



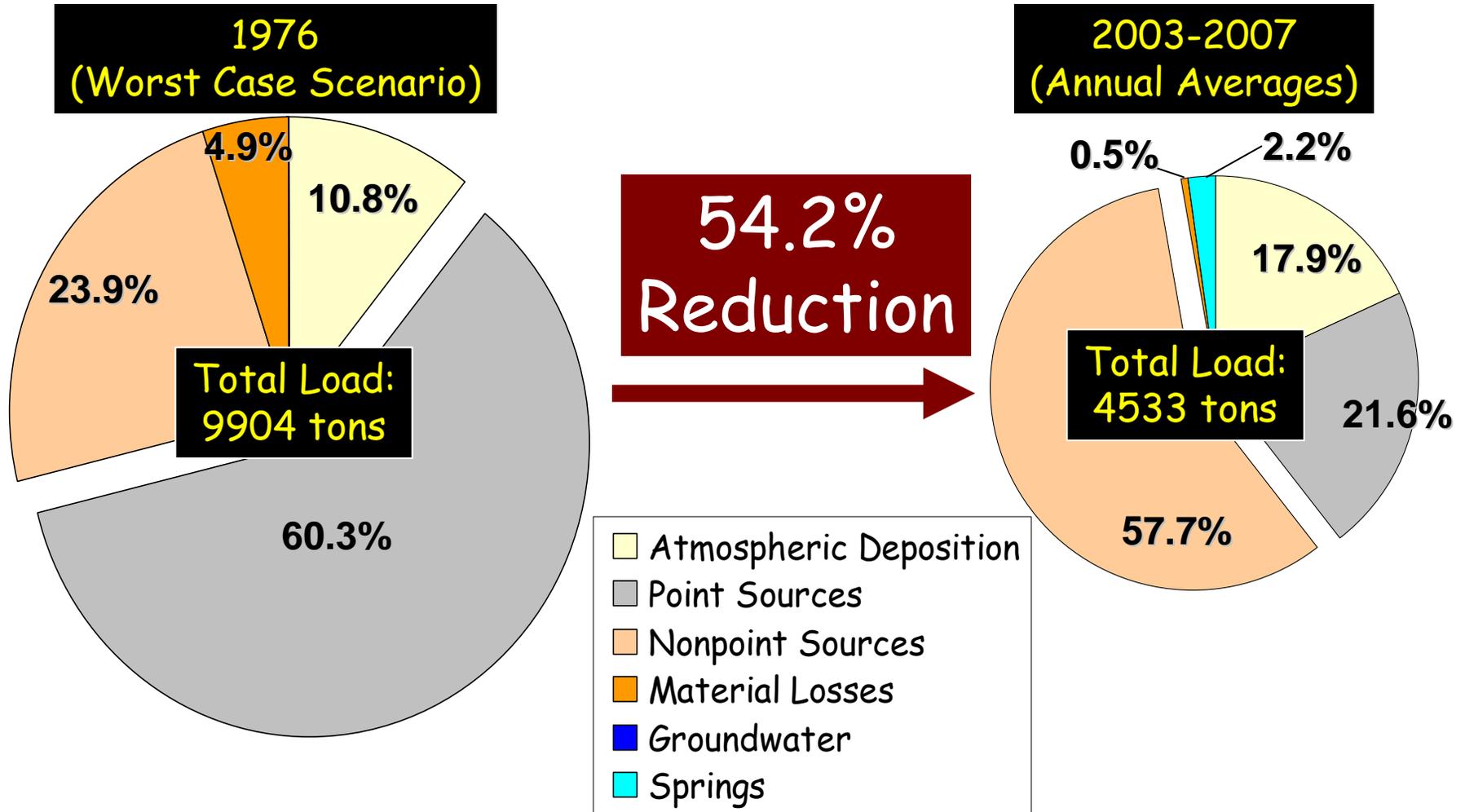
EPA's proposed approaches for Florida ENC's: Observations from Tampa Bay



