



# Five Year Plan (2023-2028)

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SEMINOLE SOIL AND WATER  
CONSERVATION DISTRICT

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# ABOUT SEMINOLE SOIL AND WATER CONSERVATION DISTRICT

## Introduction to SSWCD

The Seminole Soil and Water Conservation District (SSWCD or District) is a soil and water conservation district organized under Florida Statutes Chapter 582. We are a local subdivision of state government and operate as a special district. SSWCD serves all residents of Seminole County by striving to promote the efficient use of soil and water resources by protecting water quality and preventing floodwater and sediment damage.

## Mission

The Seminole Soil and Water Conservation District provides technical assistance, financial assistance, and education to create a sustainable, productive, healthy environment in Seminole County. We identify natural resource challenges and use both time-tested methods and cutting-edge research to determine solutions. Working with residents and agricultural producers, we help our community implement sustainable solutions to conserve and enhance natural resources.

## Vision

The Seminole Soil and Water Conservation District works to create a sustainable, productive, and healthy environment for Seminole County.

## **PART 1 - GUIDING PRINCIPLES AND PERSPECTIVES**

The District's operations, interactions with the public and partners, and services are directed by these guiding principles and perspectives.

- Protection and enhancement of our county natural resources are essential to our economic vitality and community livability.
- The condition of our natural resources and access to nature have direct public health impacts. Public health benefits are not limited to access to natural areas in rural settings but can also be done with strategic “green spaces” in densely populated urban communities.
- Seminole County communities are diverse. The District is committed to serving all communities within the county, so they can access and benefit from our programs and services.
- County and community leaders need to understand that what is happening in forests and rural lands has a direct impact on urban areas, particularly for water quality and quantity. What the District can do in forest and rural lands should be as important to urban residents as what we can do directly within urban areas.
- Protection of our natural resources requires a watershed-scale effort. Lasting gains are made when work is done across all land uses and projects.
- Pressures on our natural resources present challenges to natural resource health: population growth, urban expansion, insects, invasive species, plant and animal diseases, and fragmentation of land use in rural areas.
- Keeping natural resources healthy requires consistent, diligent work which never ends.
- Recovery from damage or deterioration from neglect is not achieved quickly. It is much more costly than prevention and proper management, and it may not succeed in returning to previous conditions.
- Grants and leveraging state and federal funds bring in financial resources to assist individuals, agricultural producers and conservation groups carrying out activities. The District can use district funds when projects

might not qualify for other funding. A locally led, watershed-based, voluntary approach to resource management on private lands is critical to sustainable natural resources.

- Landowners will meet natural resource goals through voluntary, agricultural best management practices (BMPs) when equipped with information, technical assistance, and incentives.
- Private property rights and decisions shall be respected, as well as an individual landowner's right to make a living off the land.
- Private landowners have a right to economic profitability of their land, within allowable legal uses. They also have a corresponding obligation to use natural resources wisely and responsibly.
- Partnerships dedicated to conservation principles, goals, and objectives shall lead to mutual support and shared leadership in collaborative efforts, while respecting differences in mission, cultures, and customers.
- Residents and agricultural producers input will be sought and used to establish local priorities relating to natural resource concerns and strategies to improve watershed health through our local working group.

## Our Three Pillars

- **Livable Community** - Our work helps to create healthy, livable communities that are good places to work and to play. We form partnerships to achieve stewardship, provide conservation education, and bring communities together in shared responsibility. We see economic health as interconnected and necessary for livable communities.
- **Wise Conservation** - We believe conservation is based on knowledge and practice. Our organization guides Seminole County to conserve and enhance natural resources. We create education opportunities and help community members better understand and connect to conservation resources. Wise conservation makes sustainability attainable for individuals and communities.

- Practical Innovation - Our practices are based on science and practical experience. We implement new knowledge and technology as well as depend on reliable, established practices. We continue to learn and grow to serve our community's needs.

## Four Uniques

Four important characteristics define our district.

1. We serve everyone. We serve all residents of Seminole County. From farmers to apartment dwellers, we provide education, connect people to resources, and work together to make our community a good place to live.
2. We are local. While following federal and state laws, our focus is always local – to benefit all of Seminole County.
3. We are connectors. We partner with many organizations and can help connect residents with the resources they need to achieve community conservation goals.
4. We are non-regulatory. We do not enforce any laws, though we can assist residents to understand and comply with them.

## How SSWCD Will Use the Strategic Plan

The District's five-year Plan provides focus and direction to carry out our mission and vision for Seminole County. It establishes goals and desired conditions for the entire district.

