



Lake Okeechobee Ecology Update & Low Stage Restoration Projects

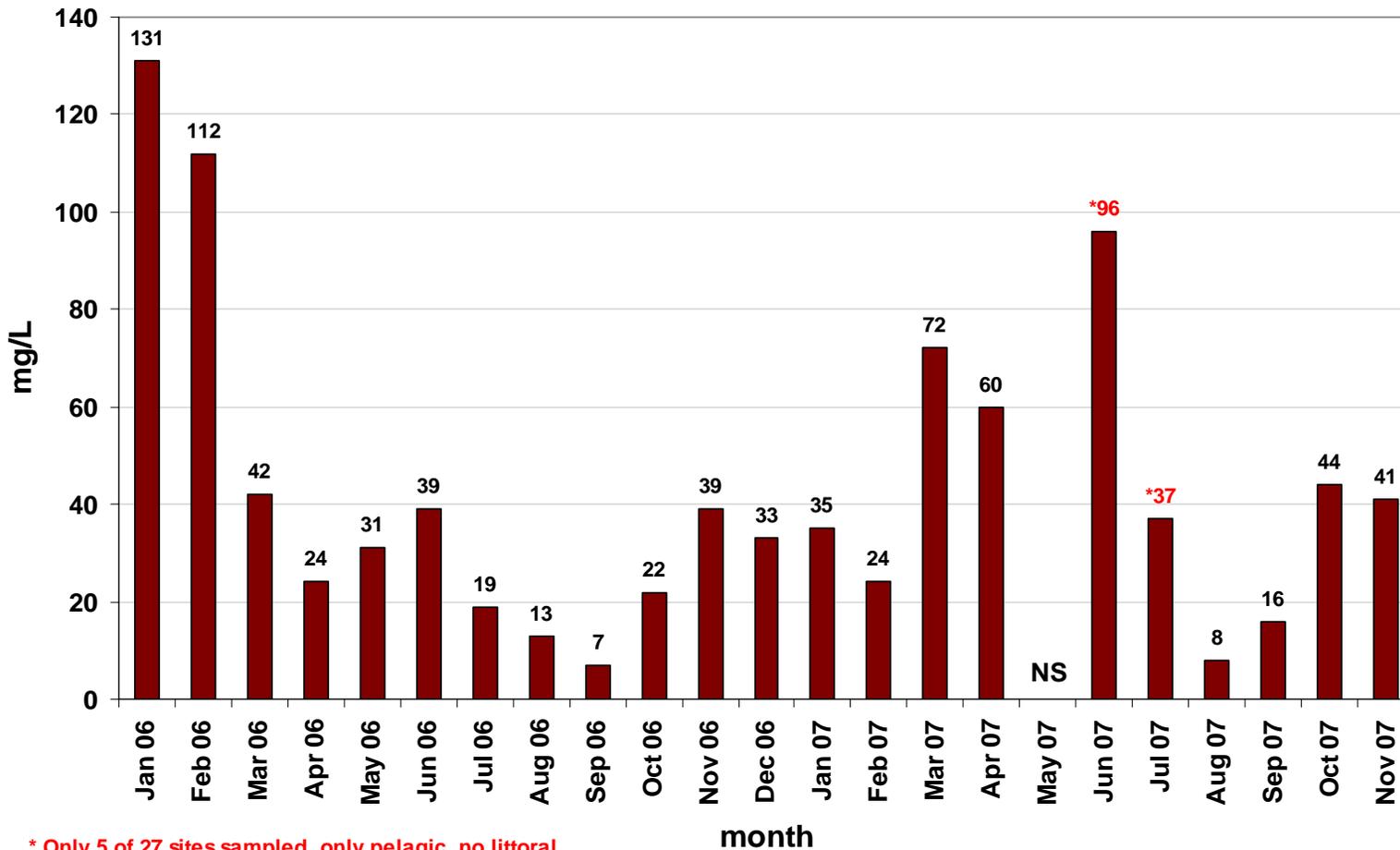
Governing Board Meeting – December 13, 2007

