



Northern Tampa Bay LTPRG
2005 MFL Assessment
May 3, 2006

Minimum Flows and Levels

- In 1998 – the District adopted 41 cypress wetlands, 15 lakes, and 7 Floridan aquifer wells as minimum level sites
- Since then, we've added 48 additional lakes (63 total)
- One river adopted – Lower Hillsborough
- The plan for further MFL adoption is revised and approved each year

Assessment of MFLs

- Long-term median for lakes and wetlands
- Long-term average for seawater intrusion wells
- Lakes, wetlands and wells assessed for 6- and 10-year periods for the ending years 1999-2005

Lakes – 2005 Results

10-year

- 32 lakes meeting minimum level (including 11 that were not meeting their levels in 2004)
- 30 lakes not meeting minimum level (all not meeting their levels in 2003)
- 1 lake without enough data to determine

Lakes – 2005 Results

10-year (cont.)

- 47 lakes meeting high minimum level
- 15 lakes not meeting high minimum level (20 were not meeting the HML in 2004)
- 1 lake without enough data to determine

Lakes – 2005 Results

6-year

- 29 lakes meeting minimum level (including 17 that were not meeting their levels in 2004)
- 33 lakes not meeting minimum level (all not meeting their levels in 2004)
- 1 lake without enough data to determine

Lakes – 2005 Results

2-year *

- 57 lakes above minimum level elevation *
- 6 lakes below minimum level elevation *

* Two years is not enough data to do a minimum level determination

Wetlands – 2005 Results

10-year

- 13 wetlands meeting minimum level (all were meeting their levels in 2004, or didn't have enough data in 2004)
- 14 wetlands not meeting minimum level (all not meeting their levels in 2004, or didn't have enough data in 2004)
- 14 wetlands without enough data to determine

Wetlands – 2005 Results

6-year

- 21 wetlands meeting minimum level (9 were not meeting their levels in 2004)
- 15 wetlands not meeting minimum level (all not meeting their levels or didn't have enough data in 2004)
- 5 wetlands without enough data to determine

Wetlands – 2005 Results

2-year *

- 45 wetlands above minimum level elevation *
- 6 wetlands below minimum level elevation *

* Two years is not enough data to do a minimum level determination

MFL Wells – 2005 Results

10-year

- 6 wells meeting minimum level (all were meeting their level in 2004)
- 1 well not meeting minimum level (not meeting its level in 2004 – RMP-8D)

MFL Wells – 2005 Results

6-year

- 6 wells meeting minimum level (all were meeting their level in 2004)
- 1 well not meeting minimum level (not meeting its level in 2004 – RMP-8D)

