Santa Fe River – Invasives (Water Hyacinth)

- Water hyacinth is a free-floating perennial aquatic plant (or hydrophyte) native to tropical and subtropical South America. With broad, thick, glossy, ovate leaves, water hyacinth may rise above the surface of the water as much as 1 m (3 ft) in height. The leaves are 4–8 inches across on a stem, which is floating by means of buoyant bulb-like nodules at its base above the water surface. They have long, spongy, bulbous stalks. The feathery, freely hanging roots are purple-black. An erect stalk supports a single spike of 8–15 conspicuously attractive flowers, mostly lavender to pink in color with six petals.



Why is Water Hyacinth detrimental?

- A mat can double in size in 6 days covering large portions of the water body (rivers, lakes and ponds).
- Each flower has thousands of seeds and remain viable for more than 28 years.
- Outcompetes native aquatic plants both floating and submerged.
- Creates large shade areas depriving submerged aquatic vegetation (SAV) of needed sunlight.
- Water hyacinth can absorb a large amount of harmful heavy metals and other substances. After death, it rots and sinks to the bottom of the water, causing secondary pollution to the water body, destroying the natural water quality.
- Since water hyacinth is composed of 95% water, its evapotranspiration rate is high.
- Dense mats of water hyacinth prevent the use of a waterway, leading to the loss of transportation (both human and cargo), as well as a loss of fishing possibilities.

Water Hyacinth Removal Options

Hand removal

- Disadvantages (slow, labor intensive)
- Advantages (selective, sensitive to wildlife)
- Completely remove chemicals and nitrates

Machine removal

- Disadvantages (indiscriminative, costly, insensitive to wildlife)
- Advantages (quick)

Spraying

- Disadvantages (adds chemicals to water, plant decays in water)
- Advantages (quick)