

Nemaha Natural Resources District

Long Range Plan

2019

Nemaha Natural Resources District
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Statement of Adoption

The 2019 Long Range Plan has been prepared to outline and explain the Nemaha Natural Resources District's activities, programs and projects for 2019 and beyond.

This Plan was adopted by the Nemaha Natural Resources District Board of Directors at their regular meeting held on August 8, 2019, at Tecumseh, Nebraska.

Bill Niedfeldt

Chairman

Doug Iske

Secretary

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INTRODUCTION

The Nemaha Natural Resources District is one of 23 Natural Resources Districts (NRD's) created in 1969 with the passage of LB 1357 by the Nebraska Unicameral. Since its formation in 1972, the Nemaha NRD has been assisting people in the Nemaha River Basin in the development and protection of our soil and water resources.

Nebraska statutes require that Natural Resources Districts develop a *Long Range Implementation Plan*. The purpose of the plan is to “summarize planned district activities and include projections of financial, manpower, and land rights needs of the district for at least the next five years and the specific needs assessment upon which the current budget is based.” (Section 2-3277, R.R.S. 1943). The plan serves as a tool for carrying out the District's *Master Plan*.

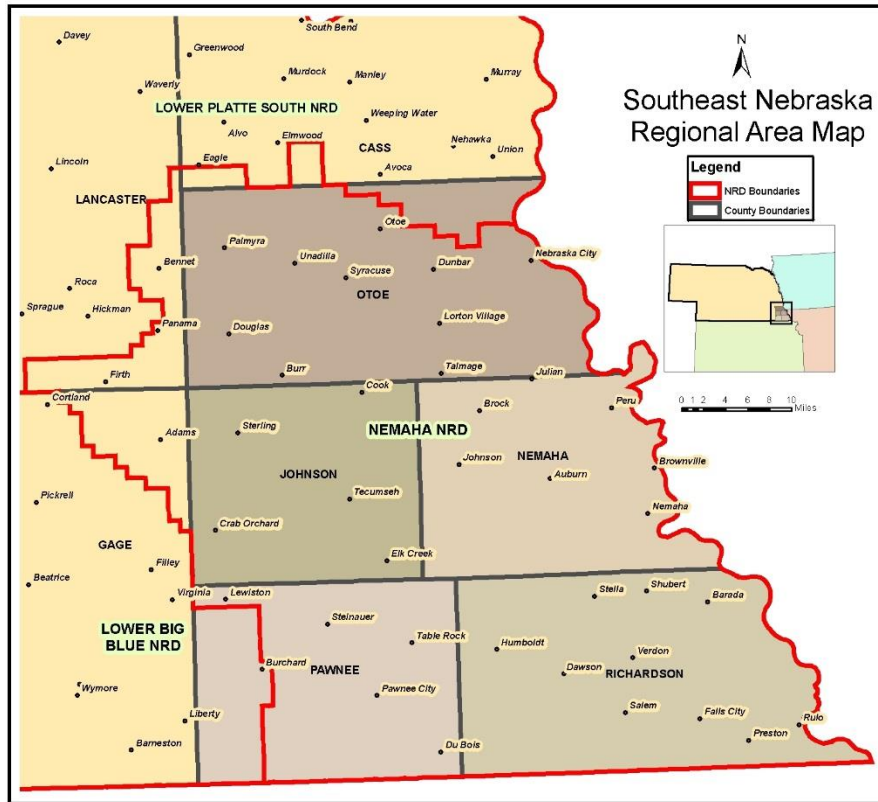
I. AUTHORITY AND RESPONSIBILITIES

The Natural Resources Districts were given statutory responsibility outlined in Sections 2-3229, R.R.S. 1943. This section states “The purposes of the Natural Resources Districts shall be to develop and execute, through the exercise of powers and authorities contained in this act, plans, facilities, works and programs relating to:

- (1) Erosion prevention and control,
- (2) Prevention of damages from flood water and sediment,
- (3) Flood prevention and control,
- (4) Soil conservation,
- (5) Water supply for any beneficial uses,
- (6) Development, management, utilization, and conservation of groundwater and surface water,
- (7) Pollution control,
- (8) Solid waste disposal and sanitary drainage,
- (9) Drainage improvement and channel rectification,
- (10) Development and management of fish and wildlife habitat,
- (11) Development and management of recreational and park facilities, and
- (12) Forestry and range management.”

Nemaha NRD programs and projects are available to meet the goal of properly developing our water and related land resources.