MFL Wells – 2005 Results

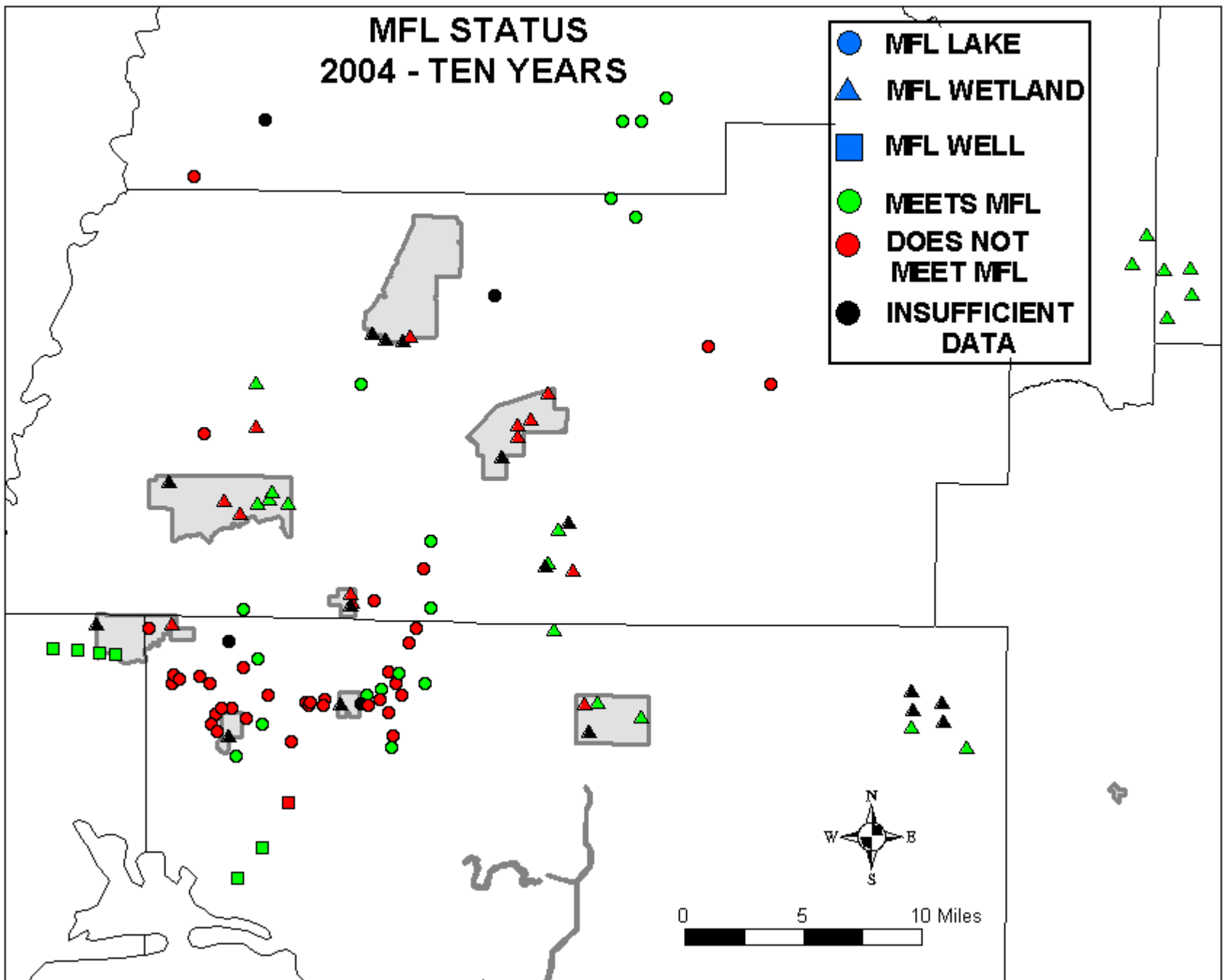
2-year *

- All wells above minimum level elevation *

* Two years is not enough data to do a minimum level determination

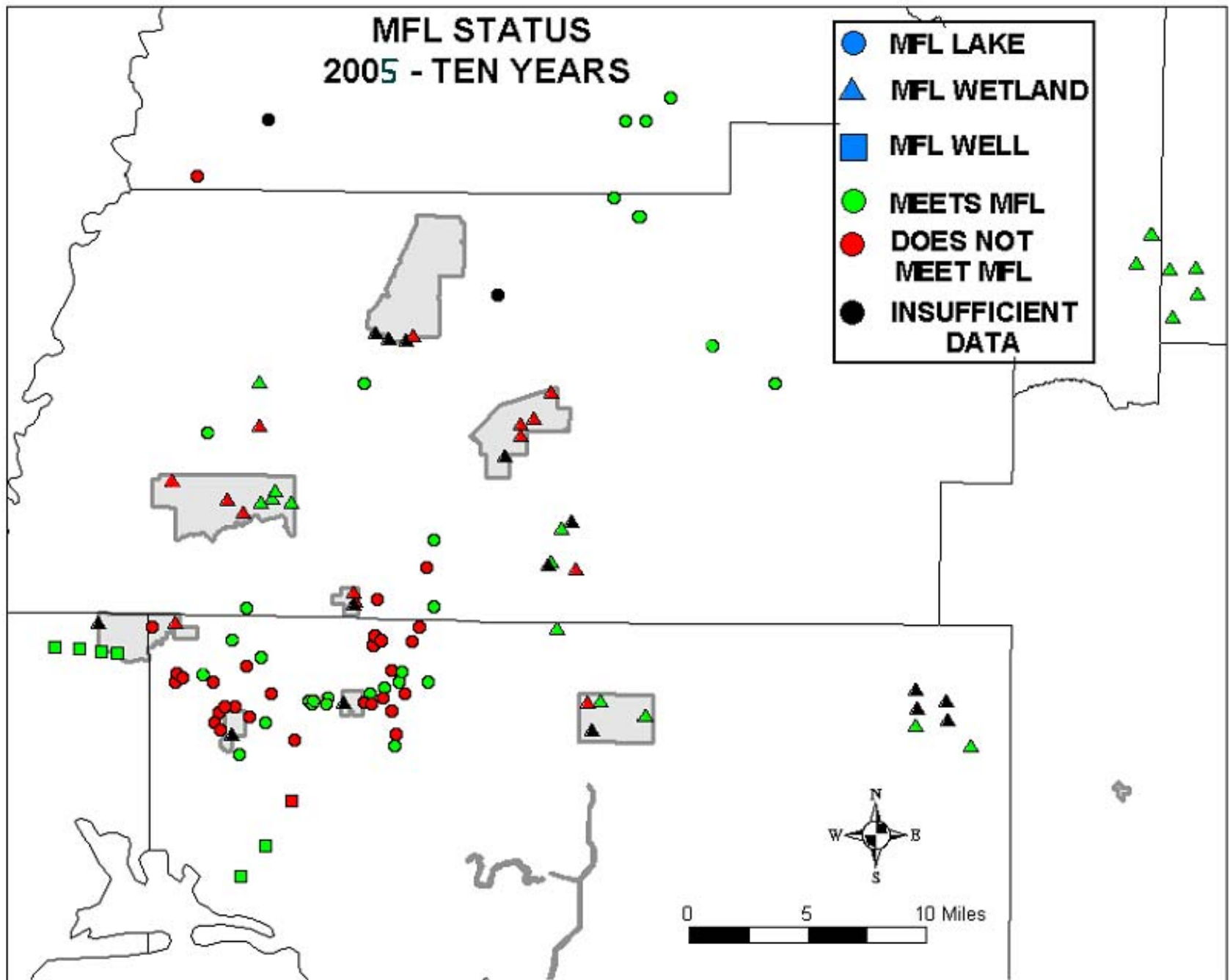
MFL STATUS 2004 - TEN YEARS

- MFL LAKE
- ▲ MFL WETLAND
- MFL WELL
- MEETS MFL
- DOES NOT MEET MFL
- INSUFFICIENT DATA



