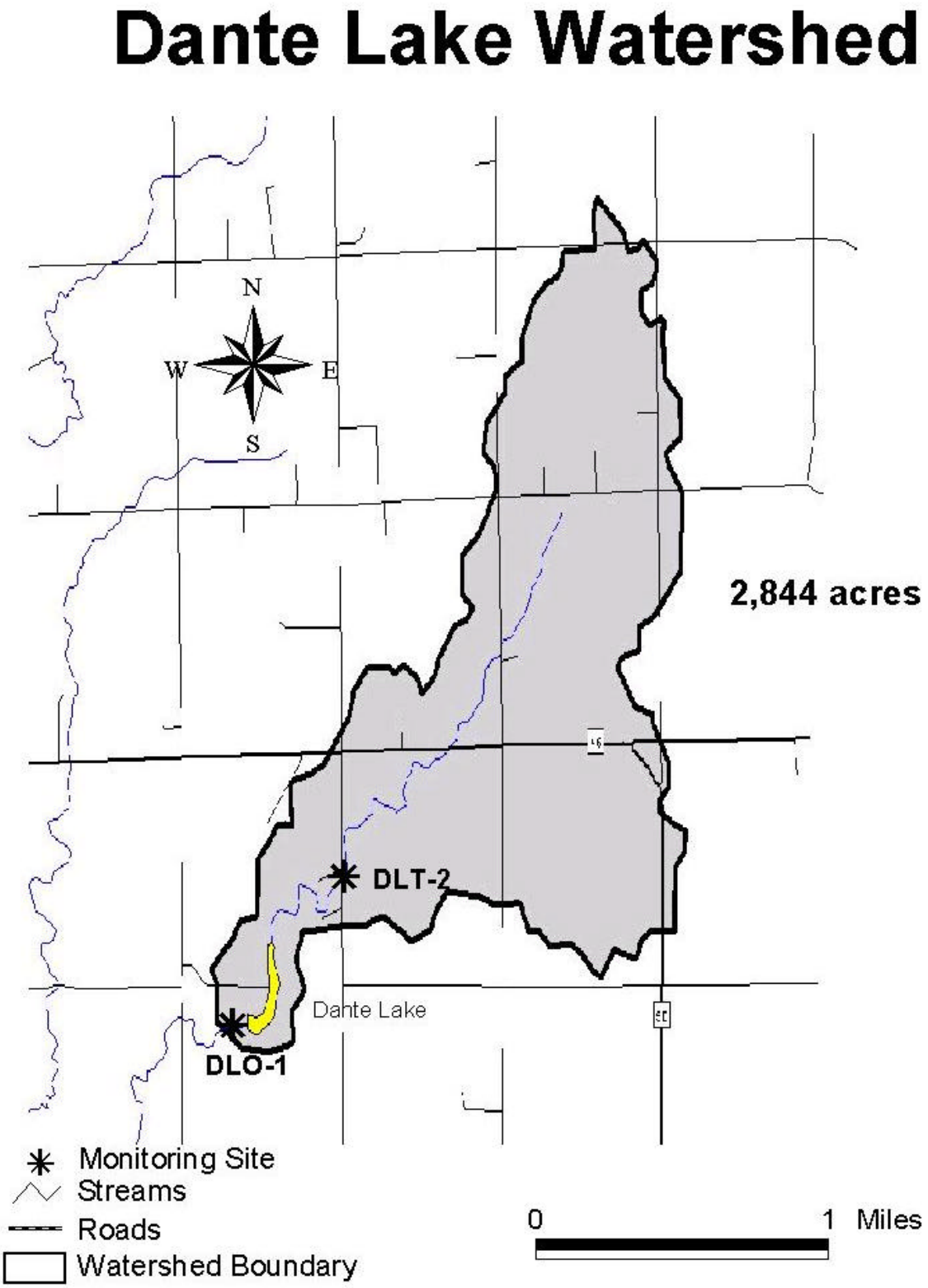

Dante Lake Watershed
N
W
E
S
2,844 acres
DLT-2
Dante Lake
DLO-1
Monitoring Site
Streams
Roads
Watershed Boundary
0
1 Miles

Figure 3d.