II. DESCRIPTION OF THE DISTRICT



Location: Southeast Nebraska (All of Johnson, Nemaha, and Richardson Counties; most of Otoe and Pawnee Counties; some of Gage, Lancaster, and Cass Counties)

Size: 2,402 square miles or 1,537,460 acres within the Big & Little Nemaha River Basins

Tributaries: Brownell Creek, Camp Creek, Long Branch Creek, Muddy Creek, Pony Creek, Rock Creek, Lores Branch, Negroes Branch, Spring Creek, Squaw Creek, Turkey Creek, Walnut Creek, Winnebago Creek, Bean Creek, Ziegler Creek, and Wilson Creek.

Population: 44,560 (2010 census) - about 35% rural, 65% urban

Taxing Authority: Up to 4.5 cents per \$100 of taxable valuation annually on all taxable property within the District and an additional tax equal to the amount by which our restricted funds budgeted to administer and implement ground water management activities and integrated management activities under the Nebraska Ground Water Management and Protection Act exceed our restricted funds budgeted to administer and implement ground water management activities and integrated management activities from FY 2003-2004, not to exceed 1 cent per \$100 of taxable valuation annually on all of the taxable property within the District

III. GOVERNING BODY & CURRENT STAFF

The Nemaha Natural Resources District is governed by a 21-member Board of Directors. Directors are elected during the general election for a term of four years with half of the members up for election every two years. Directors are elected by their subdistrict's voters. To allow balanced representation across the District, the area is divided into ten subdistricts, all with approximately equal population. Two board members represent each of the ten subdistricts. Also, one board member is elected at large every four years.

The NRD Board operates according to a set of by-laws which are kept on file at the District headquarters in Tecumseh, Nebraska.

BOARD OF DIRECTORS (As of July 1, 2019)

Name	Address	Subdistrict
Lisa Beethe	Elk Creek	6
Robbie Bohling	Johnson	6
Jessica Donnelly	Nebraska City	4
Jim Gerweck	Falls City	10
Orval Gigstad	Syracuse	3
Vacant	Nebraska City	5
Dan Hodges	Julian	4
Doug Iske	Dunbar	3
Jon Keithley	Falls City	9
Robert Lassen	Firth	1
Timothy Loseke	Hickman	1
Michael McDonald	Palmyra	2
Russel Moss	Burr	At-Large
William Niedfeldt	Shubert	9
Alan Romine	Falls City	10
Donald Siske	Table Rock	8
Eldon Snoke	Humboldt	8
Mike Speece	Auburn	7
Daniel Stukenholtz	Brock	7
J. Duane Sugden	Sterling	2
Kevin Thorne	Nebraska City	5

The staff of the Nemaha NRD consists of 13 full-time employees in the headquarters and five clerks that serve in the Natural Resources Conservation Service offices throughout the District. Seasonal, temporary staff are hired as needed for help with watershed and recreation area maintenance. The NRD also administers grant funds provided by NRCS or NACD to hire technical assistance within the NRCS offices. These positions are funded entirely through these grants.*

Current Staff *(as of July 1, 2019)*

General Manager	Bob Hilske
Assistant Manager	Scott Nelson
Water Resources Manager	Chuck Wingert
Administrative Assistant	Jane Kuhl
Administrative Assistant	Kerri Miller
Secretary	Lisa Bartels
Resources Specialist	Aaron Stalder
Water Resources Technician	Charlie Pierce
Field Representative	Vernon Speers
Field Representative	Mark McDonald
Field Representative	Steve Bartels
Field Technician	Tomas Chalé Aké
Land & Water Resources Assistant	Ken Hatten
Johnson County Clerk (Tecumseh)	Geralynn O'Malley
Nemaha County Clerk (Auburn)	Alice Alexander
Otoe County Clerk (Syracuse)	Kim Zech
Pawnee County Clerk (Pawnee City)	Kathy Harlow
Richardson County Clerk (Falls City)	Laura Hart
*NRCS Technical Assistant	Turner Moore

IV. PROJECTS & PROGRAMS

A. WATERSHED PROGRAMS

The Nemaha NRD has helped install and/or is responsible for operation, maintenance, and inspection of over 450 watershed projects comprised of both flood control and grade stabilization dams and structures.

