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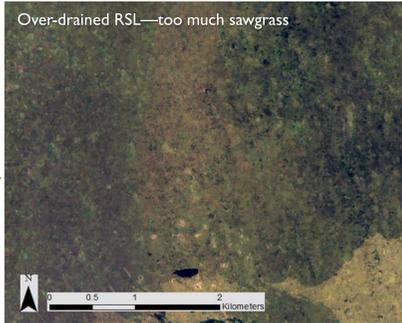
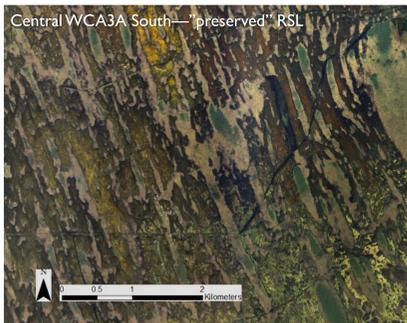
Using the Decomp Physical Model for Active Marsh Improvement

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What's the problem?

The ridge and slough landscape is an important indicator of success in monitoring plans for Everglades restoration and decompartmentalization. In some areas of the Everglades, overdrainage has caused sawgrass patches to expand, and increased water will not be sufficient to restore the ridge and slough pattern.

The Decomp Physical Model (DPM) is a project designed to evaluate ecosystem response to sheetflow in an area that is overgrown with sawgrass.



What can we do?

Active management experiment or "Brute Force Science"

Questions:

- Can we change direction of flow?
- Can we increase flow speeds and propagate it further into the DPM footprint?
- Can we create differential flow (ridge vs. slough)?
- What is the best option for active management of an over-drained ridge and slough landscape? Cut vs. smash

Cut vs. Smash Slough

Cut by hand



Smash with airboat

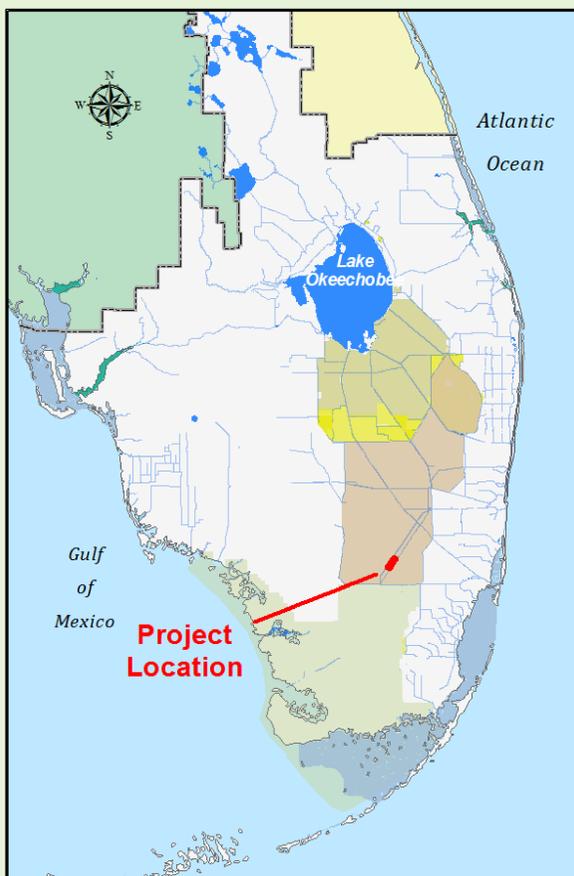
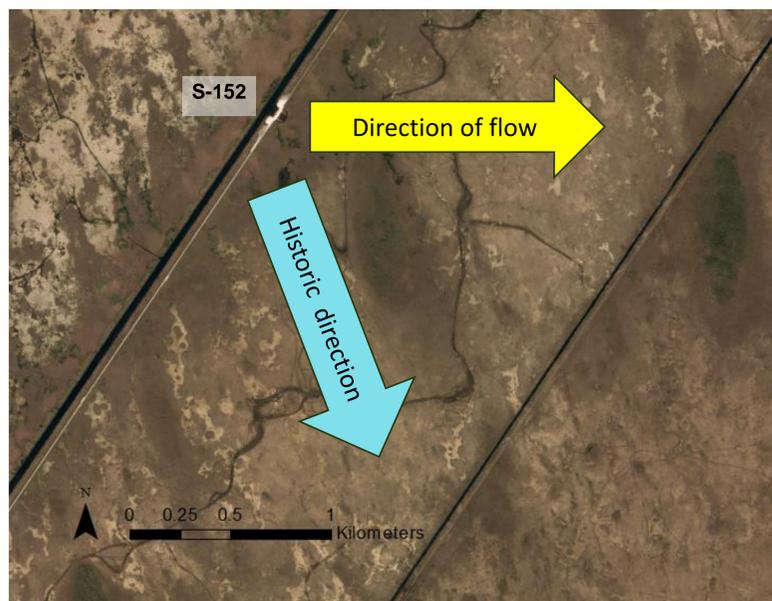


Cut and smash slough



When things do not go as planned

When the DPM structure (S-152) opened to put historical flow into the Everglades for the first time in decades, flow did not follow the historic flow path as expected.



What did we learn?

Question	Smash	Cut
Can we change direction of flow?	No	Yes
Can we increase flow speeds and propagate it further into the DPM footprint?	?	?
Can we create differential flow (ridge vs. slough)?	Yes	Yes (16 cm/sec!)
What is the best option for active management of an over-drained ridge and slough landscape?	? Fire?	?