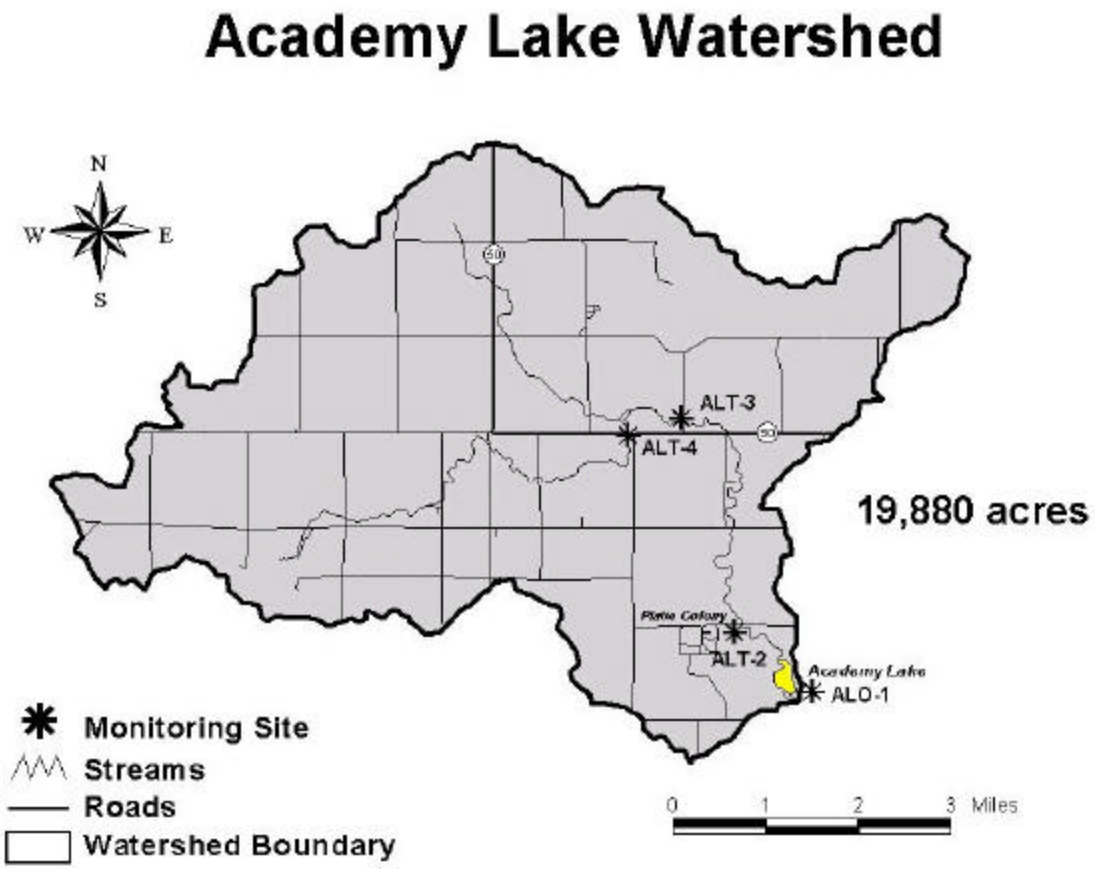

Academy Lake Watershed
N
W
E
S
ALT-3
ALT-4
19,880 acres
Pine Colony
ALT-2
Academy Lake
ALO-1
Monitoring Site
Streams
Roads
Watershed Boundary
0
1
2
3
Miles

Figure 3e.

