

#### **Eco Paddle** On the Wild & Scenic River System

May 12<sup>th</sup>, 2023





### **Eco Paddle Leaders**

Elizabeth Stephens

SERV Coordinator, Seminole County

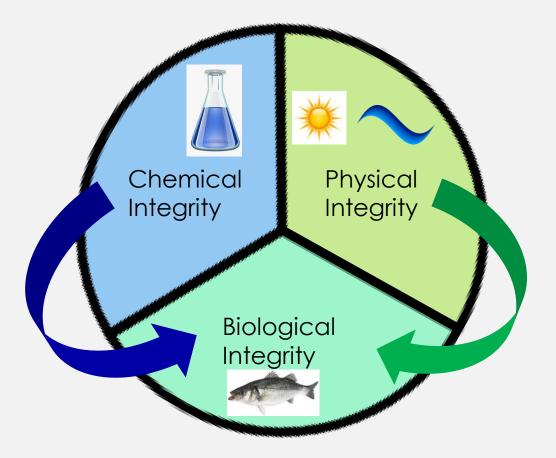
Ashley Konon

Wekiva Wild and Scenic River – River Ambassador

Lindsey Mears

- Intercoastal paddle tours
- SERV Site Captain

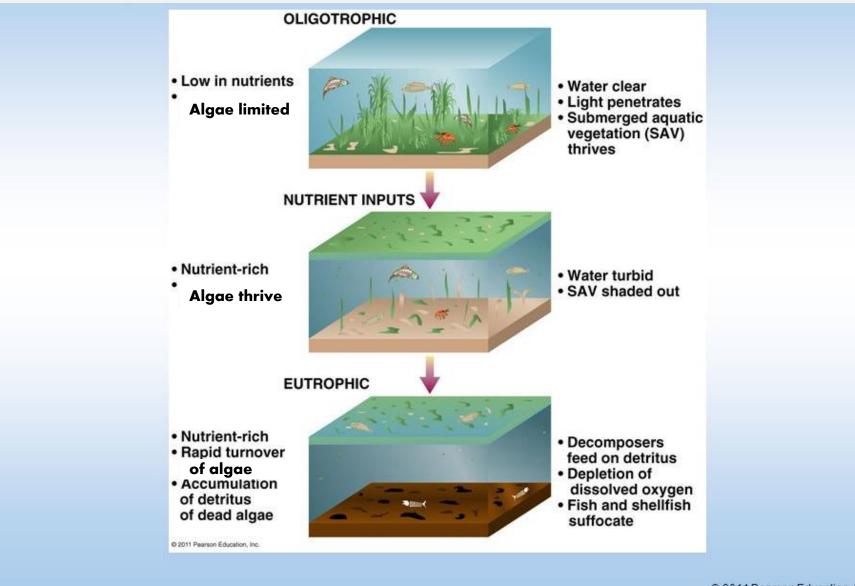
### How Can You Tell if a Waterbody is Healthy?



### How Can You Tell if a Waterbody is Healthy?

- Transparency
  - Ability to transmit light
- Littoral zone
  - Light reaches lake/river bottom
- Dissolved Oxygen
  - Amount of oxygen in water
  - 5 ppm
- Nutrient Concentration
  - Amount of Nitrogen and Phosphorus





- © 2011 Pearson Education, Inc.
- Eutrophication: a process that results from accumulation of nutrients in bodies of water

### Where are nutrients coming from?

- Runoff: water that does not soak into the ground or percolate into aquifers
- Excess nutrients and other pollutants run off land into nearest stormdrain or waterway



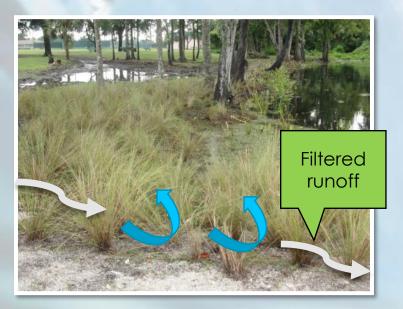




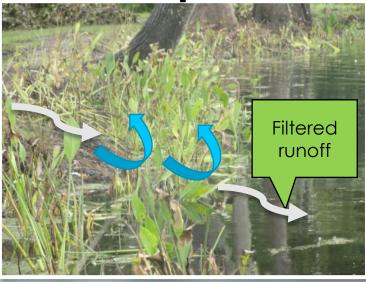
## How Can We Prevent Eutrophication?