ONGOING ACTIVITIES

1. General Maintenance
 - a. Complete annual dam inspections
 - b. Complete routine maintenance
 - i. Contracted maintenance
 - ii. Staff performed maintenance
 - c. Complete scheduled major repair items
 - i. Rip rap projects
 - ii. Outlet Repairs
 - iii. Primary Spillway Replacements
 - d. Update Emergency Action Plans on high hazard structures
 - e. Cost: \$250,000
 - f. Funding source: NRD
2. Upper Big Nemaha 25-C
 - a. Complete rehab project in spring, 2020
 - b. Cost: \$2,500,000
 - c. Funding source
 - i. NRCS Watershed Program: \$1,625,000
 - ii. NRD: \$875,000
3. Small Dams Cost-Share Program
 - a. Complete Haug dam design and permitting
 - b. Complete project construction
 - c. Estimated cost (engineering, permits, construction): \$120,000
 - d. Funding source
 - i. NRD: 75%
 - ii. Landowner: 25%

FUTURE PLANS

1. Address beaver issues on dams
2. Consider need for rehabilitation of aging watershed structures
3. Continue routine maintenance of watershed structures
4. Assess the potential for quality small dam cost-share applications
5. Update Small Dams Policy for monetary or inflationary purposes

B. GROUND & SURFACE WATER/WATER RESOURCES

ONGOING ACTIVITIES

1. Groundwater Management
 - a. Rules & Regulations Changes/Updates – public hearing anticipated for September-October 2019
 - b. Continue membership in ENWRA (Eastern Nebraska Water Resources Assessment)
 - c. AEM Flight Data Report
 - i. Funding source: Water Sustainability Fund-\$126,000
 - d. Monitoring Well Project – Geologic logging and observation well construction began June 10, 2019, & should be completed by September, 2019
 - i. Funding source: NETF - \$169,000
 - e. Work with DNR on Voluntary Integrated Management Plan
 - f. Well Permitting
 - i. Wells permitted: 2018-16 approved; 2019-3 approved
 - ii. Changes/updates to permitting process – this will depend upon the final groundwater rules and regulations that get approved later this year – potential changes include requiring pivot plans, drilling to bedrock, active well permits considered in well ranking methodology, and a waiting period for reapplication if a permit expires
 - g. Inform public about changes/implement changes as per rules
2. Groundwater Quality
 - a. Phase II Area
 - i. Continue to monitor nitrate concentrations
 - ii. Continue annual sampling, potentially add a few additional wells
 - b. Continue free nitrate and bacteria testing as requested
3. Chemigation
 - a. Permits received/inspected - 277 permits received last year
 - b. Anticipate the number of permits to increase as the number of irrigation wells constructed increases. Chemigation is a much more efficient way to apply fertilizer with less leaching potential.
4. Cost-Share Programs
 - a. Well abandonment
 - i. Wells closed/cost-shared in 2018-19: 22
 - ii. State funding + NRD funds = ~\$6,300 State/\$10,000 NRD
 - b. Flow meter & irrigation management equipment
 - i. Cost-share provided in 2019 - \$1,900

- c. Wellhead protection
 - i. Promote well decommissioning within wellhead protection areas
 - ii. Work with Auburn & Syracuse on Wellhead Protection Plan development
- 5. Surface Water
 - a. Beach sampling for cyanobacteria (toxic algae) and total coliform bacteria at NRD public lakes
 - b. Renew or process new surface water irrigation permits as needed

FUTURE PLANS

1. ENWRA – discuss additional AEM flights in 2020 or beyond
2. Projections for future well closures with NRD cost-share funds – average about 40 per year
3. Plans for encouraging more well closures – increase cost-share maximums
4. Telemetry
 - a. Adding telemetry units to all 30+ observation wells with pressure transducers installed – anticipated completion date spring, 2020
5. NDEQ Basin Rotation in 2021 (surface water sampling)
6. Consider renewal of existing surface water irrigation permits as requested

C. RECREATION

ONGOING ACTIVITIES

1. Steamboat Trace
 - a. 2019 flood damages
 - i. Because the trail is closed for 2019, only basic maintenance will be performed (spraying weeds, debris cleanup) until it is repaired/reopened (possibly not until fall, 2020)
Cost: \$15,000; Funding Source: NRD
 - ii. Evaluate extent of damage
 - iii. Estimate cost for repairs
 - iv. Work with FEMA to obtain funding
2. Iron Horse Trail Lake
 - a. New signage on loop trail
 - b. Complete invasive tree removal project
 - i. Cost: \$60,000
 - ii. Funding sources:
 1. NRD: \$15,000
 2. Game & Parks: \$45,000
 - c. Address erosion on boat mooring island

