

Test Run

| Layer | Changes |
|---------|---|
| Layer 2 | Reduction in conductance values by 0.1 in Layer 2 near Hillsborough County |
| Layer 3 | Changed negative conductance values to 50000 ft ² /d |
| Layer 5 | Reduction in conductance values along the Eastern border by 0.001 |
| Layer 5 | Changed high conductance values to 500,000 ft ² /d in Southeastern Corner of model |

GHB Net Flux Comparison

| | West Side | | | East Side | | |
|----------|-------------|----------|----------|-------------|----------|----------|
| | Calibration | Test Run | Δ | Calibration | Test Run | Δ |
| Layer 1 | | | | | | |
| Layer 2 | 414.24 | 72.78 | 341.5 | 0.06 | 0.06 | 0 |
| Layer 3 | -180.35 | -157.77 | -22.58 | -37.46 | -7.90 | -29.56 |
| Layer 4 | -1.44 | 45.22 | -46.66 | 4.66 | 10.93 | -6.27 |
| Layer 5 | -19.83 | 11.86 | -31.69 | 235.28 | 81.65 | 153.63 |
| Layer 6 | 130.03 | 130.15 | -0.12 | | | |
| Layer 7 | 19.01 | 19.02 | -0.01 | 113.46 | 118.46 | -5 |
| Layer 8 | | | | 119.44 | 124.22 | -4.78 |
| Layer 9 | -0.52 | -0.54 | 0.02 | -34.12 | -4.45 | -29.67 |
| Layer 10 | | | | | | |
| Layer 11 | -16.73 | -16.80 | 0.07 | -301.75 | -298.37 | -3.38 |
| Total | 344.40 | 103.91 | 240.5 | 99.55 | 24.58 | 74.97 |

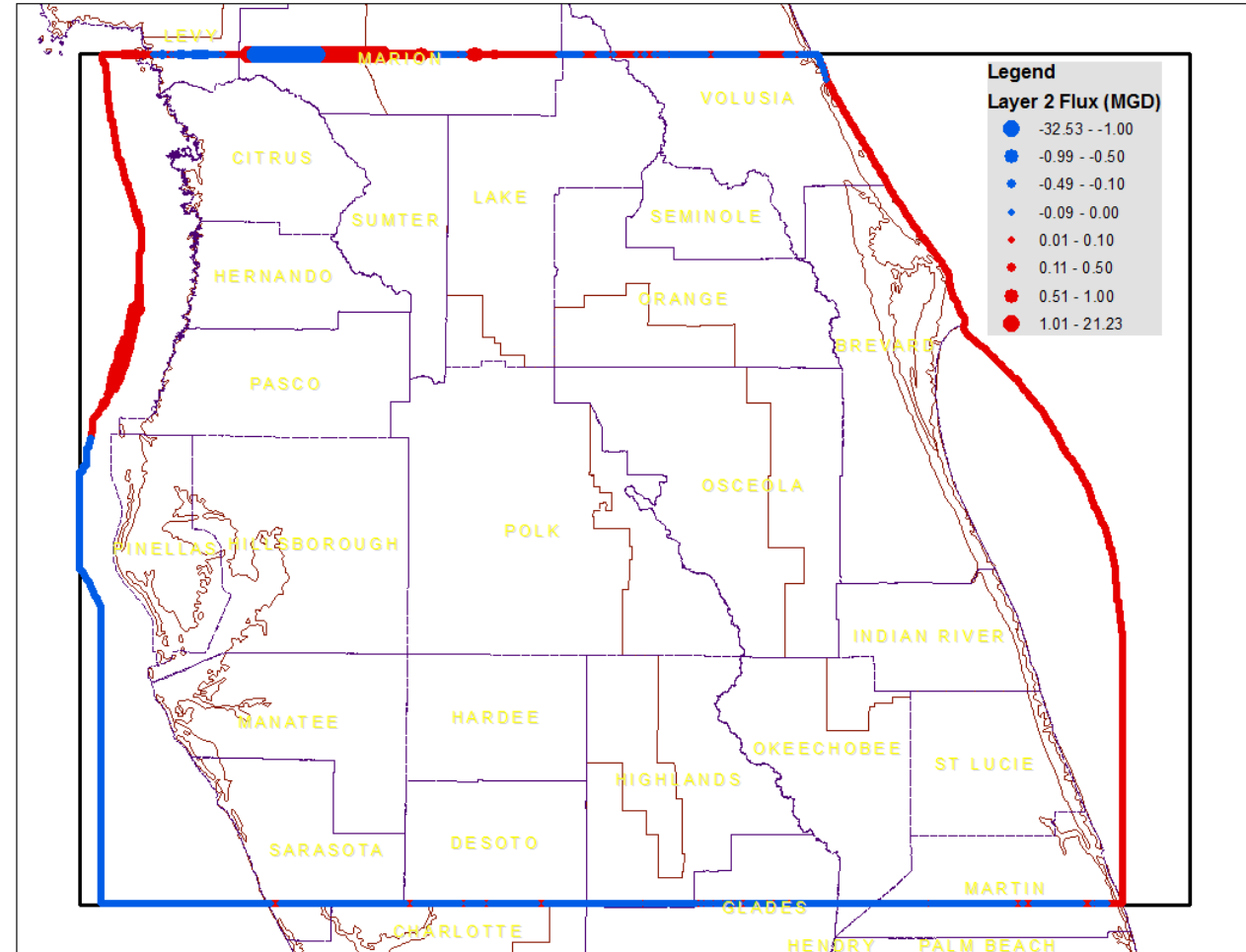
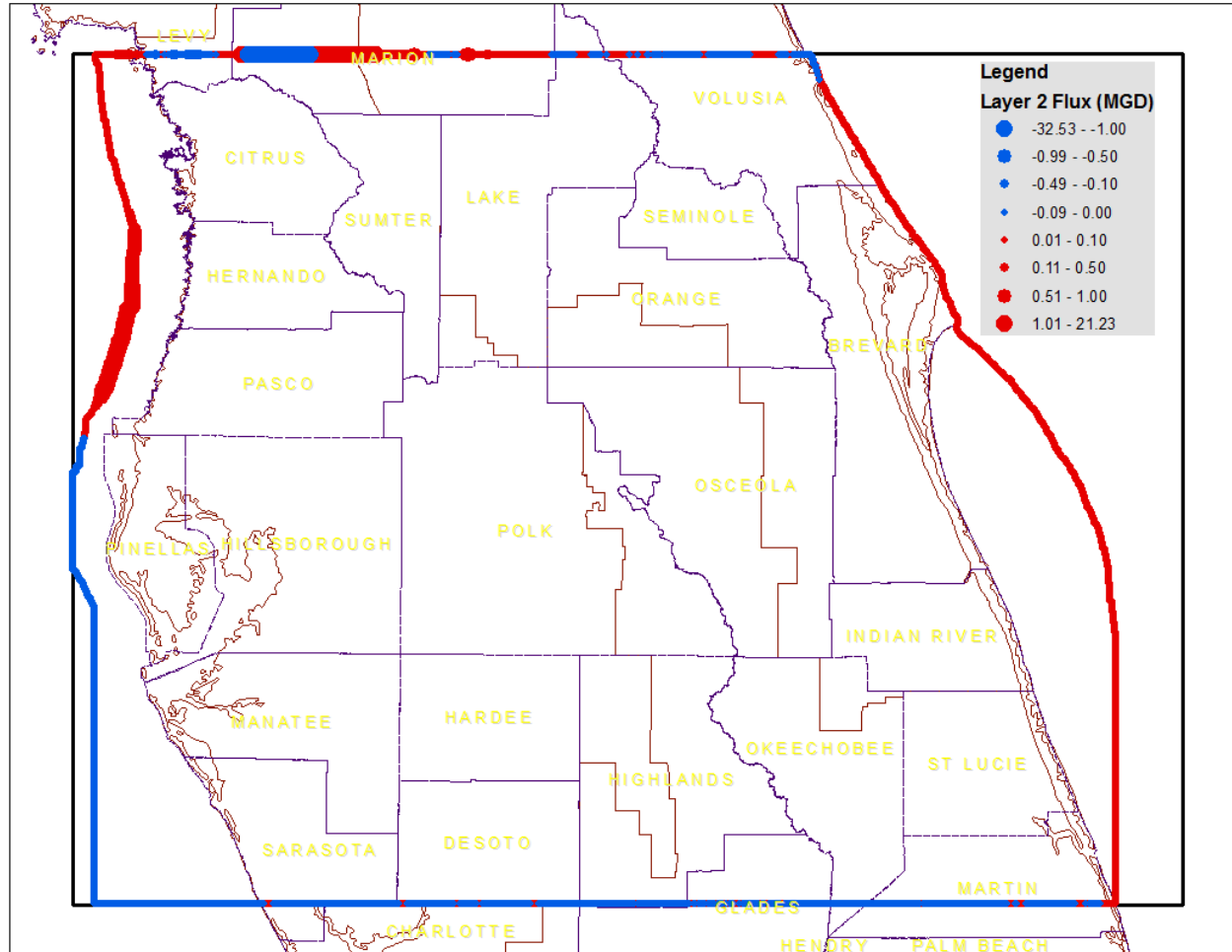
GHB Net Flux Comparison