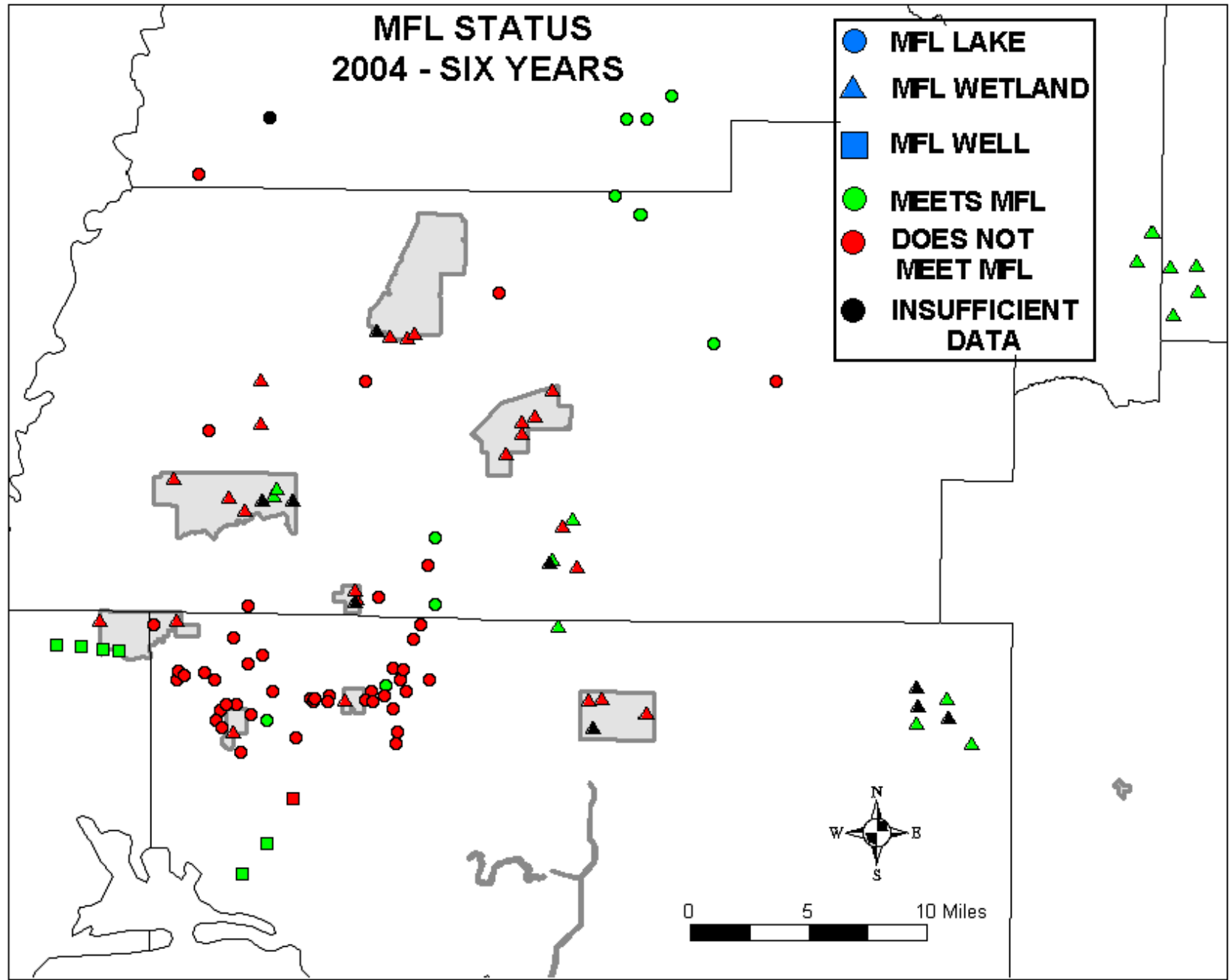
MFL STATUS 2005 - TEN YEARS

- MFL LAKE
- ▲ MFL WETLAND
- MFL WELL
- MEETS MFL
- DOES NOT MEET MFL
- INSUFFICIENT DATA



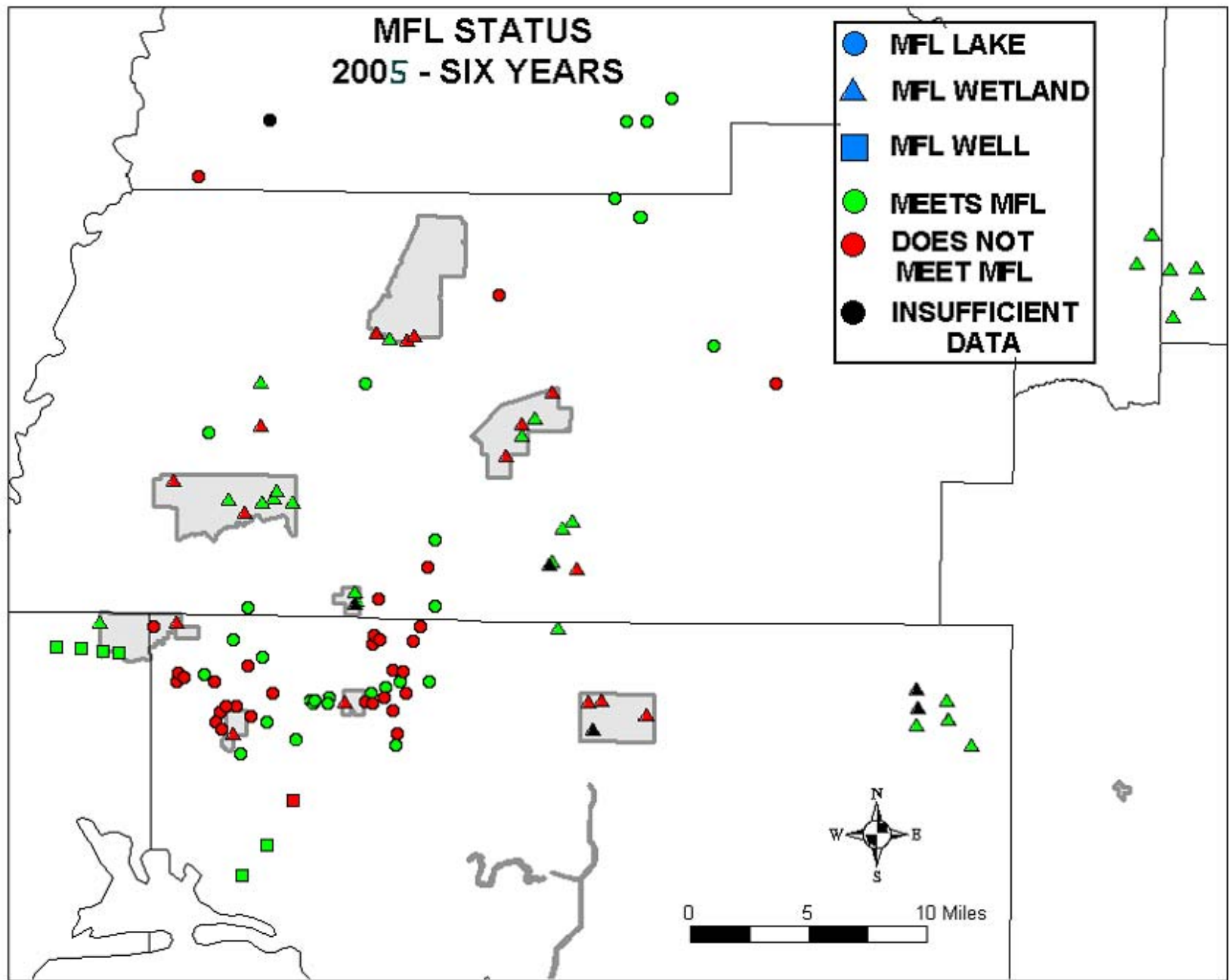
MFL STATUS 2004 - SIX YEARS

- MFL LAKE
- ▲ MFL WETLAND
- MFL WELL
- MEETS MFL
- DOES NOT MEET MFL
- INSUFFICIENT DATA



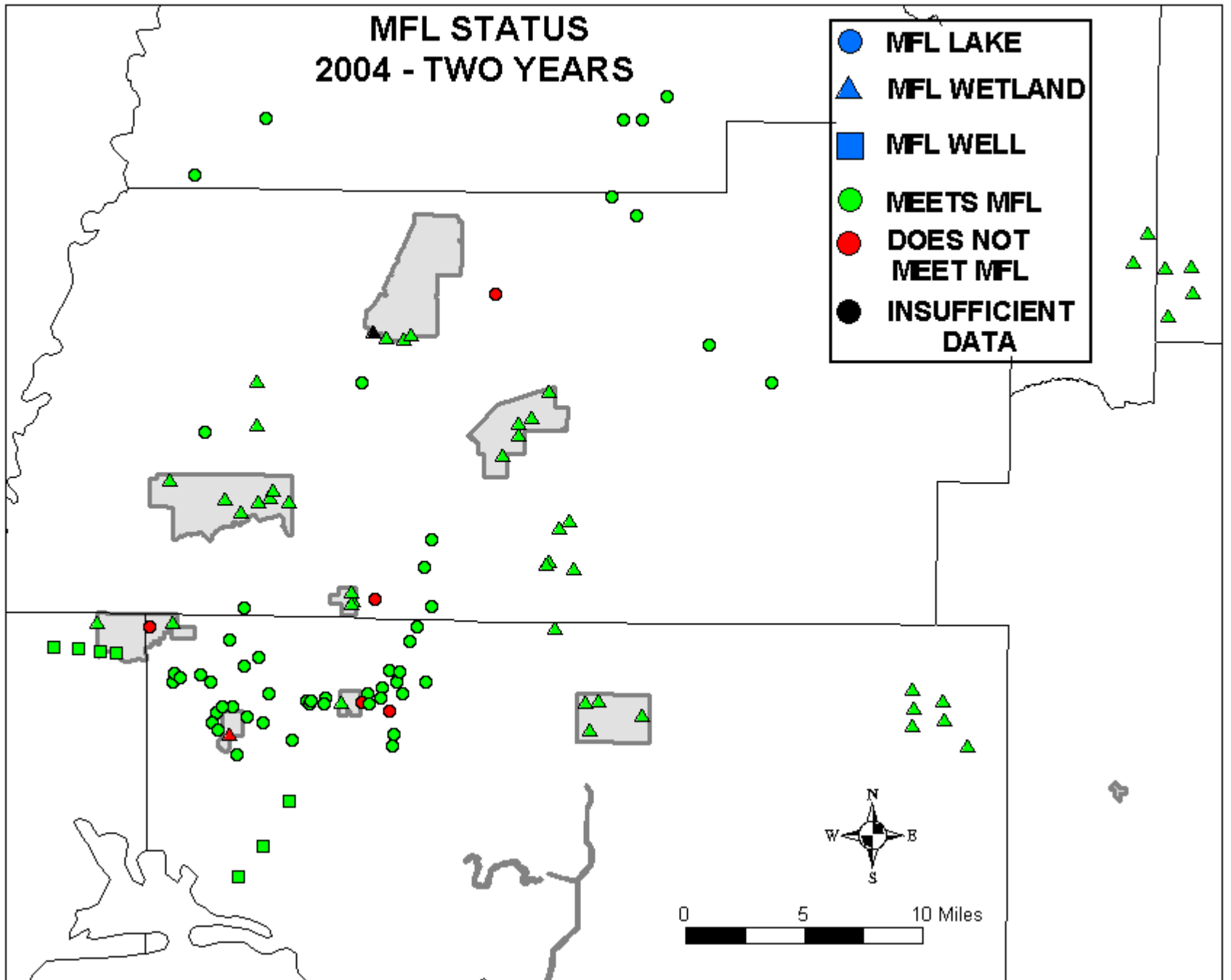