Chip Merriam
Deputy Executive Director
Water Resources

Water Quality – Total Suspended Solids



Lake Okeechobee Mean TSS

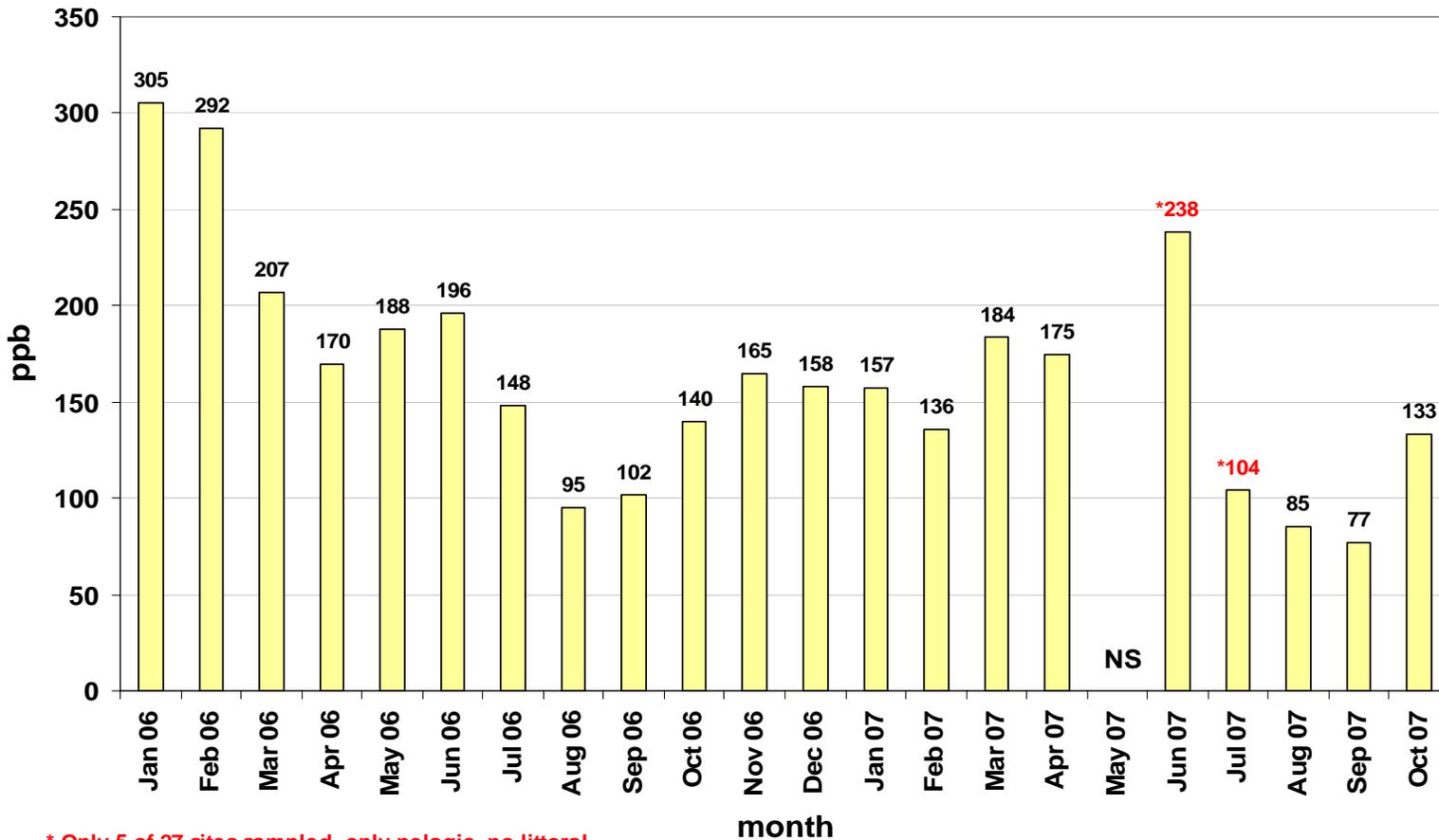


* Only 5 of 27 sites sampled, only pelagic, no littoral

Water Quality – Total Phosphorus



Lake Okeechobee Mean TPO4



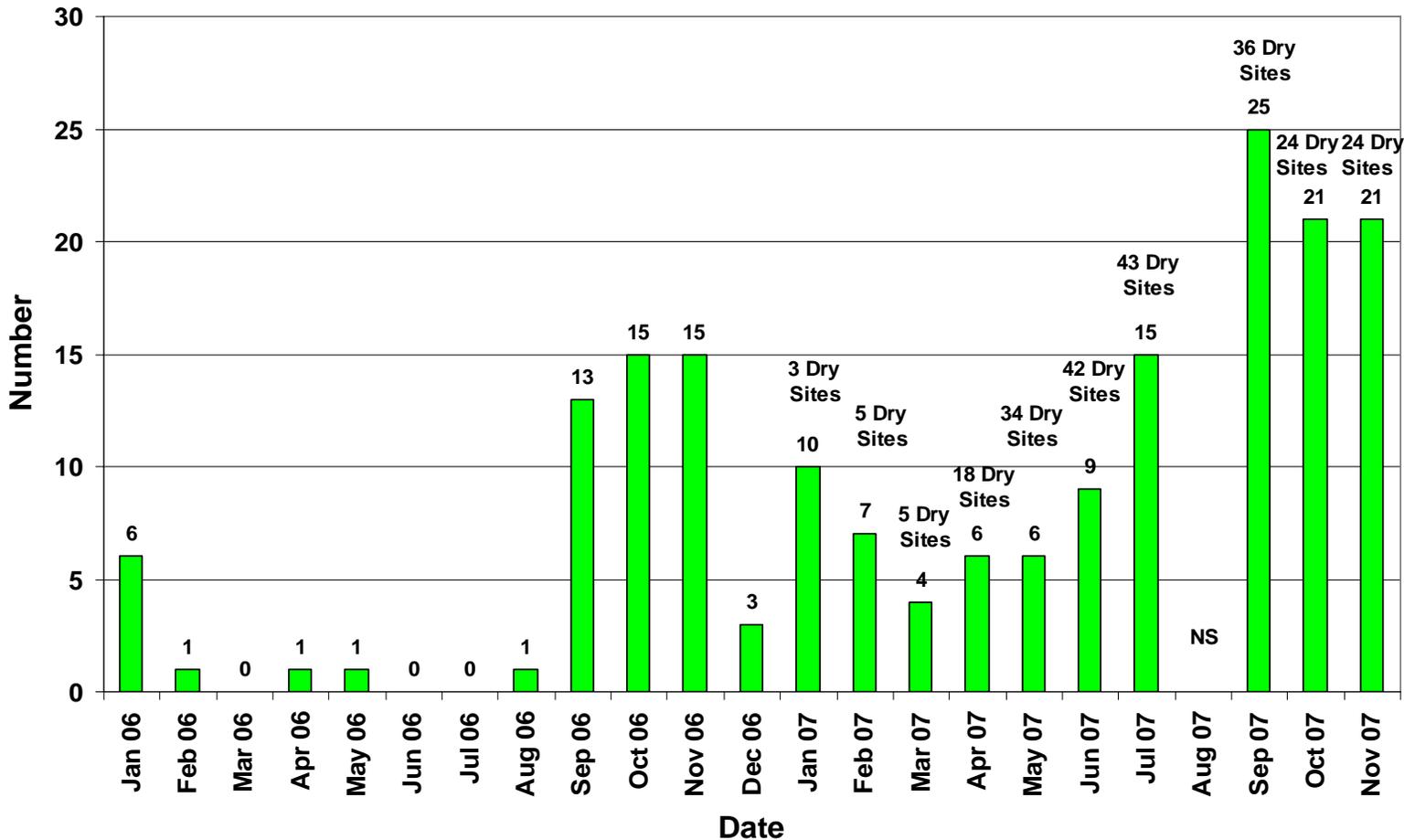
* Only 5 of 27 sites sampled, only pelagic, no littoral

Submerged Aquatic Vegetation

Transect Sites



Number of Sites with Plants



Low Stage Restoration Projects

- **October 24, 2007 – Multi-Agency Workshops**
 - Florida Fish & Wildlife Conservation Commission, Florida Department of Environmental Protection, Corps, US Fish and Wildlife Service, Palm Beach County, South Florida Water Management District
 - Formed sub-teams for project proposals
 - Discussed and developed project options, permits, schedules and costs
- **December 3, 2007, follow up workshop**
- **Restoration options also included for Lake Istokpoga**



Project Opportunities

- **Muck Scraping**
- **Disking/Plowing/Rotovation**
- **Native Species Re-Planting**
- **Exotic Control**