| | North Side | | | South Side | | |
|----------|-------------|----------|----------|-------------|----------|----------|
| | Calibration | Test Run | Δ | Calibration | Test Run | Δ |
| Layer 1 | 10.88 | 10.84 | 0.04 | 5.56 | 5.51 | 0.05 |
| Layer 2 | -336.00 | -337.97 | 1.97 | -0.38 | -0.37 | -0.01 |
| Layer 3 | 511.65 | 513.02 | -1.4 | -105.63 | -105.45 | -0.18 |
| Layer 4 | 140.51 | 140.36 | 0.15 | -100.67 | -95.41 | -5.26 |
| Layer 5 | 184.79 | 184.09 | 0.7 | 261.61 | 257.66 | 3.95 |
| Layer 6 | 1.41 | 1.41 | 0 | 58.69 | 58.72 | -0.03 |
| Layer 7 | 0.91 | 0.91 | 0 | 26.21 | 26.02 | 0.19 |
| Layer 8 | -0.02 | -0.02 | 0 | 10.94 | 10.87 | 0.07 |
| Layer 9 | 42.02 | 41.92 | 0.1 | | | |
| Layer 10 | | | | | | |
| Layer 11 | 2.58 | 2.57 | 0.01 | | | |
| Total | 558.72 | 557.13 | 1.59 | 156.33 | 157.54 | -1.21 |