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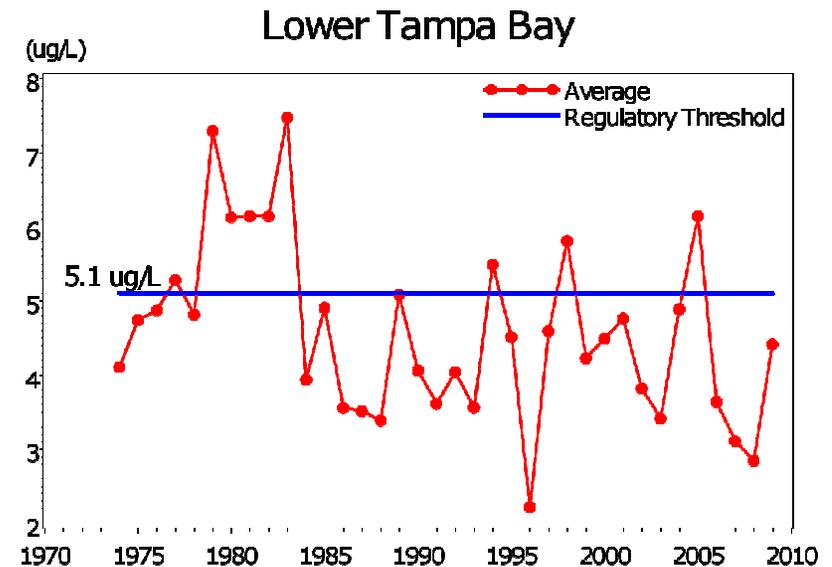