MFL STATUS 2005 - SIX YEARS

- MFL LAKE
- ▲ MFL WETLAND
- MFL WELL
- MEETS MFL
- DOES NOT MEET MFL
- INSUFFICIENT DATA



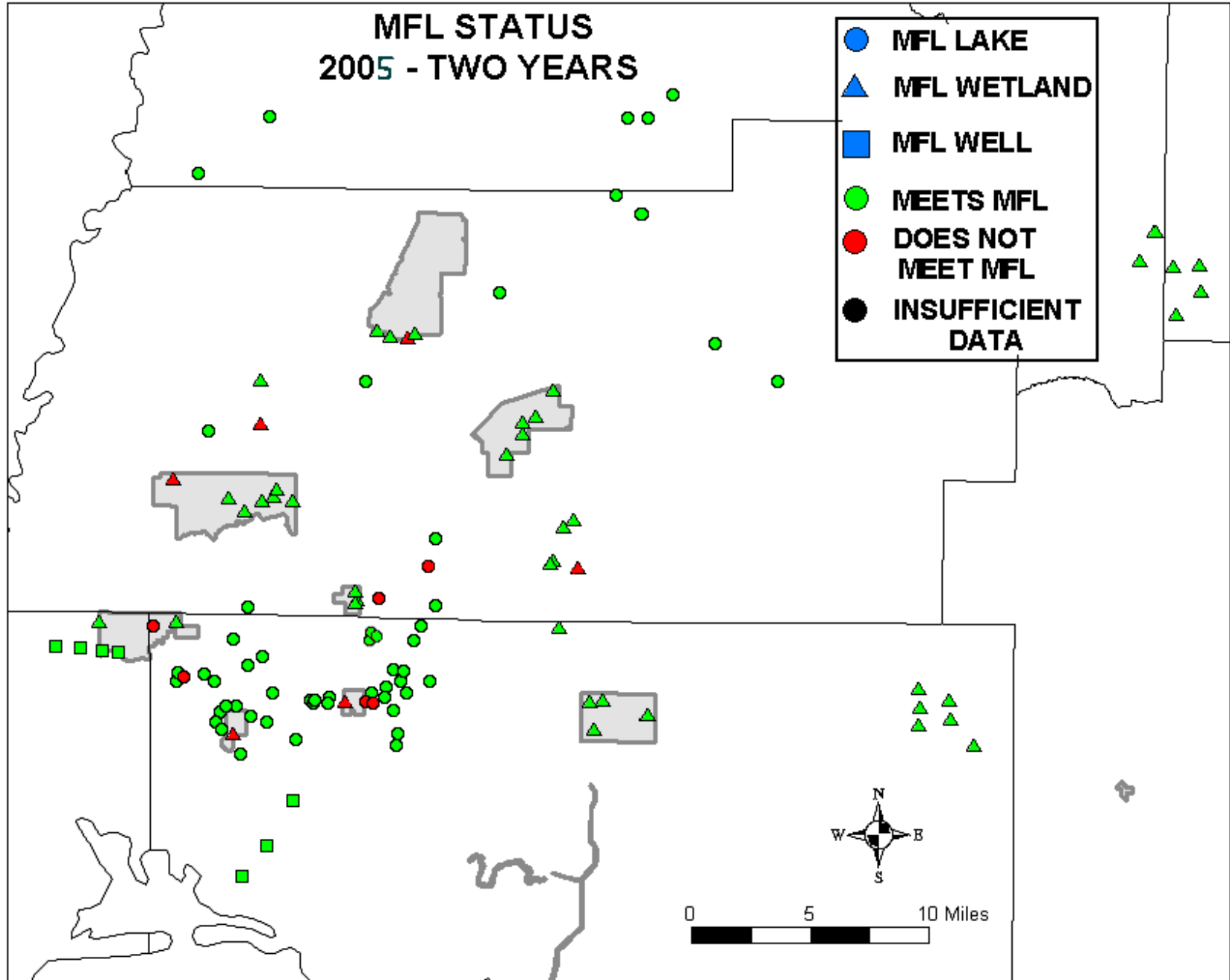
MFL STATUS 2004 - TWO YEARS

- MFL LAKE
- ▲ MFL WETLAND
- MFL WELL
- MEETS MFL
- DOES NOT MEET MFL
- INSUFFICIENT DATA



MFL STATUS 2005 - TWO YEARS

- MFL LAKE
- ▲ MFL WETLAND
- MFL WELL
- MEETS MFL
- DOES NOT MEET MFL
- INSUFFICIENT DATA



MFL Site Evaluations

- Since 1998, staff has continued to evaluate, collect data, install additional instrumentation, and maintain instrumentation at all sites
- Wetlands are particularly complicated due to multiple instrumentation needs, maintenance, remoteness, etc.
- In many wetlands, issues include survey discrepancies, access issues, development effects, and reconsideration of site status.

2005 Assessment of Recovery Levels

- Recovery Levels meant to serve as guidelines as to what the Floridan aquifer levels would be at 90 mgd, based on the District's recovery assessment
- 40 original wells – 2 since destroyed
- Based on long-term average