Comparison of Flux in Layer 2

Calibration

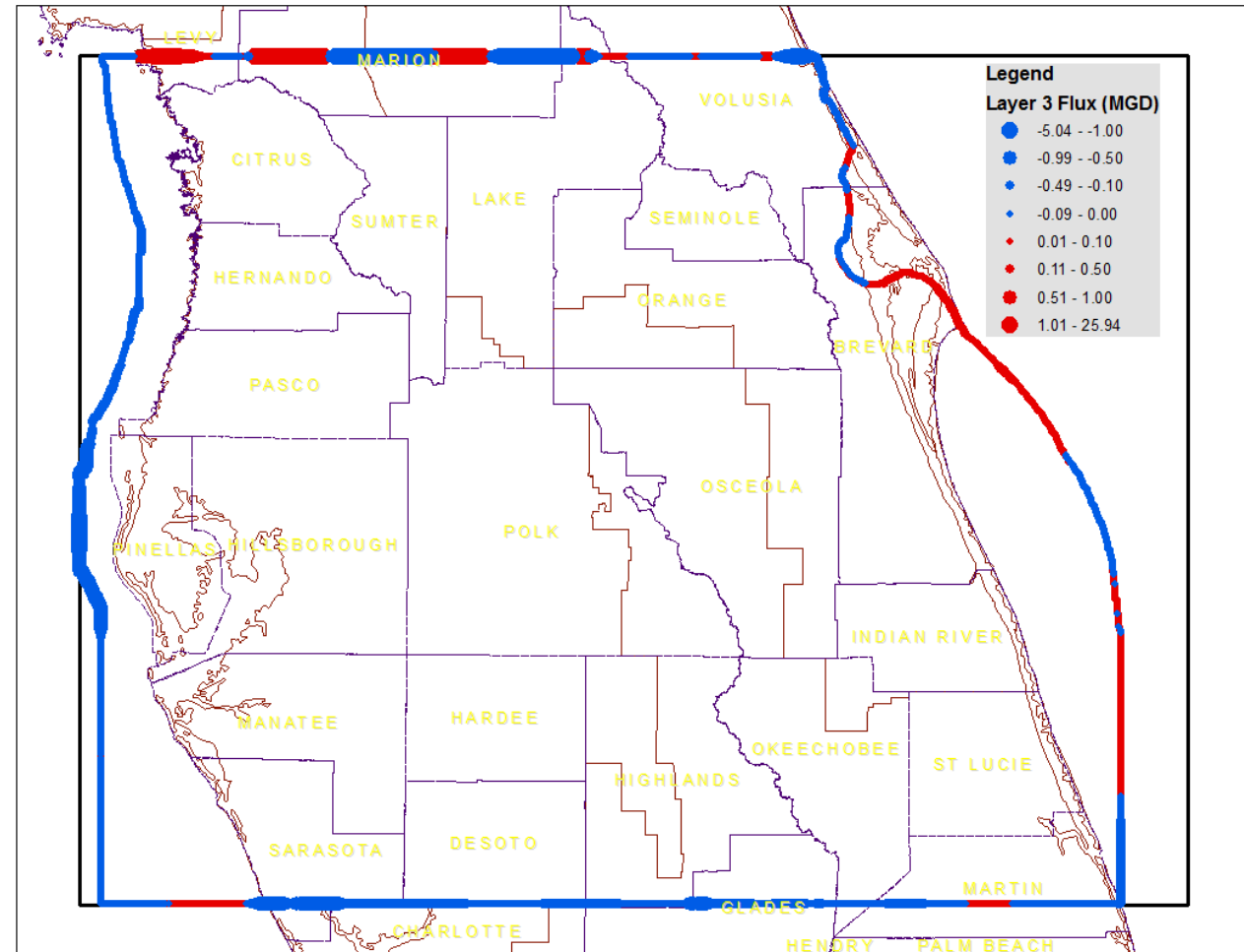
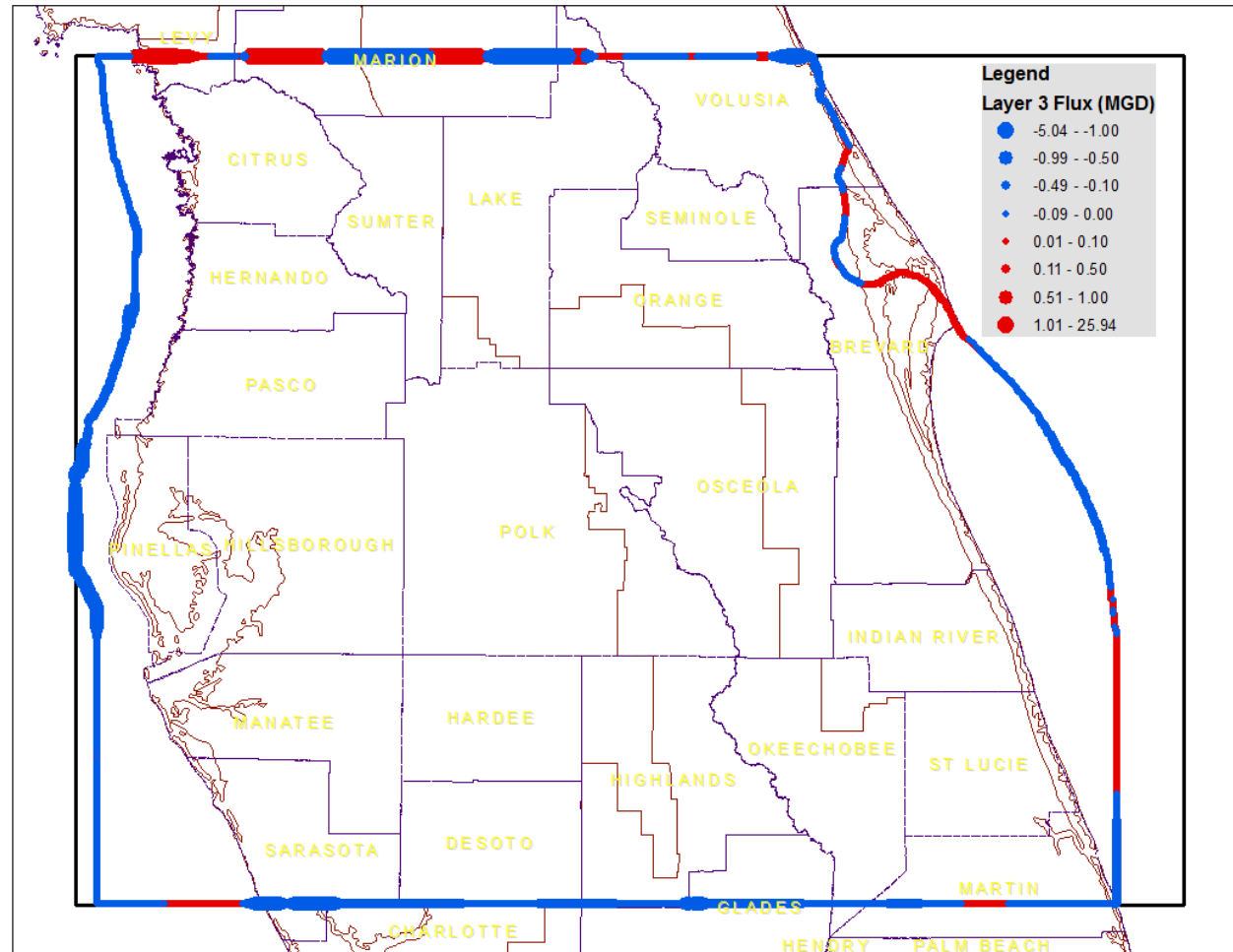
Test Run