- The Plan outlines the natural resource priorities, capacity, and strategies the District will use to address problems. Each program area includes strategies to address the goals and desired conditions.
- Detailed annual work plans will be developed and implemented for each program. Annual reports will demonstrate progress. Program development and revisions will occur as we continue to assess what is needed. We will regularly communicate to residents and partners what we are doing.

## Audiences

The intended audiences of this Plan include:

- Seminole County residents
- Seminole County government and the seven cities
- Business leaders and agricultural producers
- Partners in local, state, and federal government agencies
- Private organizations
- Lawmakers at all levels
- Current and potential funders.

This Plan provides a clear understanding of how the District's work affects these audiences. We strive to gain their support, cooperation, and participation in District activities.

## PAST AND FUTURE DIRECTION OF SSWCD

### Formation of SWCDs and SSWCD

In 1935, President Franklin D. Roosevelt addressed the problems of soil erosion in the nation by establishing the Soil Conservation Service (SCS) within the United States Department of Agriculture. The SCS was charged to develop a program to conserve and enhance the nation's soil and water resources while providing food at a reasonable price. Within the first two years it became apparent local leadership was needed to help coordinate the efforts of federal conservation agencies and tie their programs to local erosion conditions and natural resource priorities. In 1937, President Roosevelt drafted the Standard State Soil Conservation District Law asking all governors to promote legislation that would form soil conservation districts. The Florida Legislature passed Florida Statute 582 in 1937, creating the mechanism through which soil conservation districts could

be established. The Seminole Soil and Water Conservation District was organized by the Secretary of State's certification on November 7, 1948, as the Seminole Soil Conservation District.

## Structure and Governance

Conservation district boards are the local governing bodies of the soil and water conservation districts. Effective boards work cooperatively to plan and oversee implementation of their district's programs. Florida Statutes Chapter 582 outlines the statutory powers granted to conservation district boards.

## Background and Context

Understanding the economic vitality, demographic diversity, community profiles, and trends of Seminole County leads the District to make our programs and services resource-driven and locally led with sufficient flexibility to serve local concerns and priorities. All elements of our program are tailored to the conditions specific to this county and by extension to each resident. The important conditions of Seminole County that drive our programs and service delivery are presented below.

(Description of Seminole County and Its Eighteen Drainage Basins goes here.)

## NATURAL RESOURCE PRIORITIES

As described above, Seminole County has a population of approximately 489,000. Seminole County includes a thriving rural area and an urban area with industry, commercial districts, and residential areas. This diversity brings a wide array of natural resource concerns. The natural resource priorities discussed below are significant to all land uses within the county.

### WATER QUALITY

#### Description and Importance to County Residents

Every water body in Seminole County is contaminated at some level. The problem spans streams, creeks, rivers, lakes, ponds, Upper Floridian Aquifer system, construction sites, clearing and grading areas, and areas with septic systems. The Wekiva, St. John's, and Econlockhatchee Rivers and tributaries are used for fish and wildlife, irrigation, drinking water, supporting industries, and recreation. All these beneficial uses are affected by the water quality in the watersheds.

In the past, most water quality problems were traced to the most obvious cause - point source pollution. Since point source pollution is any pollution source that comes from a specific location (such as a pipe discharging pollutants directly into the river), the problem can usually be traced back to the source. Much progress has been made in preventing further water quality problems from point sources.

Nonpoint source pollution problems are more difficult to control because the sources are often hard to identify and difficult to measure. This type of pollution results from a variety of activities. Nonpoint source pollution can be carried by the water that runs off crop, forest, and urban landscapes.



Nonpoint sources include failing and unmaintained septic systems, runoff from parking lots and construction sites, and irrigation and drainage systems.

Pollutants carried from nonpoint sources may include bacteria, motor oil, eroded soil particles, nutrients, pesticides, herbicides and more.

## Goals and Desired Conditions for Water Quality

1. Water meets all federal and state standards.
2. Runoff is prevented from reaching our surface and ground water.
3. Clean water is available for all beneficial uses (e.g. drinking water, irrigation, supporting industries and agriculture, fish and wildlife, and recreation).
4. Residents manage their properties to have positive effects on water quality.
5. All streams and lakes have riparian buffers (wetlands) with native vegetation.

## SOIL HEALTH

### Description and Importance to County Residents

Healthy soil supports clean air and water, bountiful crops and forest, productive pastures, diverse wildlife, and beautiful landscapes. In basic terms, soil health is the capacity of a soil to function. It is a measure of how well a soil can:

- sustain plant and animal productivity and diversity,
- absorb and store water, maintain and enhance water quality, and
- support human health and the surrounding environment.