3. Kirkman's Cove
 - a. Install new restrooms in day-use area and near boat ramp
 - b. Replace west entry sign
 - c. Cost estimated at ~ \$15,000

4. Wirth Brothers Lake
 - a. Replace signage
 - b. Modify archery range

5. Prairie Owl
 - a. Erosion protection on shoreline
 - b. Cost: \$2,800 (NRD funds)

6. Duck Creek
 - a. Connect trail to east side of lake
 - b. Additional tree and grass planting
 - c. Completed construction of maintenance building
 - d. Cost: \$50,000
 - e. Funding source: \$30,000-Nebraska Resource Development Fund

7. Sediment Basins
 - a. Kirkman's Cove
 - i. Complete preliminary design and permitting
 - ii. Cost: \$53,000-NRD Funds
 - b. Duck Creek
 - i. Acquire land rights
 - ii. Complete permitting
 - iii. Complete construction
 - iv. Cost: \$400,000
 - v. Funding sources
 1. NRCS Watershed Program: \$300,000
 2. NRD: \$100,000

8. Park Permits/Fees/Mowing Contract(s)
 - a. Encourage and find ways to increase website sales of permits
 - b. Investigate options for mobile payment of park permits, camping fees
 - c. Continue 3-year mowing contracts
 - d. Split mowing into two contracts (half of the areas in each contract)

FUTURE PLANS

1. Steamboat Trace
 - a. Complete bridge re-decking
 - b. Hard surface problem points
 - c. Evaluate options for future operation of the trail as a result of 2019 flood damages

2. Iron Horse Trail Lake
 - a. Replace restroom in primitive RV loop
 - b. Replace playground equipment
 - c. Evaluate expansion of electric RV area
 - d. Monitor sediment basin
 - e. Invasive tree control (burn/hay/spray)
 - f. Investigate options for installing warning siren

3. Kirkman's Cove
 - a. Develop plans for RV dump station
 - b. Replace restrooms in Amy Glathar area and tent camping area
 - c. Replace playground equipment in beach loop
 - d. Invasive tree removal
 - e. Investigate possibility of installing a warning siren in cooperation with Richardson County

4. Wirth Brothers Lake
 - a. Install rubber mulch in playground area (apply for NDEQ grant funds)
 - b. Replace restroom
 - c. Develop RV pads
 - d. Replace boat dock

5. Prairie Owl
 - a. Replace restroom
 - b. Discuss future development vs. no development

6. Duck Creek
 - a. Look at options for developing group facilities
 - b. Consider options for a dump station

7. Sediment Basins-Kirkman's Cove
 - a. Seek/acquire grant funding for project
 - b. Construct sediment basin

8. Park Permits
 - a. Monitor and adjust fees as needed
 - b. Consider options for campsite reservations

D. CONSERVATION PROGRAMS

ONGOING ACTIVITIES

1. Soil & Water Conservation Program (SWCP)
 - a. Continue to supplement State funds with NRD budgeted funds
 - b. Erosion & Sediment Control Program-handle complaints with cost-share through SWCP when applicable

2. Nebraska Buffer Strip Program
 - a. Continue to administer contracts with NRCS
 - b. Continue to inspect all contracts annually
 - c. Funding provided entirely by Nebraska Department of Agriculture
3. Conservation Tree Program
 - a. Continue to offer trees/shrubs for sale
 - b. Continue to offer tree planting service for orders exceeding 200
 - c. Implement a Windbreak Renovation Program
4. Grassland Drilling Program-continue to offer spring and fall no-till grass drilling services with a 100-acre per season maximum workload
5. Wildlife Programs: Continue to offer programs through WILD Nebraska

FUTURE PLANS

1. Investigate options to encourage more tree plantings
2. Review approved practice schedule periodically

E. INFORMATION & EDUCATION/PUBLIC ASSISTANCE

ONGOING ACTIVITIES

1. Education/Youth Programs
 - a. Envirothon (regional, state, 2020 national in Nebraska)
 - b. Land & Range Judging
 - c. Water Celebration
 - d. Third Grade Plant A Tree
 - e. Watershed of Wonders Day Camp (every even-numbered year)
 - f. Scholarships for youth camps (ACE, Range Camp, etc.)
 - g. Outdoor classrooms: promote funding for small projects (<\$1,000)
2. Information Programs
 - a. Insight (quarterly newsletter)
 - b. Website
 - c. Social Media (increase use)
 - d. Events (State Fair, Husker Harvest Days, etc.)