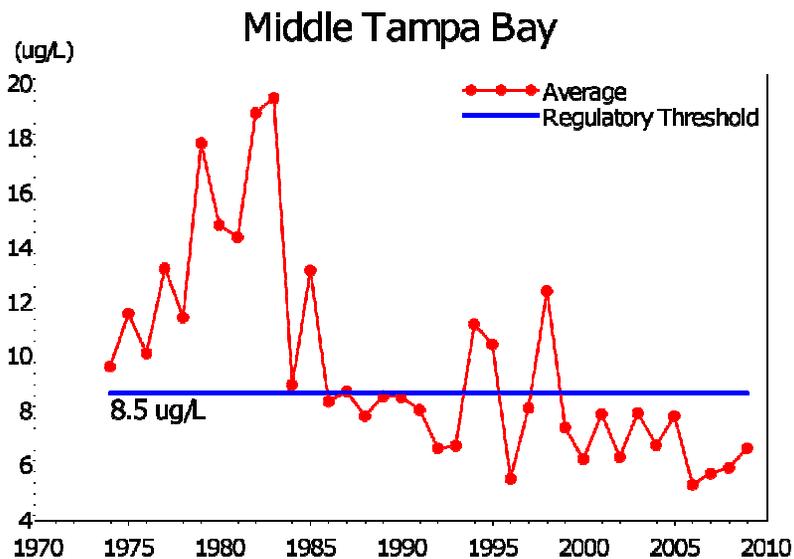
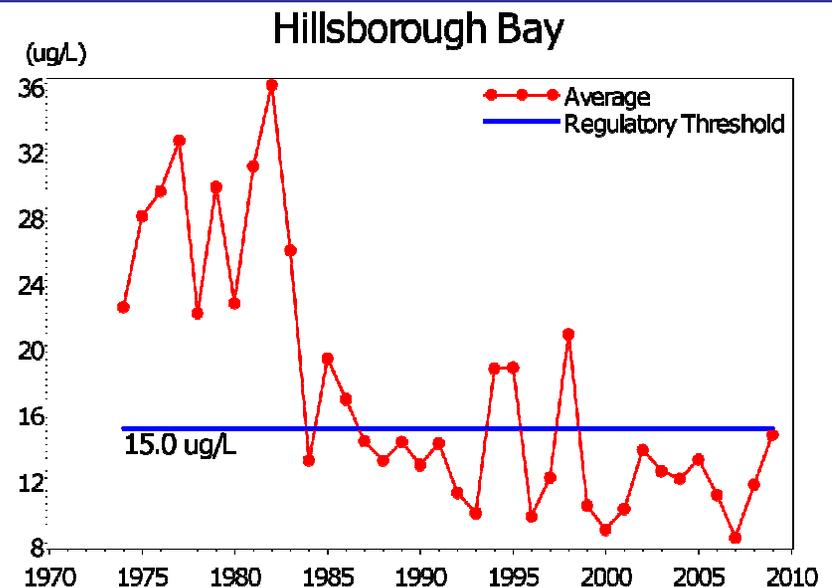
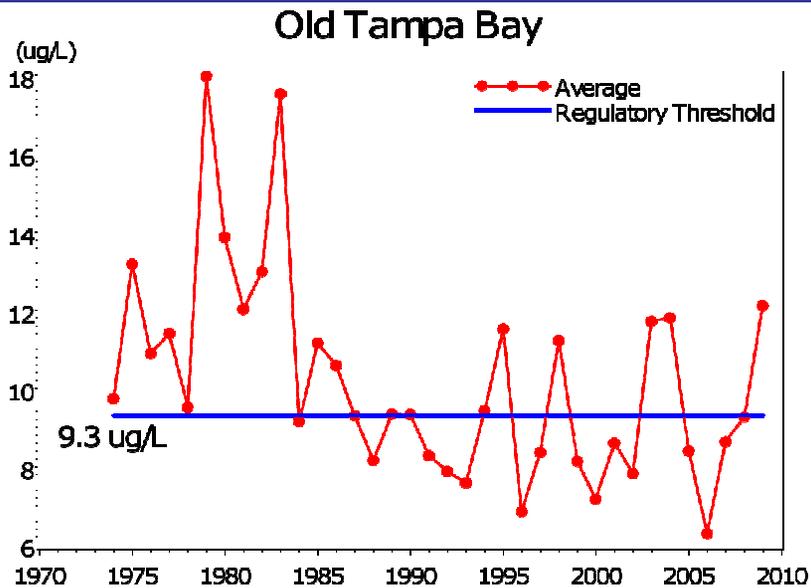
12/13/2010