#### With plants



### **Location of Aquatic Plants**

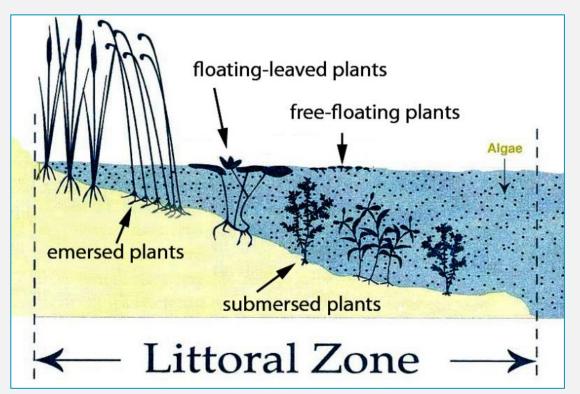
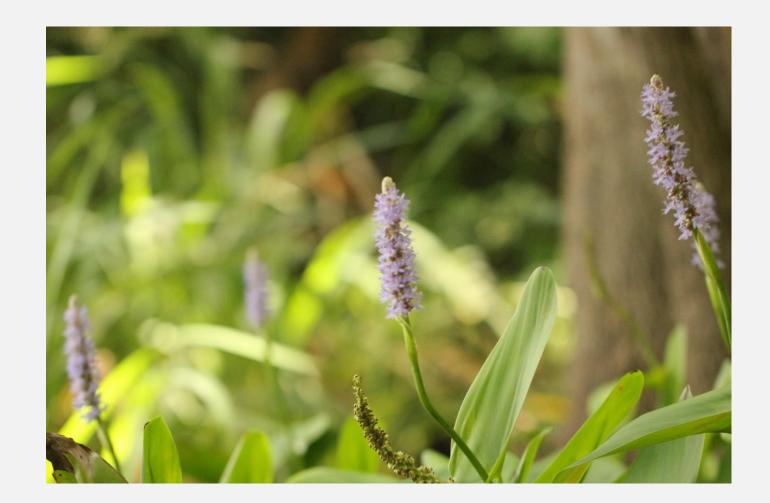


Diagram: IFAS Center for Aquatic and Invasive Plants

• Pickerelweed (Pontederia cordata)



• Lanceleaf Arrowhead, duck potato (Sagittaria lancifolia)





- Spring run spider lily (Hymenocallis rotata)
- Blooms from April to June.



### **Reducing Nutrient Inputs**

### Fertilize appropriately



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### Yard maintenance





### **Reducing Nutrient Inputs**

## Fertilize appropriately

### Yard maintenance

Keep rainwater on the ground









# THANK YOU!

Contact info: Elizabeth Stephens, SERV Coordinator <u>serv@seminolecountyfl.gov</u>; 407-665-2457

# Wekiva Wild & Scenic River System

### Ashley Konon, River Ambassador RiverAmbassador@FriendsofWekiva.org



# What is a Wild & Scenic River?

"The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542;16 U.S.C. 1271 et seq.) to preserve certain rivers with outstanding natural, cultural and recreational values in a free-flowing condition for the enjoyment of present and future generations."

National Park Service, Wild and Scenic Rivers Program

### **Designation Process**

The Governor of the State must request the designation. The River must meet these requirements:

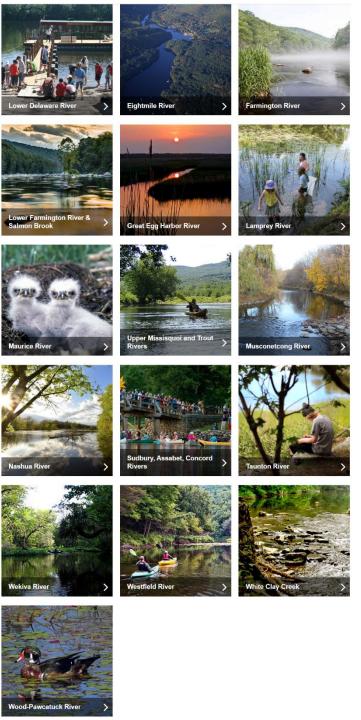
- Must be recognized in the state as Wild & Scenic or similar.
- Must be "free-flowing" and possess at least one Outstandingly Remarkable Value (ORV).
- The long-term management and cost to the Federal government must be considered.

# Wild & Scenic Rivers

#### There are 226 National Wild & Scenic Rivers and 16 Partnership Wild & Scenic Rivers

"The Wild and Scenic Rivers Act (WSRA) charges administration of rivers in the National Wild and Scenic Rivers System to four federal land management agencies, Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, and U.S. Forest Service."