Comparison of Flux in Layer 3

Calibration

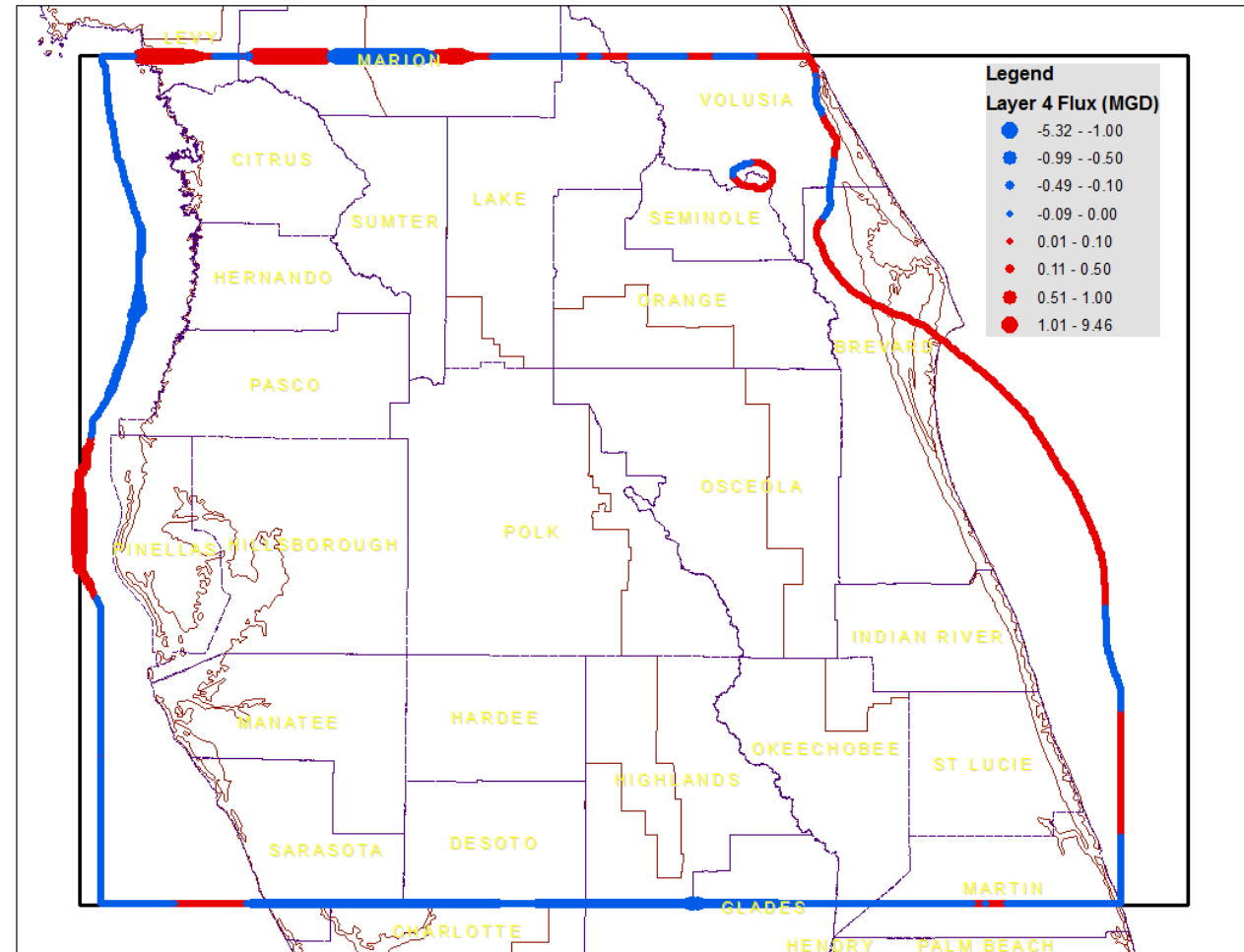
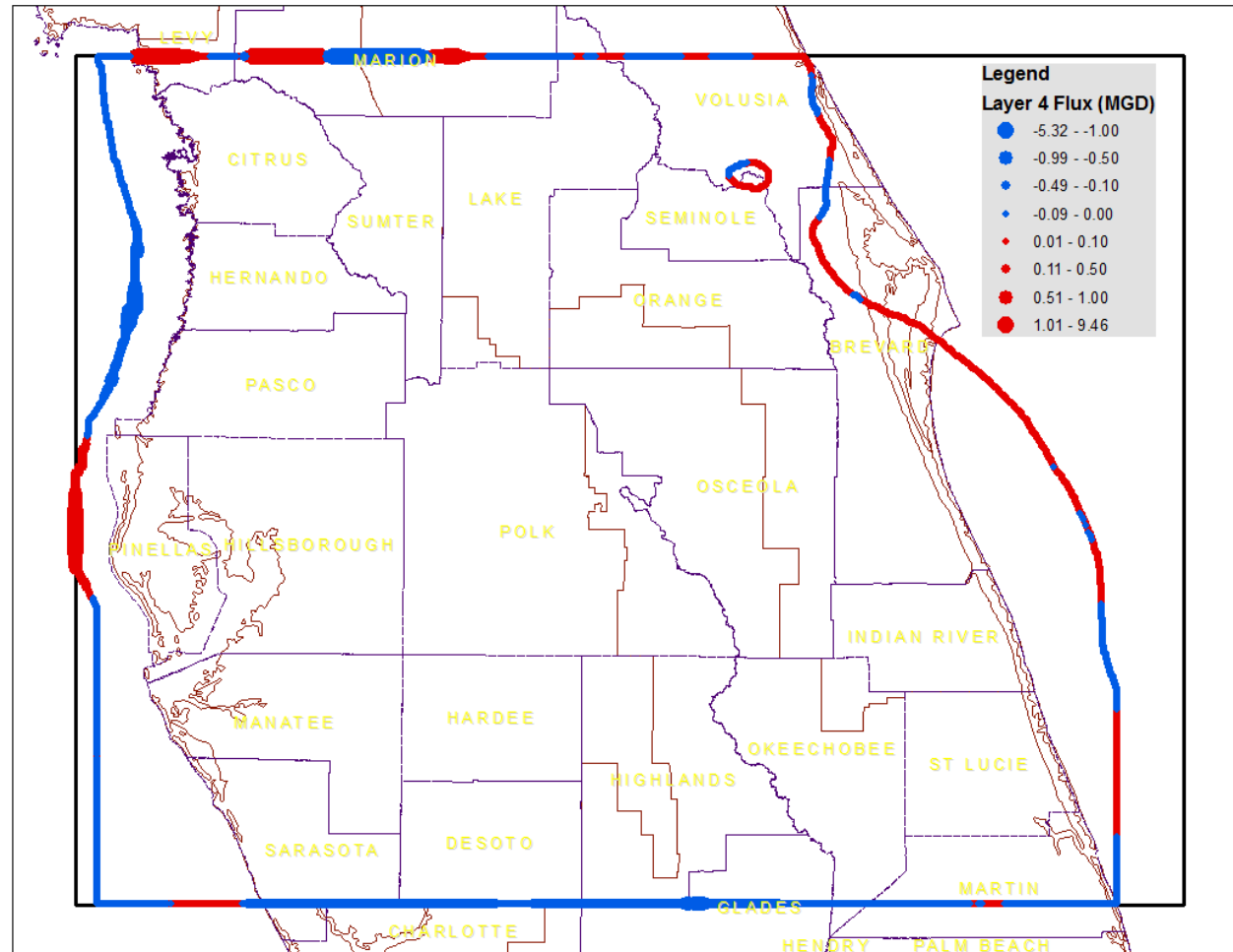
Test Run