Significant Nitrogen Load Reductions & Shifts in Major Source Contributions Have Occurred

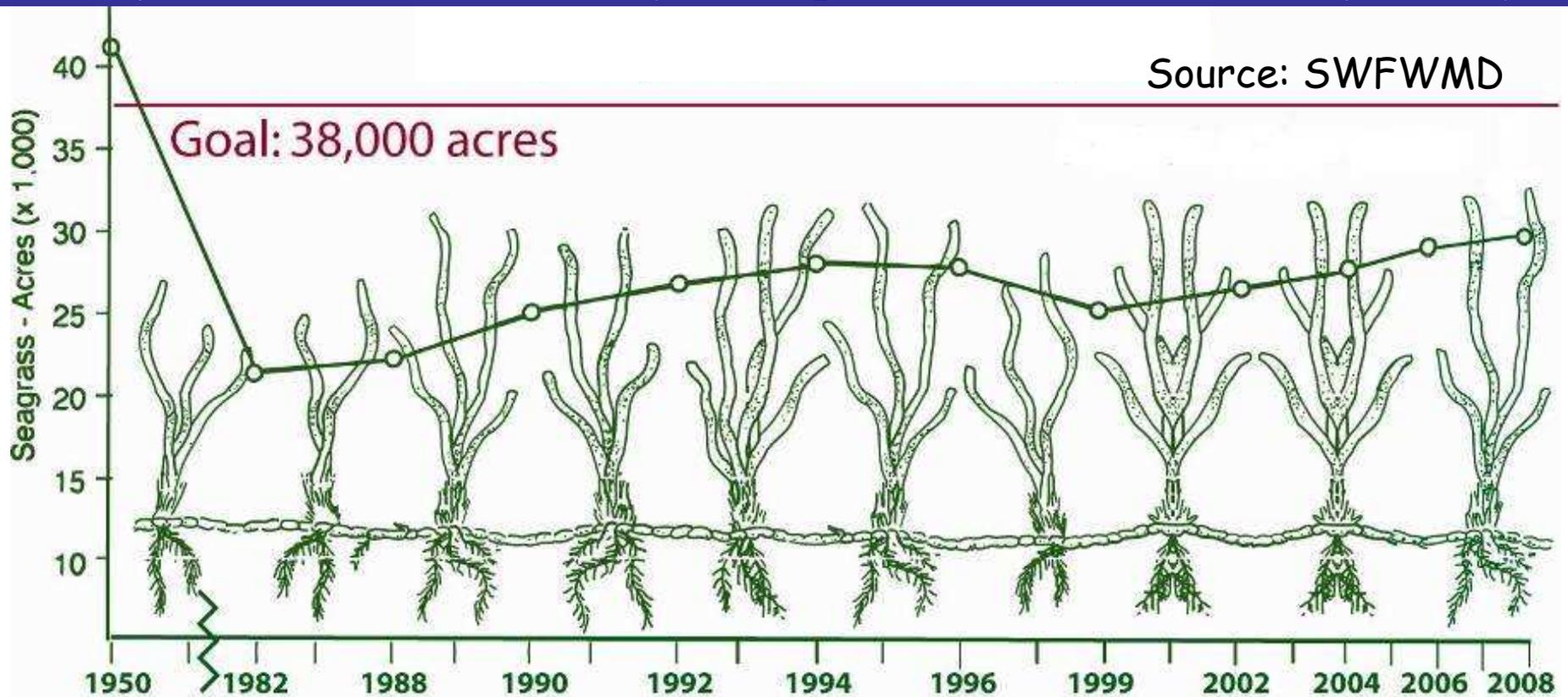


Greening and Janicki 2006; TBNMC 2010

Maintaining these Load Reductions has Resulted in Meeting Chl-a Thresholds for Seagrass Expansion