With Florida's sandy soils, enhancement of the soil helps them to be full of life, high in organic matter, covered all the time, and well structured. Residents and agricultural producers are advised to follow the four basic soil health principles to improve soil health and sustainability:

- Keep the soil covered as much as possible.
- Disturb the soil as little as possible.
- Keep plants growing throughout the year to feed the soil.
- Diversify as much as possible using crop rotation and cover crops.

Erosion affects every resident in Seminole County. It has an impact on the water we drink, the food we eat, and the recreation we seek. Because erosion washes potentially harmful elements into our rivers, lakes, and streams, we need to be concerned about the quality of our drinking water. Erosion, and the pollution it may cause, could also make our waterways unsafe for swimming and fishing.

#### Goals and Desired Conditions for Soil Health

1. Soil health is enhanced for productivity, water infiltration and storage, plant and animal use, and plant survivability during dry periods.
2. Erosion is prevented or minimized to protect and preserve topsoil.
3. Residents, business owners, and agricultural producers prevent erosion and implement appropriate soil health practices.

## WATER QUANTITY

#### Description and Importance to County Residents

Water quantity is an important issue. Having either too much or too little can negatively impact farming, infrastructure, and waterway health. Everyone uses water, so everyone is affected by its supply, accessibility, and cost.

Pure and clean water is terrific, but we have problems when there is not enough to go around. A lack of water affects the farmer who must irrigate crops, the family concerned about a steady and clean drinking water supply, the home gardener who needs to water vegetables, and the weekend warrior recreating in natural spaces connected to water resources. All water users could be impacted by regulations and mandatory conservation measures if the water supply continues to be stretched.

On the other hand, having too much water can lead to serious problems. Flooding after storms cause waterway erosion and damage to buildings and structures as well as wildlife habitat. As with lack of water, flooding may also have a huge

negative impact on crop production. Flood water carries weed seeds, debris, and deposits soil on top of crops.

Recent flood events increased concern with flood management in the watershed. Increased development within the urban portion of the county and certain farm practices in the rural areas of the watershed have combined to generate higher peak flows that arrive faster and carry more erosive force, leading to the degradation of waterways.

In Seminole County, water demand comes from residential landscapes, irrigated agriculture, and municipal and industrial supply. The figure below shows the percent water use for each use category in the county.

Insert pie graph

#### Goals and Desired Conditions for Water Quantity

1. Water supply meets all beneficial use demands.
2. Wetlands are maintained for their multiple benefits.
3. Stormwater is professionally managed and mitigated.
4. Residents use water-saving strategies

## FARMLAND PROTECTION

### Description and Importance to Residents

Imagine a world without agriculture. Farmers supply the food we eat and contribute to many products we use daily. The land farmers use to grow these products is under constant pressure to be converted to residential or industrial uses. Once this land is converted to a non-farm use, it will likely never return to farm production again. The loss of farmland is an extremely important issue globally, but at the local level as well; it is one the District feels strongly about.

Agriculture is a part of Seminole County that is necessary to a sustainable environment, strong economy, and a healthy way of life.

(Insert history here0

As the future of farmland in Seminole County remains uncertain, the economic outlook for potential businesses and institutions that support agriculture production does too. This support infrastructure includes farm related businesses such as farm equipment dealers, feed stores, and farmers' markets. Without farm-related businesses in the county, farmers would be forced to drive longer distances to purchase the supplies and equipment necessary to generate agriculture products. Seminole County must maintain a "critical mass" of farmland, infrastructure, and economic benefits to support a viable agriculture industry. The District is dedicated to this issue and will advocate for a strong and viable agriculture industry. According to Florida Department of Agriculture and Consumer Services (FDACS), agriculture lands represent perpetual, renewable, adaptable, and sustainable economic and ecological value.

#### Goals and Desired Conditions for Farmland Protection

1. Urban and rural farms and gardens are visible throughout the county and contribute to the food supply for themselves and to share with others.
2. Farmers' markets are active and accessible to residents with reasonable effort and cost.
3. SSWCD supports agricultural viability for new and beginning farmers, farmers going through succession planning, and the infrastructure needed to operate farms.
4. Conservation easements are used to protect farmland in Seminole County.

## INFORMED AND INVOLVED PUBLIC

### Description and Importance to Seminole County Residents

An informed and involved public across all land uses fosters appreciation of the county's natural resources and teaches resource conservation practices to current and future generations.