Lake Platte Watershed

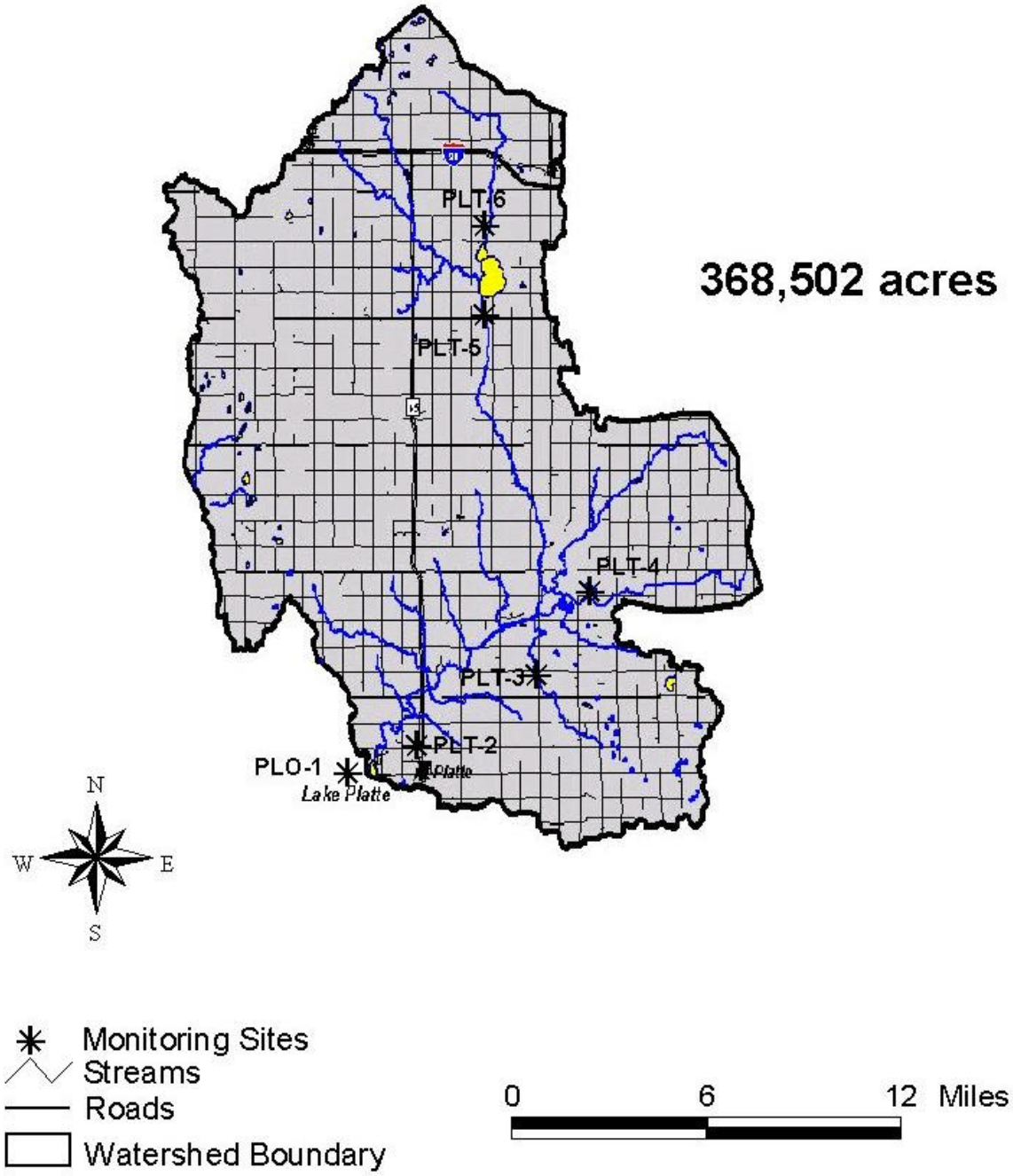


Figure 3f.

Site		Location
ALT-1	Lat.	43.459569
	Long.	-99.107660
ALT-2	Lat.	43.469703
	Long.	-99.119582
ALT-3	Lat.	43.502159
	Long.	-99.130543
ALT-4	Lat.	43.499747
	Long.	-99.141941

Monitoring sites for the Platte Lake Watershed:

Site	Location	
PLT-1	Lat.	43.382039
	Long.	-98.899021
PLT-2	Lat.	43.410481
	Long.	-98.880604
PLT-3	Lat.	43.455565
	Long.	-98.797790
PLT-4	Lat.	43.499776
	Long.	-98.725206
PLT-5	Lat.	43.653909
	Long.	-98.782141
PLT-6	Lat.	43.671508
	Long.	-98.793608

TASK 5 Discrete discharge measurements will be taken on a regular schedule and during storm surges. Discharge measurements will be taken with a hand held current velocity meter.

TASK 6 Discharge measurements and water level data will be used to calculate a hydrologic budget for the creek system. This information will be

used with concentrations of sediment and nutrients to calculate loadings from the watershed.

TASK 7 Collect water quality samples from 27 tributary monitoring sites. Samples will be collected during spring runoff, storm events, and monthly base flows. Proposed water quality monitoring sites may be found in Figure 3.