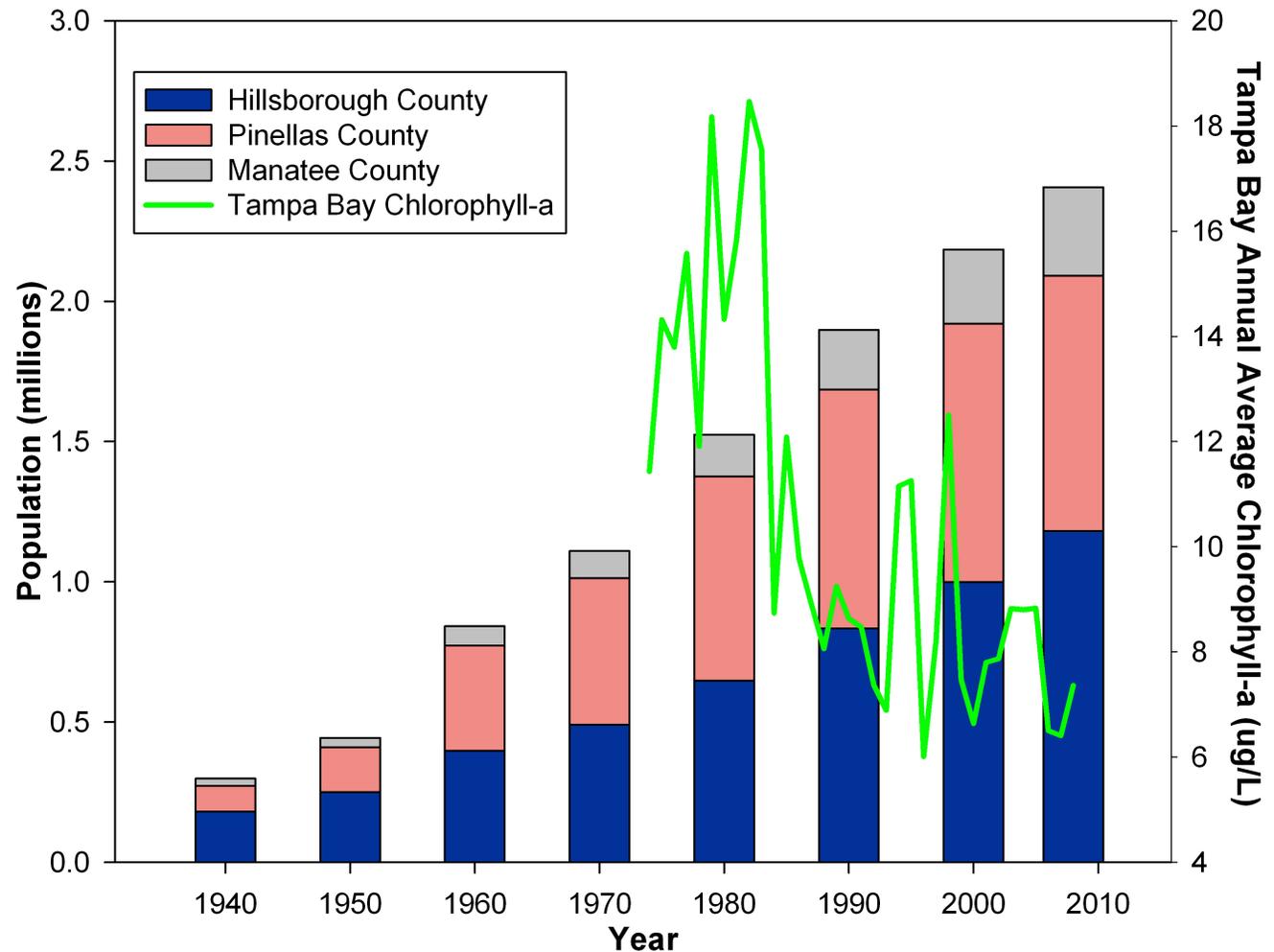
Maintaining Current Load Allocations has Resulted in Expansion of Healthy Seagrass Beds in Tampa Bay



- Seagrass acreage has increased by ~3,900 acres since 1992
- Loss with El Nino rainfall in 1996, 1998: immediate recovery
- Rate of expansion since 1998: More than 500 acres per year

Tampa Bay Community Committed to Sustaining the Effort

- Ongoing collaborative efforts ensure Tampa Bay will maintain water quality success
- All sources have agreed to numeric limits on TN Loads