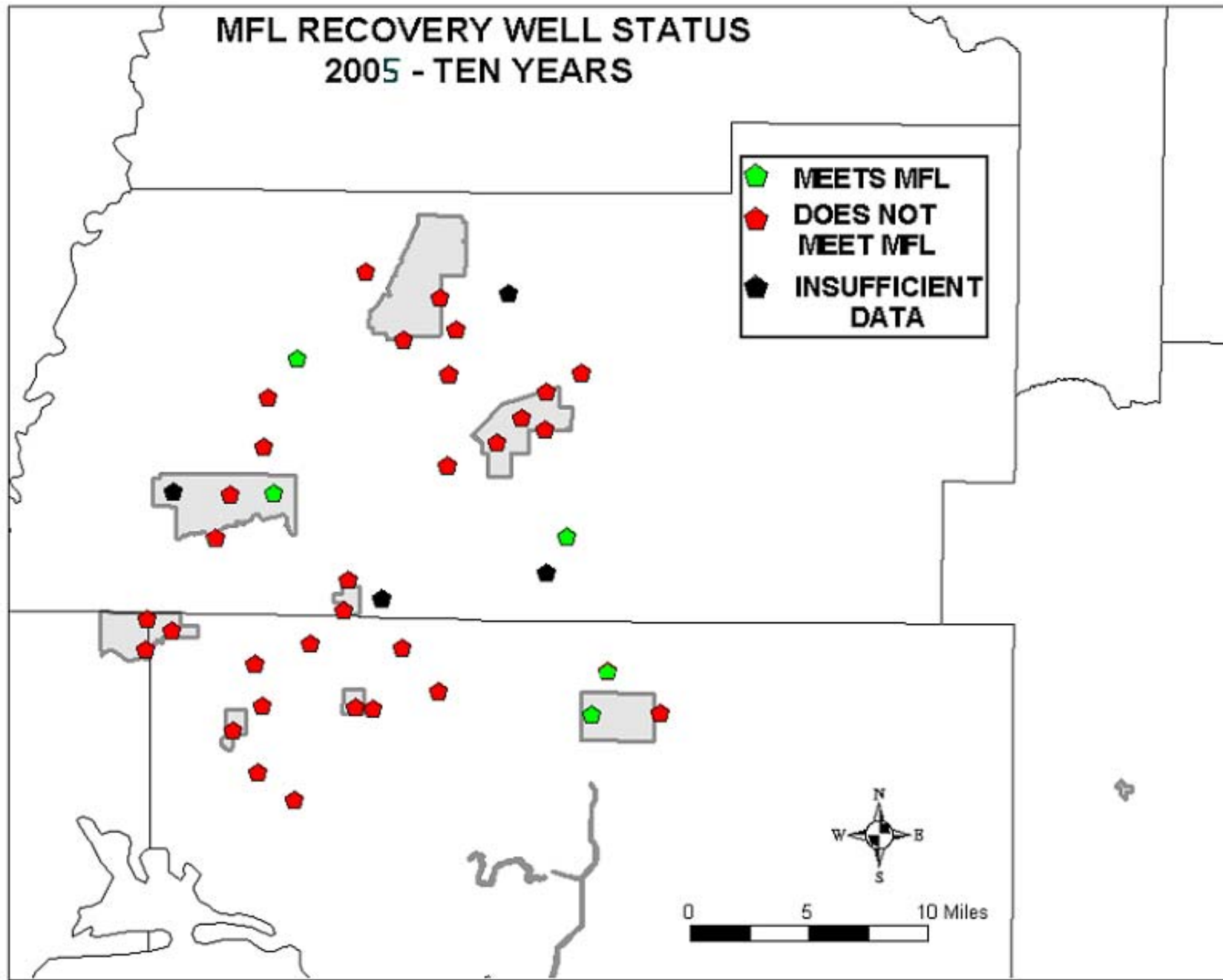
Recovery Wells – 2005

Results - 10-year

- 6 wells meeting recovery level (two were not meeting their recovery levels in 2004)
- 30 wells not meeting recovery level (all were not meeting their recovery levels in 2004)
- 2 wells without enough data

MFL RECOVERY WELL STATUS 2005 - TEN YEARS

- MEETS MFL
- DOES NOT MEET MFL
- INSUFFICIENT DATA



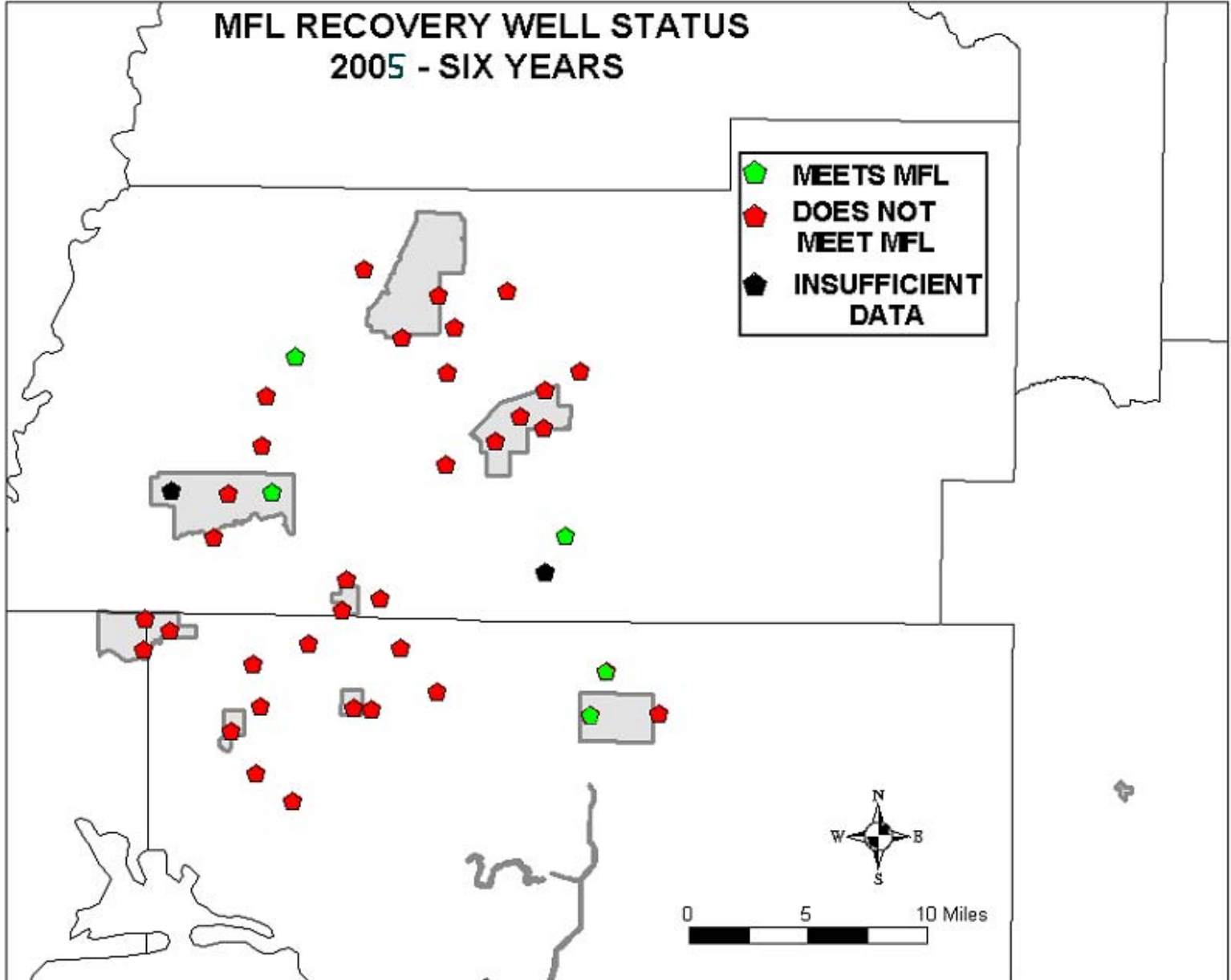
Recovery Wells – 2005

Results - 6-year

- 5 wells meeting recovery level (two were not meeting their level in 2004)
- 33 wells not meeting recovery level (all not meeting their level in 2004)