Comparison of Flux in Layer 4

Calibration

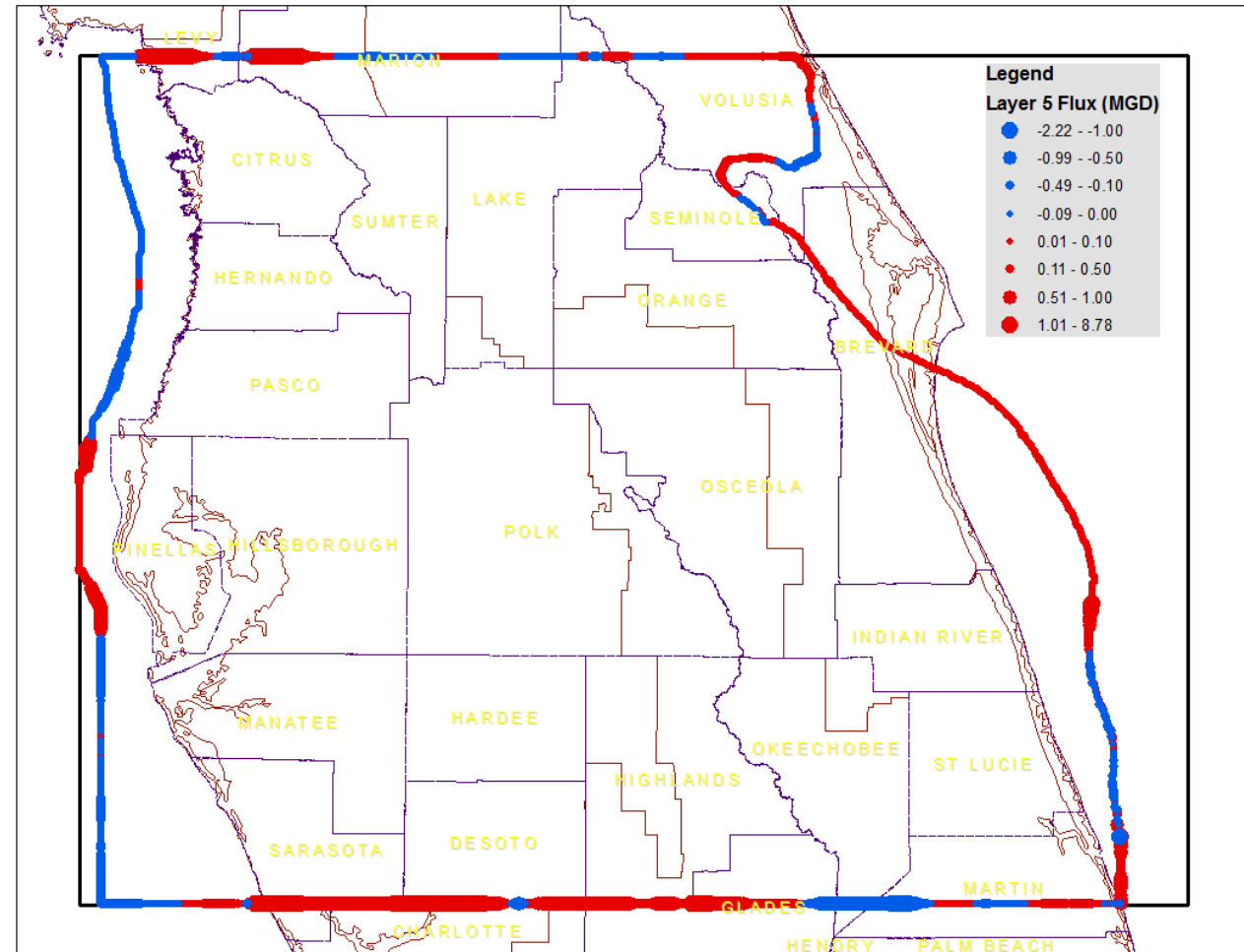
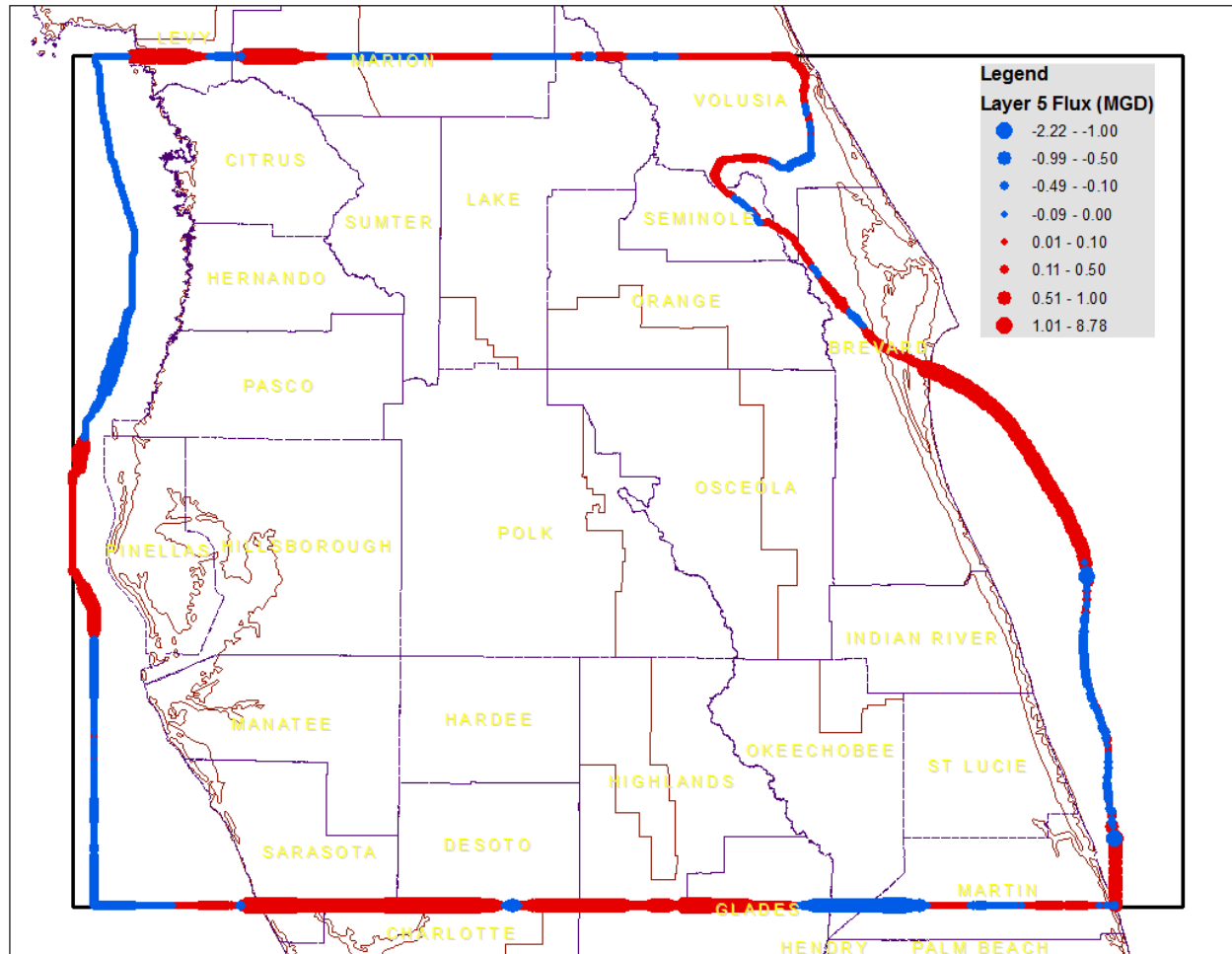
Test Run