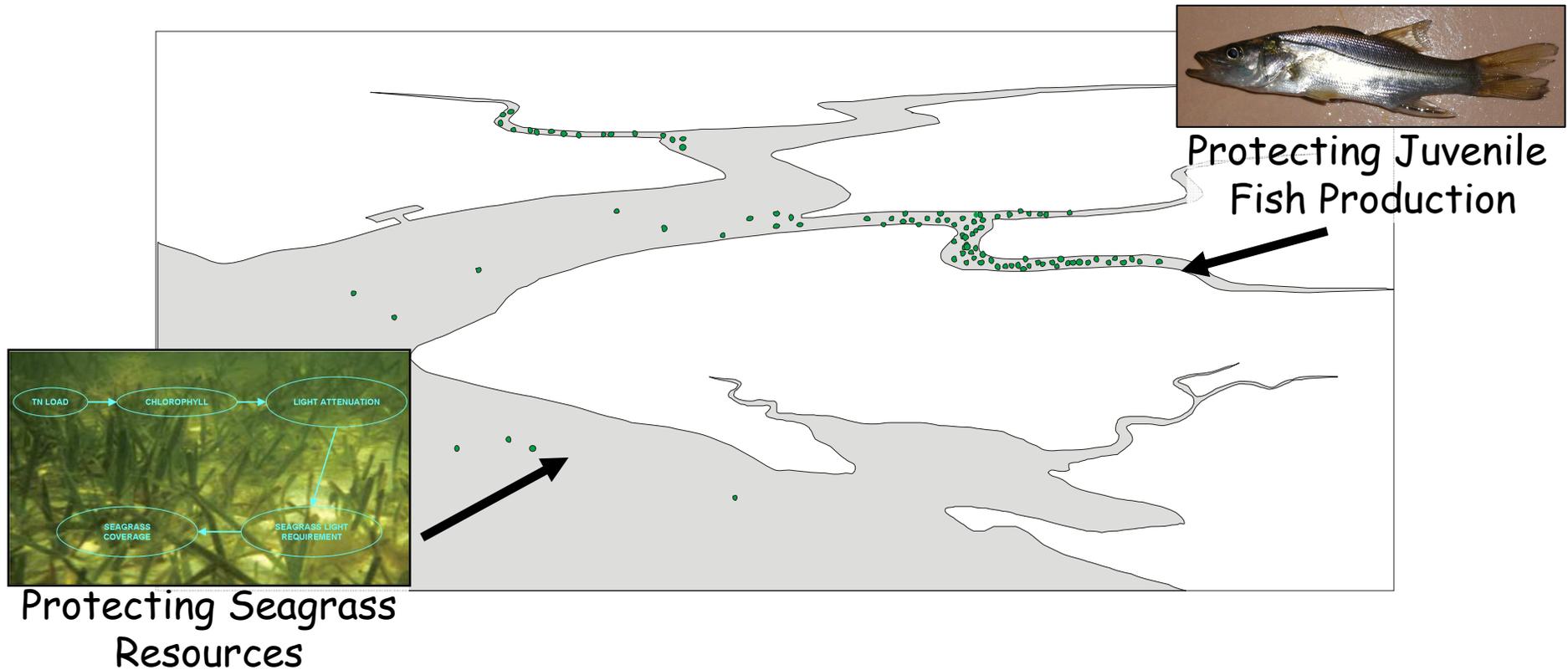
EPA Proposed Approach: Perspective from Tampa Bay experience

Agree with major elements:

- *Defined Endpoints*
 - Seagrass communities
 - Balanced phytoplankton biomass & production
 - Balanced faunal communities
- *Approaches*
 - Stressor/response models
- *Estuarine System & Segment-Specific Criteria*