MFL RECOVERY WELL STATUS 2005 - SIX YEARS

- MEETS MFL
- DOES NOT MEET MFL
- INSUFFICIENT DATA



Recovery Wells – 2005

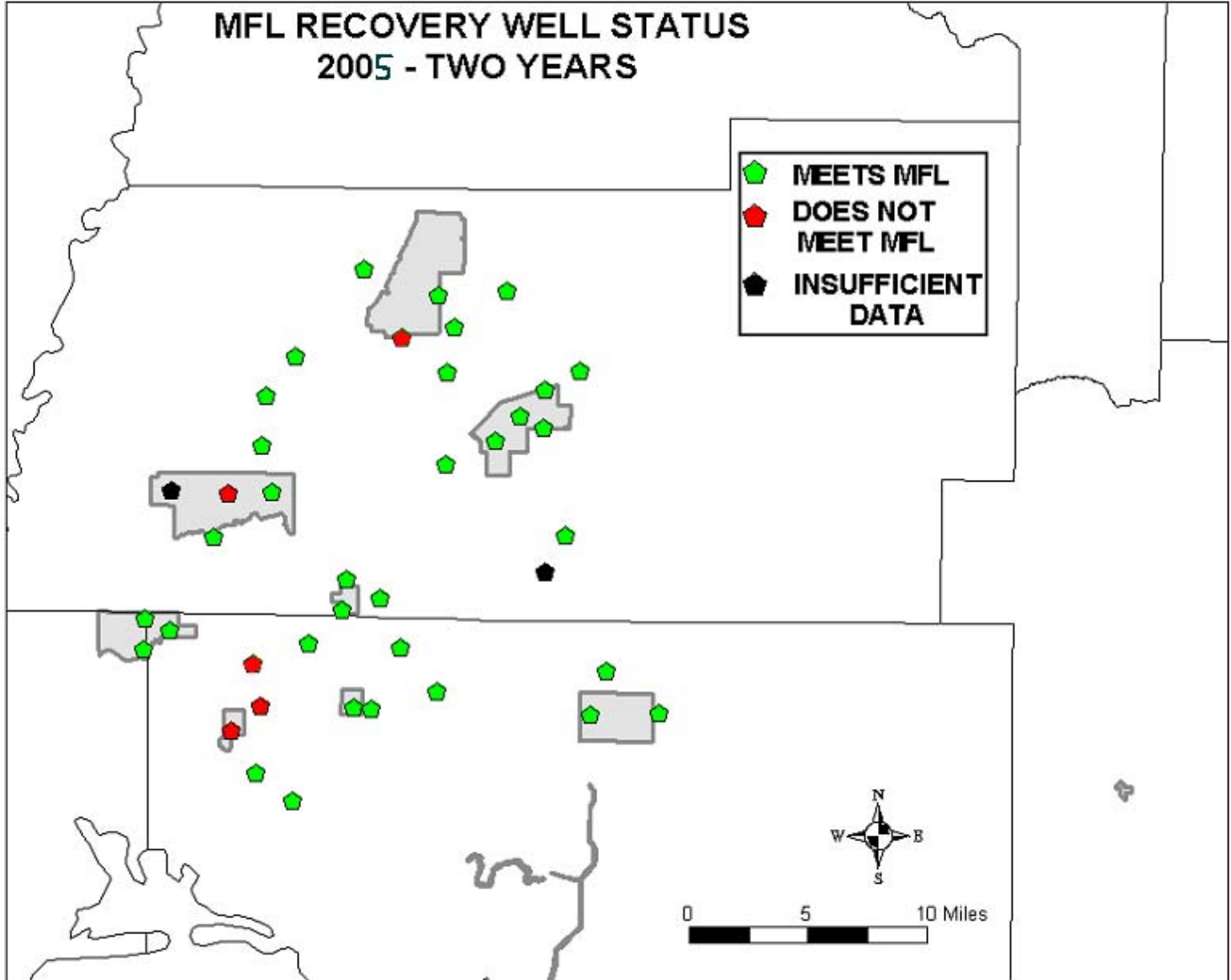
Results - 2-year

- 33 wells above recovery level elevation
- 5 wells below recovery level elevation
(Cosme 3, James 11, Calm 33A, MW1, SRW)

* Two years is not enough data to do a recovery level determination

MFL RECOVERY WELL STATUS 2005 - TWO YEARS

- MEETS MFL
- DOES NOT MEET MFL
- INSUFFICIENT DATA



Upcoming Recovery and MFL Issues

- Adjustments to MFL rules
 - Additions or replacement to sites
 - Additions or alterations to methodologies
- Recovery Assessment Analyses
- Recovery Presentation
- Peer Review