3. Urban Special Projects
 - a. Current Projects Approved
 - i. Nebraska City Riverview Nature Park-trail improvement
 - ii. Falls City-native plantings
 - b. Continue to advertise program with local communities, schools
 - c. Add provisions in contracts that regular, quarterly updates will be required on all project.

FUTURE PLANS

1. Continue to offer Watershed of Wonders day camp in even numbered years
2. Incorporate videos into website, social media
3. Advertising: increase paid advertising in both print and radio markets
4. Urban Special Projects
 - a. Incorporate native tree, shrub, grass listing into policy to provide guidelines for acceptable species
 - b. Consider developing a separate program for educational projects (i.e. outdoor classrooms, greenhouses, etc.)

F. OTHER PROGRAMS

ONGOING ACTIVITIES

1. Hazard Mitigation Plan
 - a. Sign grant documentation with FEMA
 - b. Complete agreements with counties
 - c. Develop plan scope with consultant
 - d. Implement plan update process
 - e. Cost: \$136,000
 - f. Funding: \$102,000-FEMA; \$34,000-NRD/Counties
2. County Road Erosion Issues
 - a. Work with counties, as requested, to identify potential projects
 - b. Consider options for assisting with projects
 - c. Consider developing a program to prioritize assistance
3. NeRAIN
 - a. Continue to fund new applicants (provide free rain gauges)

FUTURE PLANS

1. Complete update of Hazard Mitigation Plan
2. Identify potential projects for hazard mitigation assistance
3. Update Hazard Mitigation Plan every 5 years as required
4. Provide recognition for long-time NeRAIN volunteers (2021 will mark 15 years of participation within the Nemaha NRD)

G. DIRECTORS, STAFF, FACILITIES & EQUIPMENT

ONGOING ACTIVITIES

1. Election/Board of Directors
 - a. Subdistrict boundary adjustments due to 2020 census
2. Staff
 - a. Continue to provide funding for NRD clerical support in NRCS offices
 - b. Administer TSP & other grant funds for NRCS technical support
 - c. Review and update personnel policy
3. Facilities Maintenance, Updates
 - a. Security upgrades (change locks periodically, institute more stringent control of keys and access)
 - b. Other improvements, maintenance needs as identified
4. Equipment & Vehicle Needs
 - a. Monitor vehicle replacement schedule; update as needed
 - b. Replace vehicles per schedule

FUTURE PLANS

1. Consider number of Subdistricts (currently 10)
2. Consider number of Directors (currently 21)
3. Investigate options for paperless board meetings

H. BUDGET, FINANCES, FUTURE PLANNING (ONGOING)

1. Audit
 - a. Continue 3-year agreement with Schulz & Associates to perform annual audit (expires after FY 2021 audit)
 - b. Evaluate need for seeking proposals to perform audit when present agreement expires
2. Insurance-Continue coverage through Harry A. Koch unless other options become available to consider that would provide coverage, particularly for high hazard structures
3. Master Planning
The District's ten-year Master Plan is scheduled to be updated in 2021.

4. Budget: Explanation of Revenues & Expenditures in FY19 Budget

REVENUE

Federal Grants & Funds: \$1,288,879

Nemaha Basin Water Quality Plan (EPA 319 Funds); UBN 25-C Rehab Project (NRCS); Duck Creek Sediment Basin (NRCS)

State Grants & Funds: \$554,468

Iron Horse Tree Removal (Nebraska Game & Parks); Duck Creek Recreation (Nebraska Resource Development Fund); Monitoring Well Project (Nebraska Environmental Trust); AEM Flight Project (Water Sustainability Fund); Nebraska Buffer Strip Program (Nebraska Department of Agriculture); State Water Quality Funds

Local Property Taxes: \$1,945,520

Cash on Hand & Misc. Funds Receivable: \$1,774,445

Other: \$123,077

Landowner Share of Project Costs (small dams); Tree sales & planting services; Park Permits & Electrical Hookup Fees

EXPENDITURES

Watershed & Flood Control Projects: \$2,178,500

Buck/Duck Mitigation; Watershed Rehabilitation (Upper Big Nemaha 25-C); Watershed Structure Repair/Maintenance

Recreation: \$489,618

Duck Creek Recreation Development (sediment basin, maintenance building, siren); Park & Trail Maintenance (rock, sand, tables, grills, utilities, mowing, etc.); Iron Horse Trail Lake (tree removal, dump station); Kirkman's Cove (2 restroom replacements; sediment basin)