Comparison of Flux in Layer 5

Calibration

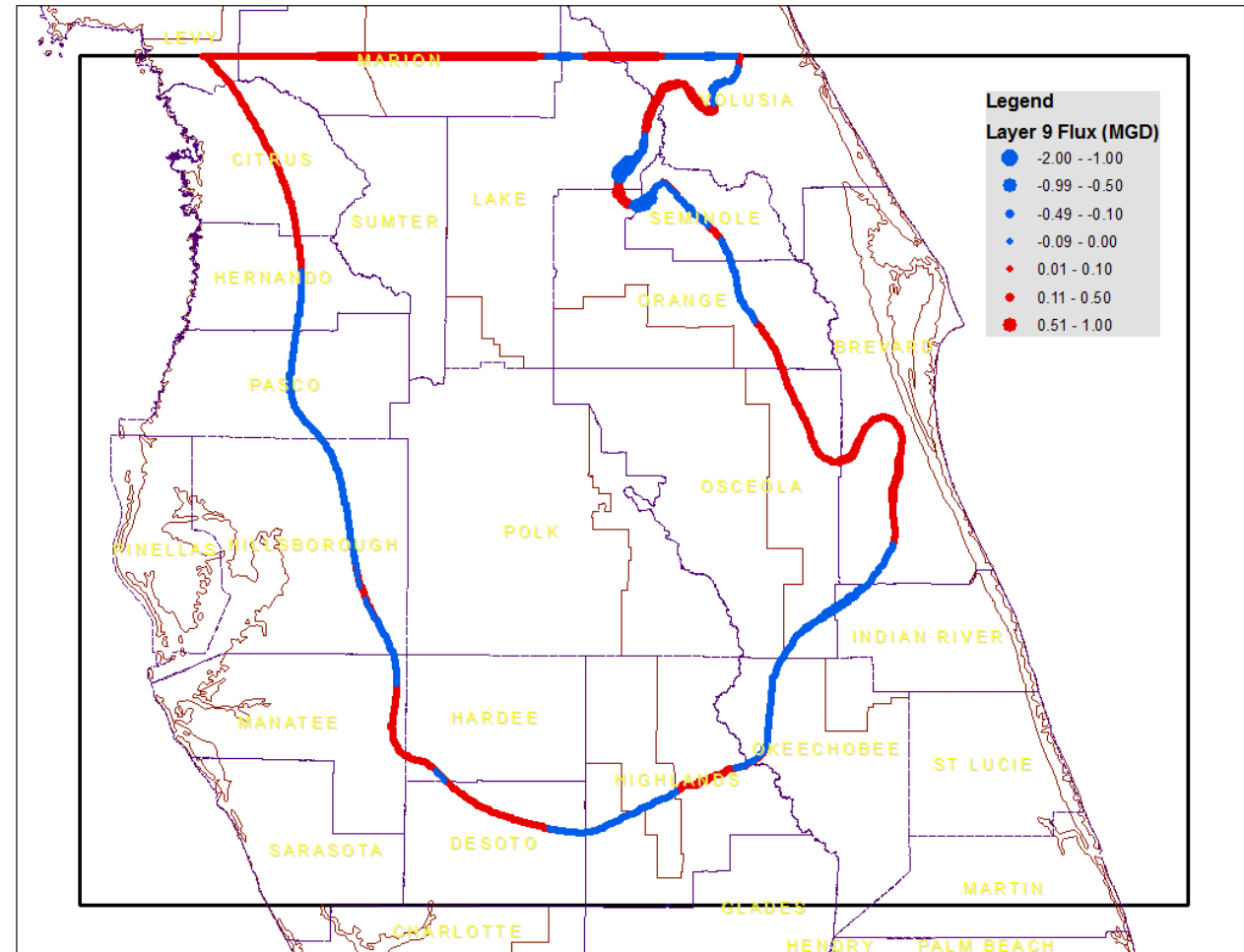
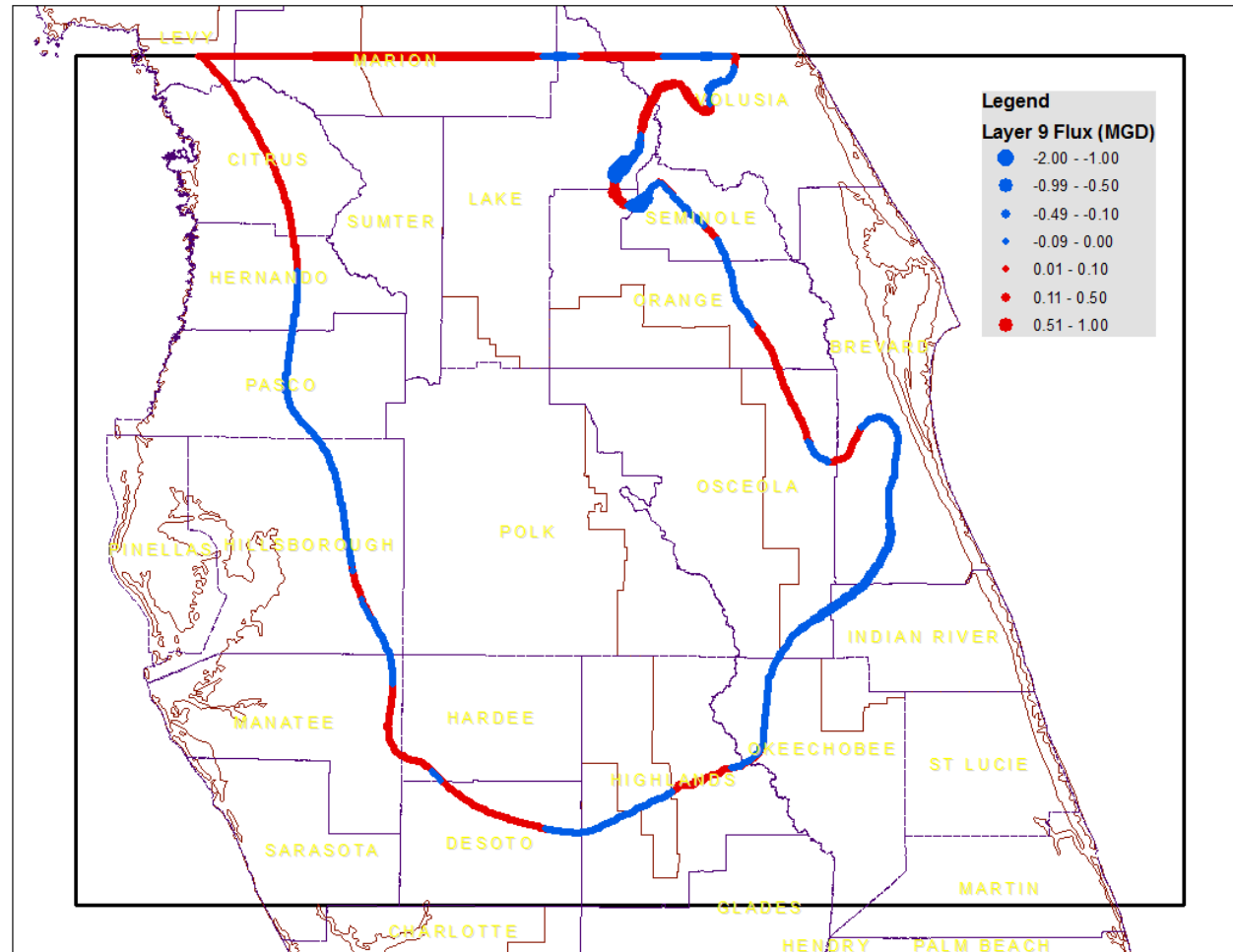
Test Run