- **Debris Removal**
- **Apple Snail Culturing**



Project Requirements

- Muck scraping projects (FFWCC) can commence at a lake stage of 10 feet (NGVD)
- Permits in hand for muck scraping; pre-application meeting for plowing/disking on 12/07/07; application submitted by 12/21/07
- Cooperative agreement being modified (Glades County)
- Estimated costs and partial funding identified



Restoration Project Costs

Project	Total Cost Estimate	SFWMD Cost	SFWMD Not Budgeted
Project 1: Muck Scraping at Harney Pond	\$2,000,000	\$2,000,000	\$2,000,000
Project 2: SFWMD Disking and Plowing, Pilot	\$250,000	\$250,000	\$250,000
Project 2: SFWMD Disking and Plowing, Full Scale - 1000 acres	\$750,000	\$750,000	\$750,000
Project 3: Native Plant Species Re-planting	\$500,000	\$500,000	\$300,000
Project 4: Exotic and Nuisance Plant Control	\$2,570,000	\$920,000	\$600,000
Project 5: In-Lake Debris Removal	\$100,000	\$100,000	\$100,000
Project 6: Apple Snail Enhancement	\$200,000	\$200,000	\$200,000
Project 7: Lake Istokpoga	\$190,000	\$190,000	\$190,000
Total	\$6,560,000	\$4,910,000	\$4,390,000