PARAMETERS MEASURED FOR TRIBUTARY SAMPLES:

PHYSICAL	CHEMICAL	BIOLOGICAL
air temperature	total solids	fecal coliform bact.
water temperature	total susp. solids	
discharge	dissolved oxygen	
depth	ammonia	
visual observations	un-ionized ammonia	
water level	nitrate-nitrite	
	TKN	
	total phosphate	
	total dis. phosphate	
	field pH	

TASK 8 Samples will be collected twice weekly during the first week of spring snowmelt runoff and once a week thereafter until runoff ceases. Storm events and base flows will be sampled throughout the project period for an estimated total number of 266 samples. Ten of the samples may be collected from alternative sites at the sponsor's discretion.

LINE ITEMS	NON-FEDERAL		FEDERAL
	CASH	IN-KIND	
Personnel (@ $24/hr)	50,000		
Travel			8,000
Water Quality Analysis			42,120
Supplies and Shipping			1,000
Boat and Motor			
Equipment			10,000
Biological Analysis			
Total	50,000		61,120

QUALITY ASSURANCE/QUALITY CONTROL:

Approved QA/QC procedures will be utilized on all sampling and field data collection on the South Central Lake and Watershed Assessment Project. Please refer to the South Dakota Watershed Protection Program Quality Assurance Project Plan for the details of the procedures to be followed.

PRODUCTS:

A tributary water quality report which will include a description of the relationship between and influence of chemical and physical data. Hydrologic and nutrient loads will be calculated for the entire watershed.

RESPONSIBLE AGENCIES:

Task Prioritization:

Project Coordinator
Project Sponsor

Design and Technical Assistance:

South Dakota Department of Environment and Natural Resources

WORK ACTIVITIES:

Water samples will be collected with a suspended sediment sampler when possible. All sample bottles will be iced and shipped to the lab and collected using the methods described in the Standard Operating Procedures for Field Samplers by the State of South Dakota Watershed Protection Program. Nutrient and solids parameters will be sampled at 27 tributary sites in a total of six watersheds. All samples will be analyzed by the South Dakota State Health Laboratory in Pierre, SD. The watershed water quality data will be integrated together with the hydrologic loadings to provide a complete analysis of the six watershed hydrologic systems.

OBJECTIVE 3: Ensure that all water quality samples are accurate and defendable through the use of approved Quality Assurance/Quality Control procedures.

TASK 9 The collection of all field water quality data will be accomplished in accordance with the Standard Operating Procedures for Field Samplers, South Dakota Watershed Protection Program.

TASK 10 A minimum of 10 percent of all the water quality samples collected will be QA/QC samples. QA/QC samples will consist of field blanks and field duplicate samples. An estimated 40 samples will be collected during the project.

TASK 11 All QA/QC activities will be conducted in accordance with the Nonpoint Source Program Quality Assurance Project Plan.

TASK 12 The activities involved with QA/QC procedures and the results of QA/QC monitoring will be compiled and reported on in a section of the final project report and in all project reports.

LINE ITEMS	NON-FEDERAL		FEDERAL
	CASH	IN-KIND	
Personnel (@ $24/hr)	1,000		
Travel		500	
Water Quality Analysis			5,252
Supplies and Shipping			500
Boat and Motor			
Equipment			
Biological Analysis			
Total	1,000	500	5752

PRODUCTS:

A Quality Assurance/Quality Control monitoring report.

RESPONSIBLE AGENCIES:

Task Prioritization:

Project Coordinator
Project Sponsor

Design and Technical Assistance:

South Dakota Department of Environment and Natural Resources

WORK ACTIVITIES:

Approved QA/QC will be utilized on all sampling and field data collected during the South Central Lakes project. Please refer to the South Dakota Watershed Protection Program Quality Assurance Plan and the South Dakota Watershed Protection Program Standard Operating Procedures for Field Samplers for details of the procedures to be followed.

OBJECTIVE 4: Evaluation of agricultural impacts to the water quality of the watersheds through the use of the Agricultural Nonpoint Source model (AGNPS).

TASK 13 The South Central Lake watersheds will be modeled using the AGNPS model. AGNPS is a comprehensive land use model which estimates soil loss and delivery and evaluates the impacts of agricultural areas. The watershed will be divided into 40-acre cells. Each 40-acre cell

will be analyzed by collecting 21 individual parameters with additional information collected for animal feeding operations.

TASK 14 This model will be used to identify critical areas of nonpoint source pollution to the surface waters in the watershed. Areas contributing excessive nutrients and sediments to surface water in the watersheds will be identified.

