Are Changes in Ecological Drivers Inhibiting Submerged Aquatic Vegetation Restoration in Florida Spring Systems?

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Changes in SAV Communities

Source: Florida Springs Institute 2018
Changes in SAV Communities

Crystal River / Kings Bay

Mean SAV Biomass (kg wet weight per m²)

Sources: Terrell et al. 1994; Hoyer et al. 2000; Frazer et al. 2013; ATM 2017
Changes in Ecological Drivers

- Algae/Muck Accumulation
- Recreation
- Herbivory
- Hydrologic Events
SAV Restoration Overview
SAV Restoration – Early Efforts

Manatee Springs
SAV Restoration – Weeki Wachee Spring
SAV Restoration – Weeki Wachee Spring

Pinowska 2006
SAV Restoration – Weeki Wachee Spring
SAV Restoration – Weeki Wachee Spring
SAV Restoration – Weeki Wachee Spring

Pinowska 2006

King 2015
SAV Restoration – Crystal River/Kings Bay
SAV Restoration – Hornsby Spring
SAV Restoration – Lessons Learned

- Planting Techniques
- Herbivory Exclusion
- Algae/Muck Removal
- Goal: Increase Resilience