Through conservation education, people develop the skills necessary to understand the complexities of natural resource problems. Conservation education also encourages people to take steps to conserve water and natural resources and use them responsibly.

The resources within Seminole County are affected by everyone's actions. It is important to help the public understand that we all live in a watershed and have responsibilities as residents to protect these resources. There is a strong connection between those resources and the local economy.

County residents need to know what a soil and water conservation district is and what services we provide to the community. Public familiarity with SSWCD improves success in providing education programs to all sectors of the community. Public awareness also supports pursuit of broader funding and partnerships, in turn allowing SSWCD to provide more services.

### Goals and Desired Conditions for an Informed and Involved Public

1. The public should know they live in a watershed and that the resources within a watershed are affected by everyone's actions.
2. The public will use good conservation practices on their own properties and participate in community conservation activities.
3. The public is aware of SSWCD's programs.

4. The public actively participates in SSWCD programs to receive education and technical assistance.
5. The public is informed about rural-urban boundary issues.
6. The public is informed about the benefits of conservation easements.

## **PART 2 - SSWCD PROGRAMS AND STRATEGIES**

This section builds on the “natural resource priorities” with “goals and desired conditions” discussed under each priority (pages 2-14) , and the “gaps and needs” presented on page 20.

Based on these understandings and perspectives, this section extends the planning process to SSWCD’s programs and services structure. SSWCD programs are designed to accomplish our mission and vision. Each program described below includes strategies that will be implemented over the next five years. Strategies define a general approach or method to accomplish the goals. The bulleted items expand each numbered strategy.

These strategies form the bases for the next step: developing action plans with specific measurable objectives and activities for the first fiscal year. With experience in each year, these strategies might be modified for subsequent fiscal year action plans. This iteration process will continue through each of the five years of this Strategic Plan.

### **WATER QUALITY PLAN**

Clean water is necessary for agriculture, and wastewater discharges contribute to algae blooms. To address excessive nutrients the SSWCB will:

1. Private well testing and outreach on results of tests. (Includes bacteria, salinity, and 1,4 dioxane and other forever chemicals.)
2. Track Pollution – Inform citizens of notifications from FDEP. Track and map incident reports, putting the report from FDEP in Google Maps and advertising the location and details of each incident.
3. Conduct a public survey of awareness of the fertilizer ordinance, following up with education through Homeowner’s Associations and Public Service Announcements created by students through a contest. (This is currently on hold)
4. Public Service Announcement Contest inviting middle school and high school student, and young adults. We will develop categories based on age and messaging. Targeted subjects will include topics on ecology and environmental issues.

To address pollution, the SSWCB will:

5. Hold a State of Seminole County Water Field Trips. They will address issues such as water nutrients, erosion, contaminates, salt water intrusion, and water conservation. The audience for the field trips are: local government officials including State Representatives, agricultural producers, business leaders, community and HOA leaders, and interested citizens.
6. Provide pollution prevention education on point and non-point source pollution information to homeowners through social media, website, and community outreach.
7. Invite HOA board members to workshops as a spin off from the Water Conference.
8. Host a series of education efforts – Save the Swales, Land Judging Contest with FFA, Envirothon Regional Competition for high school students.

## CONSERVATION PLAN

We educate the public on local natural resource concerns, teach best management practices to manage these resources, and provide conservation tools to create a healthy and livable community. The SSWCB contributes to the awareness of the importance of water conservation in Seminole County by:

- 1.** Including water conservation in the educational outreach programs.
- 2.** Partnering with SCPS to include drip irrigation in their garden projects to teach the next generation proven conservation techniques.
- 3.** Educate the public on rain water harvesting and reclaimed water storage.
- 4.** Guide residents to report their conservation accomplishments and learn about the accomplishments of others in their community in order to present awards to producers, businesses, and individuals who are leaders in conservation.
- 5.** Seeking partnerships with FDACS to bring a Mobile Irrigation Lab with both agricultural and urban landscape water users in mind.
- 6.** To include vocational education regarding urban agriculture, SSWCB will:
  - a.** Teach aquaponics to youth in underserved neighborhoods both as a “hands on” activity with the math and science necessary to successfully operate an aquaponic system, while contributing the food generated to local Boys and Girls Clubs and Midway Safe Harbor.
  - b.** Teach and administer an aquaponics initiative in our “pockets of poverty”. We would teach the math, science, entrepreneurial and small business management skills to individuals willing to engage in urban agriculture.
- 7.** Maintain our presence at community events.
- 8.** Tell the “story” about conservation activity in Seminole County.
  - a.** Tell the story of the St. John’s River – its history, natural resources, agriculture, forestry, communities, and culture.
  - b.** Tell the story of SSWCD – its history, services, natural resource accomplishments, and future.