LINE ITEMS	NON-FEDERAL		FEDERAL
	CASH	IN-KIND	
Personnel (@ $24/hr)	6000		28000
Travel			4700
Water Quality Analysis			
Supplies and Shipping			91
Boat and Motor			
Equipment			
PSIAC Model			
Total	6000		32,791

PRODUCTS:

Report on land use in the watershed.
Recommendations for remediation of pollution sources in the watershed.

RESPONSIBLE AGENCIES:

Task Prioritization:

Project Coordinator
Project Sponsor

Design and Technical Assistance:

South Dakota Department of Environment and Natural Resources

OBJECTIVE 5: Public participation and involvement will be provided for and encouraged.

TASK 15 Informational meetings will be held for the general public and to inform the involved parties of progress on the study. These meetings will provide an avenue for input from the residents in the area.

TASK 16 News releases will be prepared and released to local news media on a quarterly basis. These releases will be provided to local newspapers, radio stations and TV stations.

LINE ITEMS	NON-FEDERAL		FEDERAL
	CASH	IN-KIND	
Personnel (@ $24/hr)	948		
Travel			
Water Quality Analysis			
Supplies and Shipping	167		100
Boat and Motor			
Equipment			
Biological Analysis			
Public Meetings/News Releases			
Total	1115		100

PRODUCTS:

Public input to the project.
Information and education about the project.
Involvement and/or input from the public will be documented.

RESPONSIBLE AGENCIES:

Task Prioritization:

Project Coordinator
Project Sponsor

Design and Technical Assistance:

South Dakota Department of Environment and Natural Resources

WORK ACTIVITIES:

Informational meetings will be held on a frequent basis for the general public to inform the involved parties of progress on the study and provide a means of public input.

OBJECTIVE 6: Development of watershed restoration alternatives.

TASK 17 Once the field data is collected, an extensive review of the historical and project data will be conducted.

TASK 18 Loading calculations based on project data will be done and a hydrologic, sediment and nutrient budget for each watershed will be developed.

TASK 19 The results of the AGNPS modeling of the watershed will be used in conjunction with the water quality and hydrologic budget to determine critical areas in the watersheds.

TASK 20 The feasible management practices will be compiled into a list of alternatives for the development of an implementation project and included in the final project report.

LINE ITEMS	NON-FEDERAL		FEDERAL
	CASH	IN-KIND	
Personnel (@ $24/hr)	2000		
Travel			
Water Quality Analysis			
Supplies and Shipping			100
Boat and Motor			
Equipment			
Biological Analysis			
Computer Analysis			
Total	2000		100

PRODUCTS:

A list of viable watershed restoration alternatives and recommendations for the South Central Lake watersheds.

RESPONSIBLE AGENCIES:

Task Prioritization:

Project Coordinator
Project Sponsor

Design and Technical Assistance:

South Dakota Department of Environment and Natural Resources

WORK ACTIVITIES:

An extensive review and study of the historical and current data will be done to determine the best management practices and hydrologic restoration techniques needed to improve water quality and sediment transport in the lakes and watersheds.

OBJECTIVE 8: Produce and publish a final report containing water quality results and restoration alternatives.

TASK 21 Produce loading calculations based on water quality sampling and hydrologic measurements.

TASK 22 Summarize the results of the AGNPS model for the watershed and report locations of critical areas.

TASK 23 Write a summary of historical water quality and land use information and compare with project data to determine any possible trends.

TASK 24 Based on data, evaluate the hydrology of the watersheds and the chemical, biological, and physical condition of the streams.

TASK 25 Produce a summary report of all QA/QC activities conducted during the project and include in the final project report.

TASK 26 Write a description of feasible restoration alternatives for use in planning watershed nonpoint source implementation projects.

LINE ITEMS	NON-FEDERAL		FEDERAL
	CASH	IN-KIND	
Personnel (@ $24/hr)	3000		
Travel			
Water Quality Analysis			
Supplies and Shipping			100
Boat and Motor			
Equipment			
Biological Analysis			
Publication			1000
Total	3000		1100

PRODUCTS:

A final Report incorporating all previously described objectives

RESPONSIBLE AGENCIES:

South Dakota Department of Environment and Natural Resources

WORK ACTIVITIES:

Statistical evaluation of all water quality and field data produced during the course of the study. Review and compilation of historical data will be completed. Restoration alternatives will be developed. Graphic presentations of the information will be produced.