Comments on EPA's Proposed Approach: Perspectives from Tampa Bay

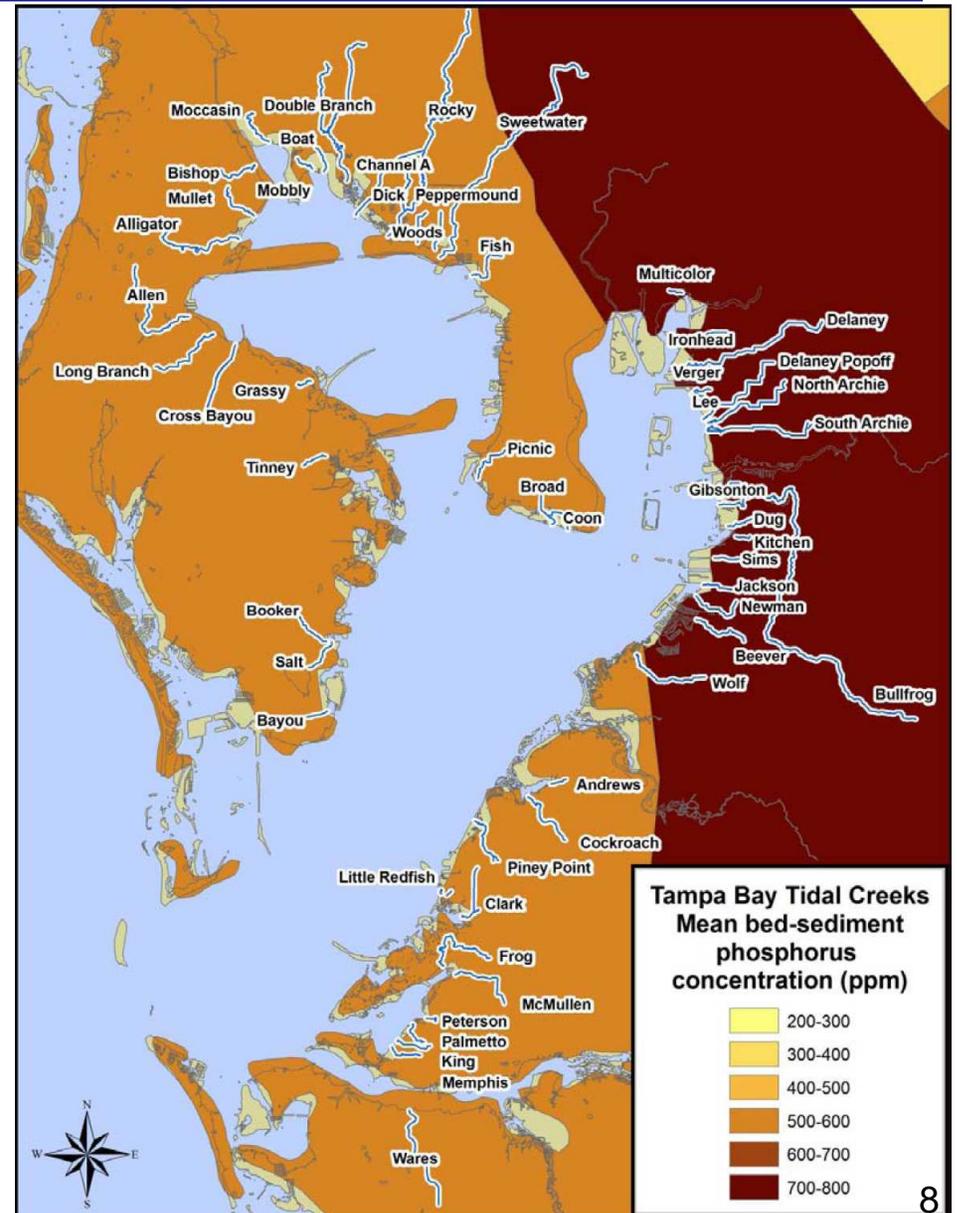
Tidal creeks ecologically and functionally distinct from
Estuarine or Freshwater systems



Suggestion: Identify "Tidal creeks/tribs" as a separate (5th)
category, with unique endpoints and criteria values to
support those endpoints

Comments on EPA's proposed approach: Perspectives from Tampa Bay

- Downstream Protective Values vary by underlying tributary characteristics
- **Suggestion:** Follow logic developed for EPA FW Lake Criteria → Development and assessment of DPVs should be dependent upon whether criteria being met downstream



Tampa Bay Bottom Line

- Stressor (TN Load) and response [Chl-a] thresholds established in Tampa Bay
- Obtaining thresholds has resulted in maintenance of protective water quality and expansion of seagrass, and is protective of State DO criteria
- Many elements of EPA's proposed approach consistent with Tampa Bay's successful nutrient management strategy

Process Observations

- EPA encouraging input and our perspectives throughout this process
- Tampa Bay, Sarasota Bay and Charlotte Harbor NEPs in SW Florida working together to provide data, analyses and recommendations on defensible and protective ENCs for each system
- Consider loading *or* ambient concentration as criteria, dependent on site-specific data
- SAB review, input and recommendations critical-thank you.

Tampa Bay contacts, data and information

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Data, publications and information:

www.tbep.tech.org

TB NMC Comments on FW Numeric Criteria:

http://www.tbep.tech.org/index.php?option=com_content&view=article&id=74:nmc-response-to-epas-proposed-numeric-nutrient-criteria&catid=29:tampa-bay-nmc&Itemid=54

SW FL Estuaries NNC Methodologies:

http://www.tbep.tech.org/TBEP_TECH_PUBS/2010/TBEP_05_10_SW_Florida_NEP_NNC_Methods-July_14_2010.pdf