2008 GEER Session: Role of Flow in a Sustainable Everglades

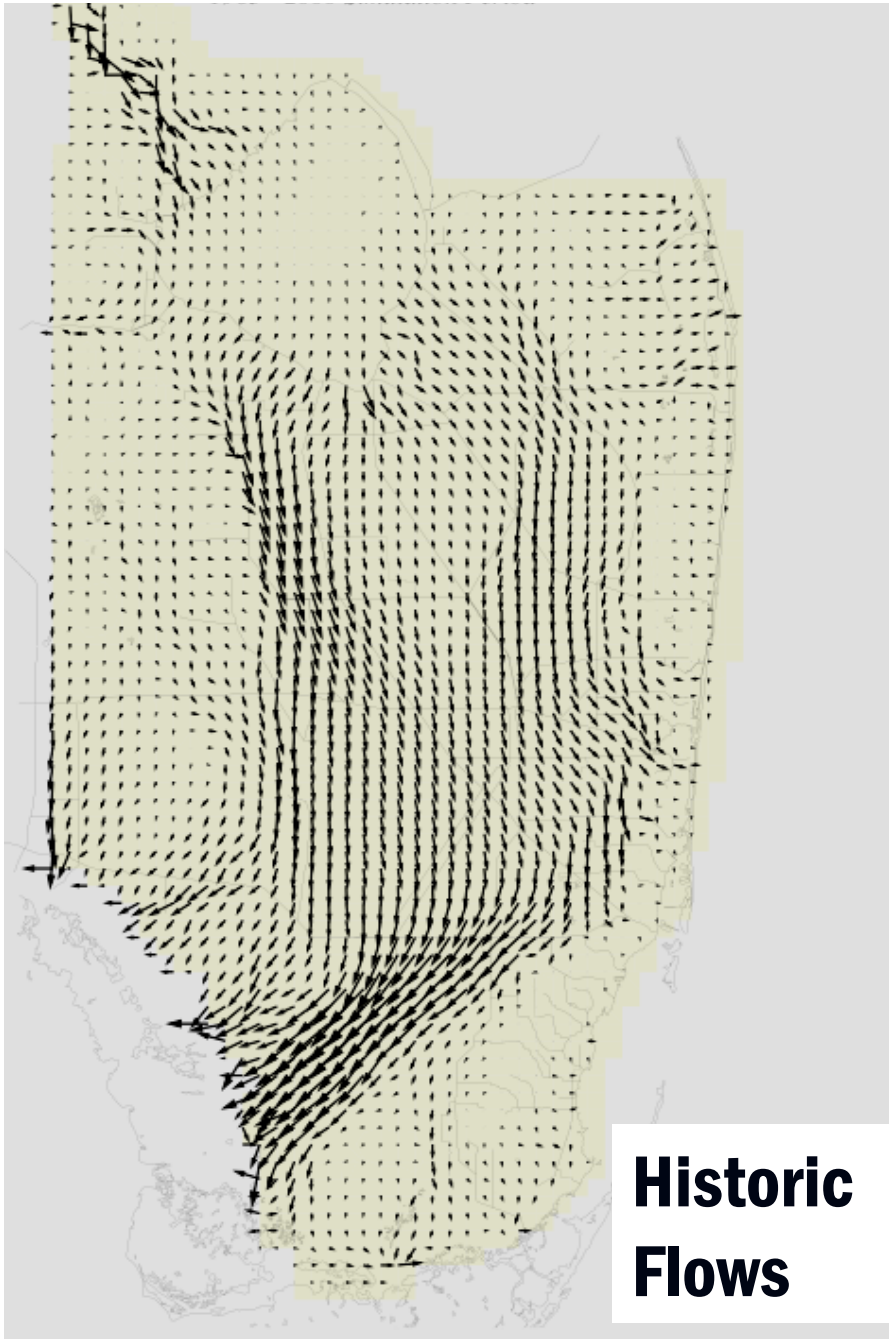
Moderators

Jud Harvey, USGS

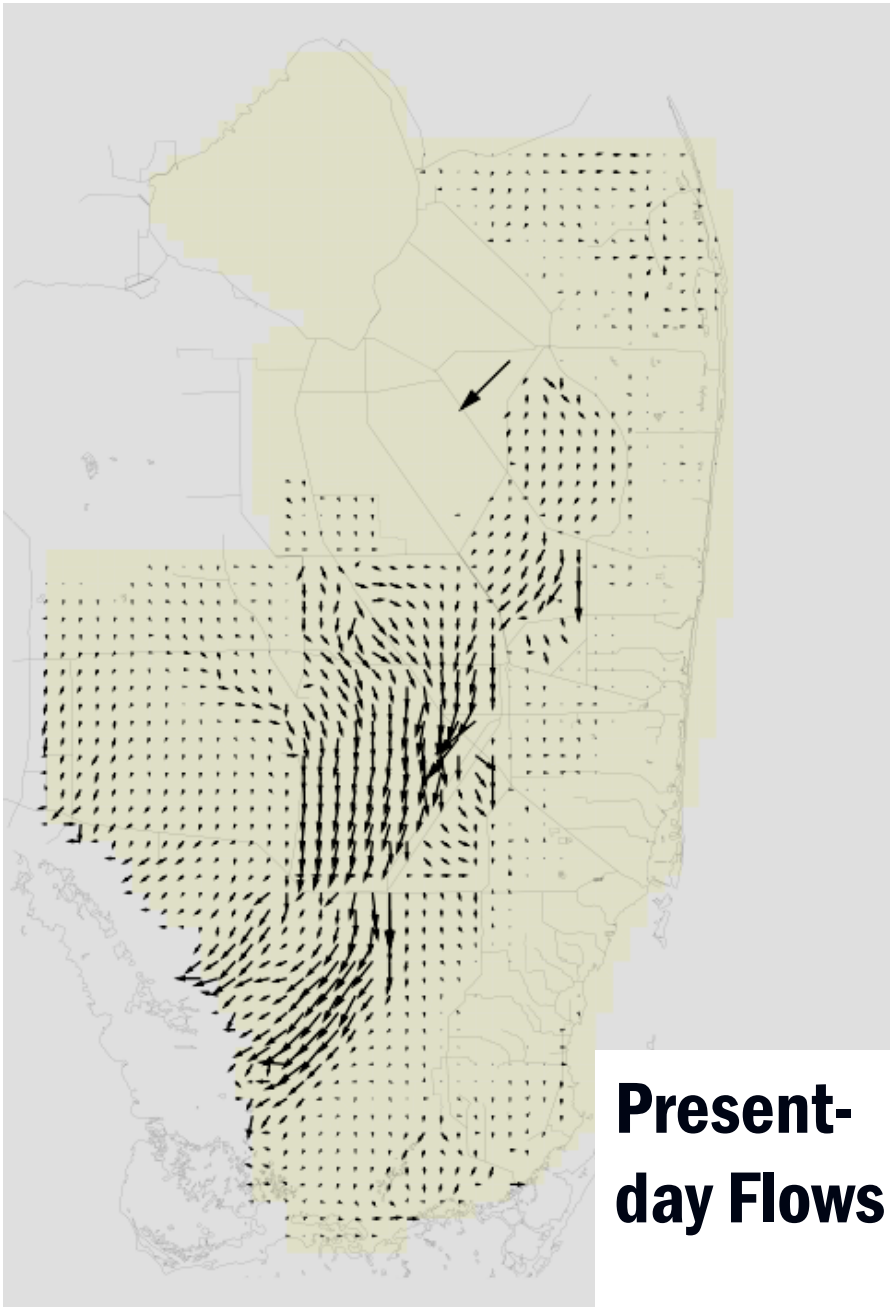
Fred Sklar, SFWMD

Leonard Pearlstine, NPS

How much sheetflow is possible?



Historic Flows



Present-day Flows

Key Uncertainties Identified at GEER 2006

- Depth-duration frequency that leads to differential peat accretion (species composition, productivity, decomposition)
- Role of episodic flood pulses in sediment transport, for which the best approach must address both short timescales (fundamental processes) and longer timescales (ecological responses).
- Need for Experiments: Large-scale physical tests such as Decomp Physical Model (DPM) and small-scale experiments to enhance sheetflow velocity and sediment transport in flumes

Goals for Today's Session

- Report Progress in Measuring and Modeling Flow and Sediment Transport and Relation to Topography, Vegetation, and Ecosystem Processes
- Debate the Role of Flow in Sustainability of Ridge and Slough Ecosystem.
- Identify Consensus and Key Remaining Uncertainties. Report to Managers in Friday Morning's Wrapup Session