3.3 MILESTONE TABLE - see attached milestone.

3.4 No special permits are required to do this assessment project.

3.5 The South Central Water Development District are appropriate lead project sponsors for this project. The Water Development District boundaries encompass all of the involved Conservation Districts. The conservation districts are important to this project because of their relationship with watershed landowners. The main problems with the project lakes and watersheds appear to be sediment and nutrient loadings.

4.0 COORDINATION PLAN

4.1 The following groups/agencies have agreed through an informal agreement to cooperate in the South Central Lakes Watershed Assessment project. (tentitive only)

South Central Water Development District – Local Project Sponsor

Charles Mix County Conservation District - Local support and technical assistance

Douglas County Conservation District - local support and technical assistance

South Dakota Conservation Commission – Local support and technical assistance

Charles Mix County Commission – Local support and technical assistance

Douglas County Commission - Local support and technical assistance

US Natural Resource Conservation Service – Local support and technical assistance.

US Environmental Protection Agency –Support and technical assistance

South Dakota Department of Environment and Natural Resources - technical assistance

South Dakota Department of Game Fish and Parks - technical assistance

4.2 In February, 1997 a letter requesting assistance was received from the South Cental Water Development District requesting assistance for the preparation of an assessment study grant for six small lakes and watersheds in the South Central Water Development District.

4.3 Letters of support have been supplied by local organizations to DENR supporting the South Central Lake Watershed Assessment Project.

4.4 This project will coordinate activities with state, federal, and local government agencies. Input and involvement in this assessment has been requested from SD Game, Fish, and Parks, NRCS, local organizations, and local government agencies.

4.5 There currently are no other agencies conducting assessment project activities on the South Central Lakes or Watersheds as described in this proposal.

5.0 EVALUATION AND MONITORING PLAN

5.1 The monitoring strategy is explained in section 3. The project will produce bi-annual progress reports.

5.2 This assessment project consists of a combination of chemical, hydrologic, land use and biological analyses. Monitoring sites will be maintained and sampled on South Central Lake watersheds. Ambient samples will be collected along with spring runoff and storm events. Stream discharge will be routinely measured. Loads will be calculated.

5.3 All water quality monitoring will be done in accordance with the approved South Dakota Nonpoint Source Quality Assurance/Quality Control Project Plan and the Standard Operating Procedures for Field Samplers for the South Dakota Watershed Protection Program.

5.4 Results from all water quality monitoring efforts under the South Central Lake Watershed Assessment Project will be reported in the final project report. Data will be managed by the South Dakota Department of Environment and Natural Resources and maintained in a computer database. All sample data will be entered in the US EPA STORET Program. This data will be used as the foundation of a Section 319 Watershed Implementation Project proposal.

6.0 BUDGET

See attached budget sheets.