- National Park Service



## **Partnership Wild & Scenic Rivers**



## Wekiva Wild & Scenic River System

- Established Oct. 13, 2000
- Includes Wekiwa Springs Run, Wekiva River, Rock Springs Run and Black Water Creek
- A total of 41.6 miles included in designation
- Five Outstandingly Remarkable Values (ORVs)



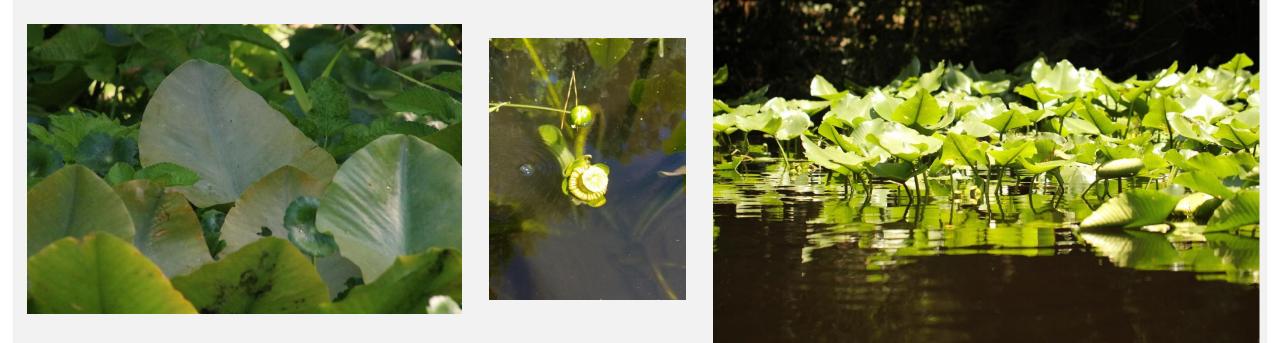
## Wekiva Wild & Scenic River

- Total 41.6 miles
  - Wild 31.4 miles
  - Scenic 2.1 miles
  - Recreational 8.1 miles
- Passes through three counties: Orange, Lake and Seminole
- More than 2 million people live within 30 miles of Wekiva River System
- More than 30 named springs feed the river system
- About 18 listed species of birds live in the Wekiva Basin



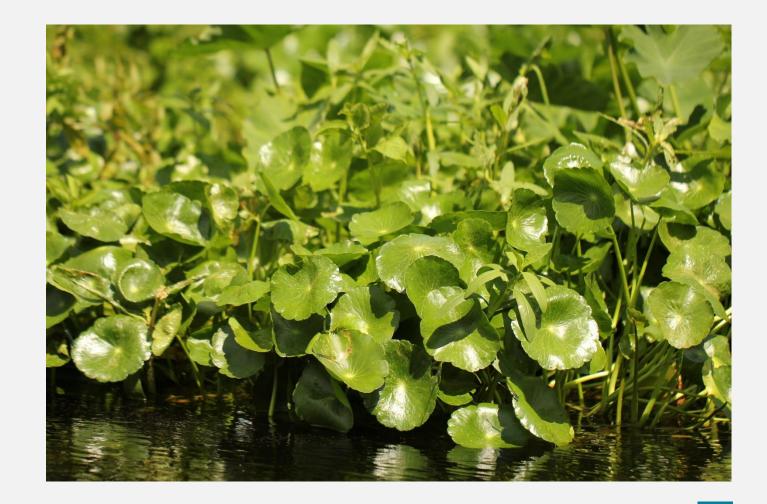
### Plants of the Wekiwa Springs Run – Floating-leaved

Spatterdock, cow lily (Nuphar advena)- Spatterdock has large heart-shaped leaves, usually with wavy margins. Spatterdock floating leaves are attached to long, stout stems which arise from large, spongy rhizomes. Spatterdock submersed leaves are very thin, attached at the bottom rhizomes. Spatterdock flowers are yellow and "half-opened" at or above the water surface. Flowers are attached to thick round stems that are often six feet long. -UF/IFAS Center for Aquatic and Invasive Aquatic Plants



### Plants of the Wekiwa Springs Run – Floating-leaved

• Pennywort, dollarweed (Hydrocotyle umbellata)



- Wild Rice(Zizania aquatica)
- Blooms in the fall, can reach 9 ft tall. Nearly always in wetlands.



### Plants of the Wekiwa Springs Run - Vine

Climbing Hempvine(Mikania scandens)



### Plants of the Wekiwa Springs Run – Tree

• Wax Myrtle(Morella cerifera)



### Plants of the Wekiwa Springs Run – Tree

 Swamp Dogwood (Cornus foemina)



Red Maple (Acer rubrum)



### Plants of the Wekiwa Springs Run – Free-Floating

- Water hyacinth (Eichhornia crassipes)
- Category 1 invasive plant, can form dense mats that clog waterways.



- Wild Taro(Colocasia esculenta)
- Category 1 invasive. Introduce in 1910 as a food crop.



### Plants of the Wekiwa Springs Run – Free-Floating

- Water lettuce (Pistia stratiotes)
- There is disagreement about if this plant is native or non-native to Florida. Either way, it can become invasive and clog waterways.



# Thank you!



### **Eco-Paddle Route on the Wekiva River**