Comparison of Flux in Layer 9

Calibration

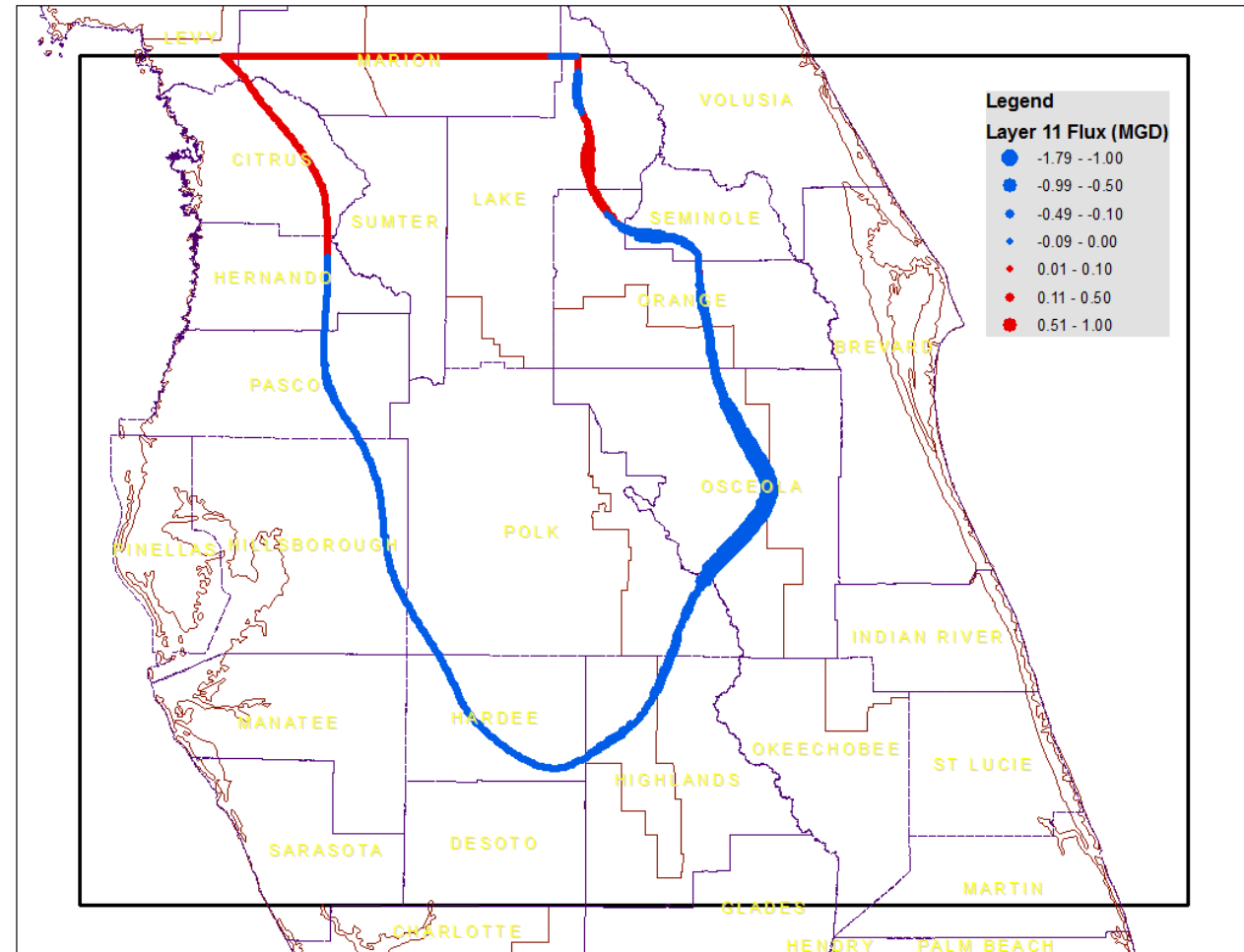
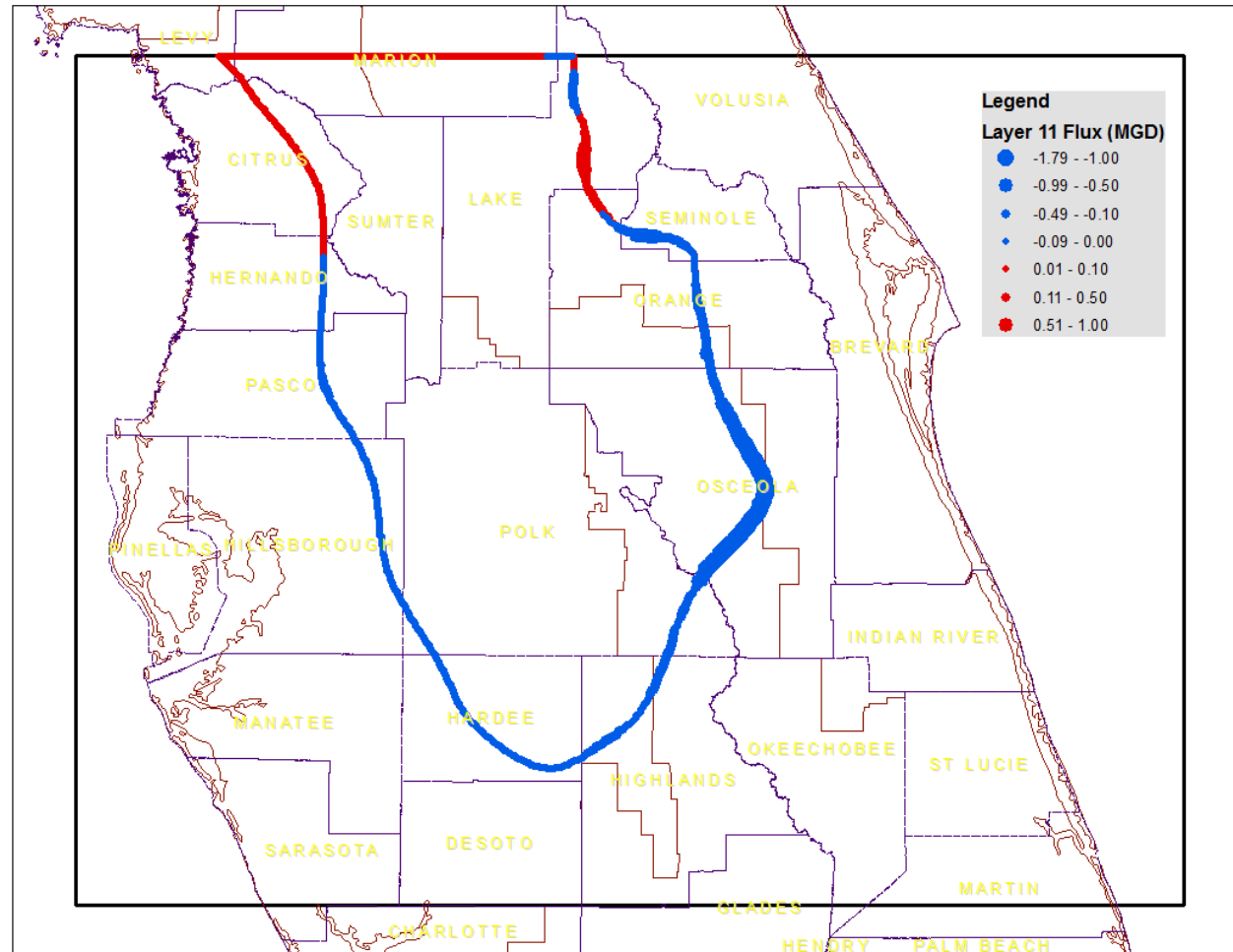
Test Run