Personnel & Director Expenses: \$1,275,465

General Operation & Administration: \$218,005

Utilities, vehicle & equipment expenses, property maintenance, supplies, insurance, dues, postage, etc.; hazard mitigation plan update

Conservation Assistance: \$361,150

Tree Planting & Grass Drilling; Nebraska Buffer Strip Program; Soil & Water Conservation Program; Urban Special Projects; Small Dams Cost-Share Program

Water Quality/Quantity: \$636,479

Groundwater & Surface Water Monitoring; monitoring well project; Well Abandonment; Chemigation; Flow Meter & Irrigation Management Cost-Share; Basin Planning/Groundwater Consulting; AEM Flight Project; Wellhead protection

Capital Expenditures: \$50,000

Additional pickup, boat & trailer, power washer

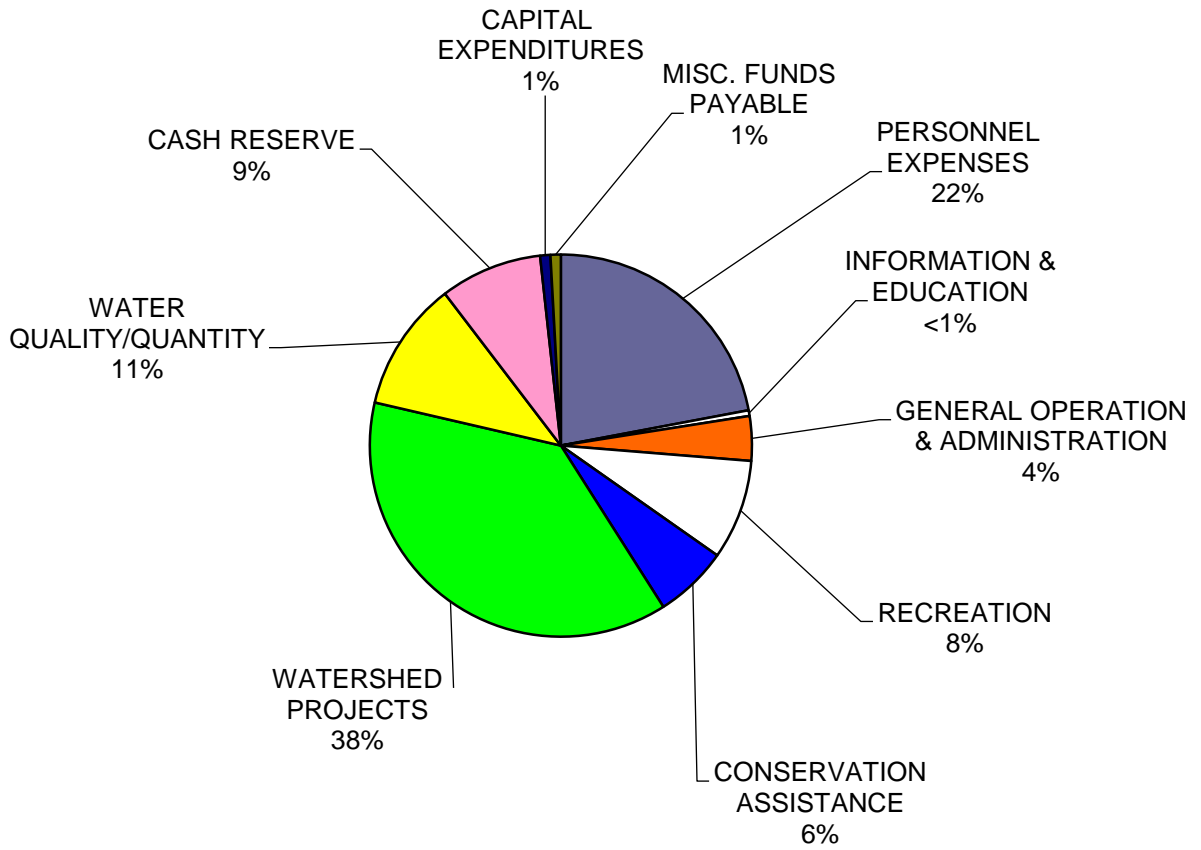
Information & Education: \$27,780

Awards, youth & education programs, newsletter & website, advertising, etc.

Misc. Funds Payable: \$50,608

Cash Reserve: \$500,000

Fiscal Year 2019 Budgeted Expenditures



Fiscal Year 2019 Budgeted Revenue