## INVASIVE AND POISONOUS PLANT SPECIES PLAN

This program collaborates with partners (NRCS) to implement invasive species outreach and eradication efforts throughout Seminole County which include financial assistance programs. The SSWCB will:

1. Hold workshops for small producers to increase their knowledge of effective strategies to combat invasive species and poisonous plants.
2. Introduce small producers to the Natural Resources Conservation Service (NRCS) district conservationist and the NRCS grants.
3. Distribute materials on invasive species.

## HABITAT CONSERVATION PLAN

The Habitat Conservation Program encourages private landowners to place conservation easements on natural lands and waters to address pollinators, fish, and wildlife habitat and water quality concerns. In Seminole County, priority habitats include wetlands, streams, riparian zones, and upland forest. We build capacity throughout the county to address habitat conservation issues through landowner-focused education, community events, presentations, and related activities.

To promote wildlife conservation is a means to engage the public about the importance of our rural areas which are essential to agriculture. To increase the positive impact we are having on pollinators, fish, and wildlife habitat SSWCB will:

1. Work with the other conservation groups in Seminole County to increase the relationships among groups by having a monthly breakfast gathering to share activities and concerns.

2. Deploy trail cameras to capture the images of our wildlife that will engage the public
3. Host a photo contest of wildlife in each type of habitat – wetlands, upland, etc.
4. Create an outreach plan around the importance of natural areas and habitat in a healthy watershed including a potential plan to increase the connectivity of riparian habitat.

## FLOODING EDUCATION AND PLANNING / RIVERBANK EROSION PLAN

In Seminole County, rain events, including both hurricanes and tropical storms, are leading to an increasing number of homes flooding. The causes are varied from storm drains not being cleaned, increased development, decreasing wetlands that hold the water after the rain, more impervious surfaces, among others. Because some areas are flooding for the first time, homeowners are caught off guard, not having purchased flood insurance.

To elevate the hardship on these families and keep the public informed, SSWCB will:

1. Help educate citizens on how to read flood maps, coordinate with the Seminole Flood Manager on outreach assistance.
2. Map pollution occurring as a result of hurricanes, example lift stations without generators. Advocate for all lift stations to have backup generators.
3. Partner with NRCS, cities, and county to clean and maintain streams and storm drains.

## FUNDRAISING PLAN

Like all independent Soil and Water Conservation Districts in the State of Florida, SSWCD does not receive any taxpayer funding. The SSWCB does not have taxing authority, so we can only operate on the administrative fee (5%) of awarded contracts that we manage. Because Seminole County is the most densely populated county in Florida, we have few large producers, and the small producers are a relatively new constituency. Therefore, the SSWCB will apply for grants, seek sponsors for events, and hold fundraisers.

In our effort to accomplish an ambitious agenda, the SSWCB will raise money in the following ways:

1. Water Quality Education and Local Beer and Wine Tasting Event
2. Workshops to construct Bee Boxes, Rain Barrels, and Bat Houses
3. Golf Tournament
4. Seminole County Ag Fair/ Plant sales

To raise awareness of the SSWCB, we will participate in as many of the following events as practicable:

PARTNERS Clean Up of Waterways and Roadways  
Wetlands Festival

Great Day in the Country

Lake Mary Art Festival

Longwood Art Festival

Sanford Art Festival

Sanford Alive After 5

Celery Days

Agricultural Fair (Create)

Casselberry Earth Day

Oviedo Arbor Day Tree Distribution

Altamonte – Crane’s Roost

Calno (Council of Local Government in Seminole County)

Seminole Forever Arc

## Gaps and Needs

1. Funding – a reliable funding source
2. Public Records and email support – we need a server with an email address that can be used by each supervisor and maintained in perpetuity.
3. Website support – currently the Association of Florida Conservation Districts (AFCD) provides us with a website. They recently went to a “two tiered plan” whereby they provide more service to districts who pay their dues. We pay the dues and still do not receive adequate support. We often are not able to post meeting notices, minutes or agendas to the website they provide thus compromising our ability to comply with Sunshine Laws. However, to take on the financial obligation of funding a website of our own, without any consistent income, also poses risks.
4. Insurance – Directors and Officers Liability Insurance