Comparison of Flux in Layer 11

Calibration

Test Run



Comparison of ECFTX Well Statistics

| ECFTX | Calibration | | | GHB_Test_20190710 | | |
|------------------------------|-------------|--------|--------|-------------------|--------|--------|
| | SA | UFA | LFA | SA | UFA | LFA |
| Residual Mean | -0.5 | 0.65 | -0.12 | -0.48 | 0.52 | -0.17 |
| Error Standard Dev | 4.2 | 4.72 | 3.58 | 4.25 | 4.82 | 3.56 |
| 5% of Observation Range | 8.97 | 7.59 | 2.79 | 8.97 | 7.59 | 2.79 |
| Absolute Residual Mean | 2.83 | 3.82 | 2.56 | 2.83 | 3.88 | 2.57 |
| | | | | | | |
| Error Sum of Squares | 17794 | 21058 | 371 | 18224 | 21795 | 369 |
| RMS Error | 4.22 | 4.76 | 3.52 | 4.28 | 4.85 | 3.51 |
| | | | | | | |
| Minimum Residual | -31.46 | -22.25 | -10.18 | -31.62 | -22.27 | -10.17 |
| Maximum Residual | 18.47 | 19.07 | 6.6 | 21.12 | 19.06 | 6.59 |
| | | | | | | |
| Numer of Observations | 997 | 928 | 30 | 997 | 928 | 30 |
| Percentage with MAE < 2.5 ft | 68% | 48% | 67% | 68% | 47% | 67% |
| Percentage with MAE < 5.0 ft | 88% | 76% | 87% | 88% | 74% | 87% |
| Percentage with R2 > 0.4 | 78% | 93% | 93% | 81% | 94% | 97% |

Comparison of CFWI Well Statistics

| CFWI | Calibration | | | GHB_Test_20190710 | | |
|------------------------------|-------------|--------|-------|-------------------|--------|------|
| | SA | UFA | LFA | SA | UFA | LFA |
| Residual Mean | -0.75 | 0.11 | 0.6 | -0.73 | -0.06 | 0.54 |
| Error Standard Dev | 3.54 | 3.83 | 3.23 | 3.5 | 3.96 | 3.23 |
| 5% of Observation Range | 8.6 | 6.2 | 2.62 | 8.6 | 6.2 | 2.62 |
| Absolute Residual Mean | 2.67 | 3.35 | 2.4 | 2.64 | 3.39 | 2.41 |
| | | | | | | |
| Error Sum of Squares | 3616 | 2840 | 248 | 3536 | 3031 | 246 |
| RMS Error | 3.61 | 3.83 | 3.22 | 3.57 | 3.95 | 3.2 |
| | | | | | | |
| Minimum Residual | -16.75 | -12.19 | -8.53 | -16.85 | -12.19 | -8.4 |
| Maximum Residual | 13.29 | 10.33 | 6.6 | 13.28 | 10.3 | 6.59 |
| | | | | | | |
| Numer of Observations | 277 | 194 | 24 | 277 | 194 | 24 |
| Percentage with MAE < 2.5 ft | 70% | 50% | 67% | 70% | 49% | 67% |
| Percentage with MAE < 5.0 ft | 86% | 81% | 88% | 87% | 81% | 88% |
| Percentage with R2 > 0.4 | 78% | 96% | 92% | 82% | 97% | 96% |

Comparison of ECFTX Spring Statistics

| | Observed | Calibration | | Test Run | |
|----------------------------------|------------|-------------|--------|------------|-------|
| Spring Name | Flux (cfs) | Flux (cfs) | Error | Flux (cfs) | Error |
| LITHIA SPRING MAJOR | 34.7 | 33.3 | -4.20% | 33.3 | -4.2% |
| BUCKHORN MAIN SPRING | 12.2 | 12.1 | -0.70% | 12.1 | -0.7% |
| SULPHUR SPRING (HILLSBOROUGH) | 34.7 | 35.4 | 2.00% | 35.4 | 2.0% |
| CRYSTAL MAIN SPRING (PASCO) | 45.5 | 46.3 | 1.90% | 46.3 | 1.9% |
| WEEKI WACHEE SPRING | 160.4 | 167.3 | 4.30% | 167.4 | 4.4% |
| CHASSAHOWITZKA SPRING MAIN | 59.6 | 59.2 | -0.80% | 59.2 | -0.8% |
| HOMOSASSA SPRING #1 | 83.5 | 84.4 | 1.00% | 84.4 | 1.0% |
| GUM SPRING MAIN | 63.8 | 66.4 | 4.10% | 66.5 | 4.1% |
| RAINBOW SPRING #1 | 71.8 | 73.9 | 2.80% | 73.9 | 2.9% |
| APOPKA SPRING | 24.9 | 24.3 | -2.40% | 24.3 | -2.3% |
| SANLANDO SPRINGS | 18.8 | 20.1 | 6.60% | 20.0 | 6.3% |
| STARBUCK SPRING | 12.1 | 12.7 | 4.80% | 12.6 | 4.6% |
| WEKIWA SPRING (ORANGE) | 61.0 | 64.9 | 6.30% | 64.8 | 6.2% |
| BUGG SPRING (LAKE) | 10.6 | 9.6 | -9.30% | 9.6 | -9.1% |
| ROCK SPRINGS (ORANGE) | 54.9 | 52.2 | -5.00% | 52.1 | -5.1% |
| VOLUSIA BLUE SPRING | 143.6 | 132.6 | -7.70% | 132.4 | -7.8% |
| ALEXANDER SPRING | 100.1 | 99.1 | -1.00% | 99.1 | -1.0% |