7.0 PUBLIC INVOLVEMENT

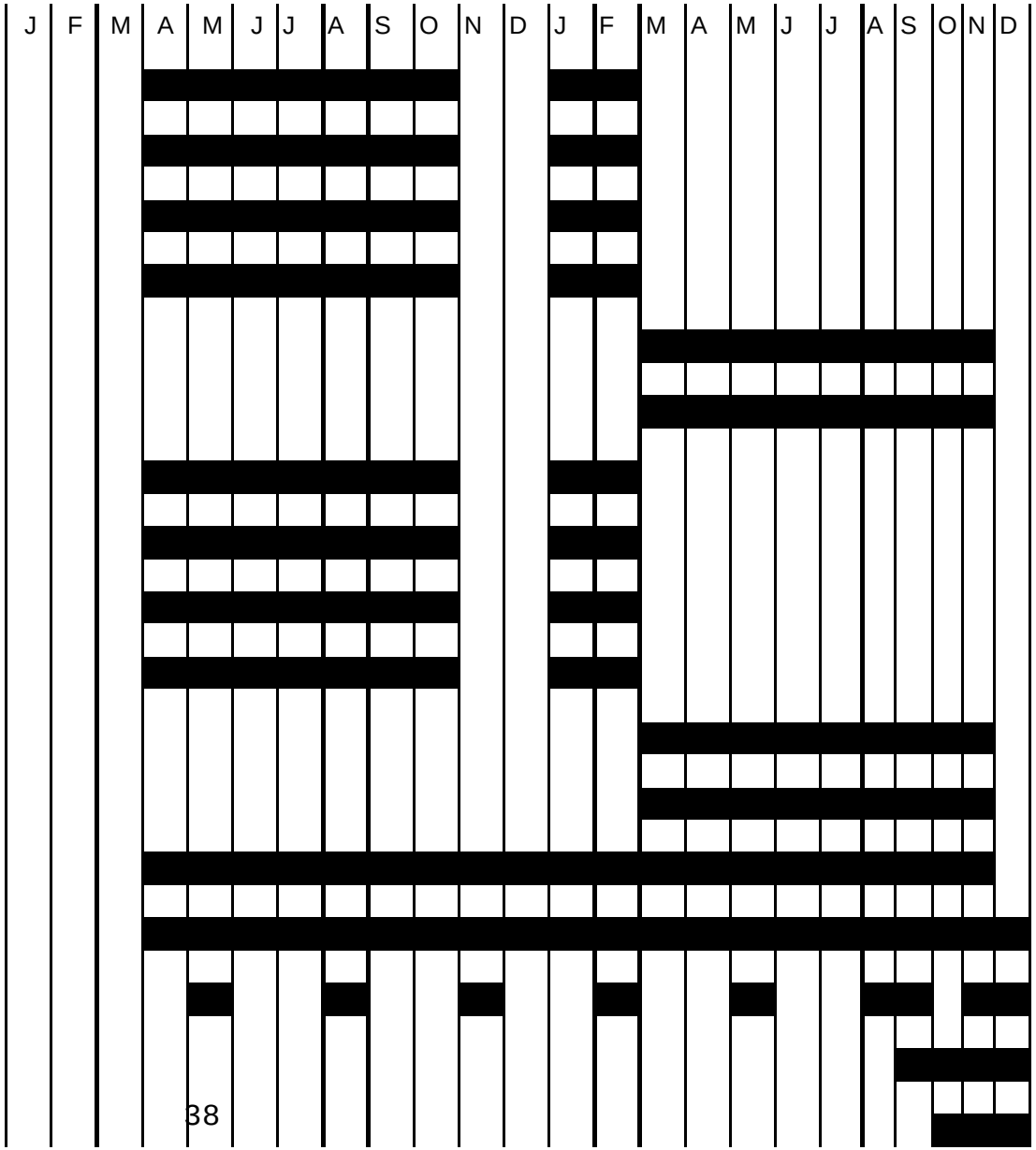
See Objective five.

SOUTH CENTRAL LAKE WATERSHED ASSESSMENT PROJECT BUDGET			
PART 1: FUNDING SOURCES	2000	2001	TOTAL
EPA SECTION 319 FUNDS	61,992	51,670	113,663
OTHER FEDERAL FUNDS Does Not Apply			
LOCAL MATCH	41,328	34,447	75,775
TOTAL BUDGET	103,320	86117	189,438

*INCLUDES MULTIPLE COMMUNITY ORGANIZATIONS AND AGENCIES

South Central Lakes Watershed Assessment Project
South Central Water Development District
Proposed Budget - 2000-2001

		Total Budget	Federal	Non-Federal	Federal EPA - 319	Conservation Commission	South Central WDD
Project Coordinator @ $15/hr		$ 62,400.00	$ 18,000.00	$ 44,400.00	$ 18,000.00	$ 26,530.00	$ 17,870.00
Technician	@$9/hr	$ 32,548.00	$ 10,000.00	$ 22,548.00	$ 10,000.00	$ 11,274.00	$ 11,274.00
Office Rent	@$150/mo/person	$ 7,200.00		$ 7,200.00			$ 7,200.00
Lab Analyses	385 samples@$150	$ 57,772.00	$ 57,772.00	$ -	$ 57,772.00	$ -	$ -
Equipment		$ 11,000.00	$ 11,000.00	$ -	$ 11,000.00	$ -	$ -
Travel		$ 14,300.00	$ 13,800.00	$ 500.00	$ 13,800.00		$ 500.00
Supplies		$ 2,258.00	$ 2,091.00	$ 167.00	$ 2,091.00	$ 83.50	$ 83.50
Publication		$ 1,000.00	$ 1,000.00	$ -	$ 1,000.00	$ -	$ -
Boat and Motor		$ 960.00	$ -	$ 960.00	$ -		$ 960.00
	TOTAL	$ 189,438.00	$ 113,663.00	$ 75,775.00	$ 113,663.00	$ 37,887.50	$ 37,887.50

South Central Lake and Watershed Assessment
South Central Water Development District
Milestone Chart

2000-2001