

**Monthly Report: March 2015**

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School of  
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ENVIRONMENTAL  
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**To:**

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02 April 2015

**By:**

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Bill and Mary:

Please see the bulleted list below for the major actions and accomplishments associated with Cooperative Agreement Number W912HZ-14-2-0002 for the month of March 2015. Please let me know if you would like me to elaborate on the details of any items I've listed below, or if there are any status updates you'd like on unlisted topics.

Best Regards,

Jamie

### Marsh Vegetation

- We've scheduled the June (1<sup>st</sup> of 2) marsh vegetation collection to begin 22 June. This is the "June sample", the synoptic sample that best reflects last year's and this spring's growing conditions.

### Water Data

- 2015 salinity and water depth data from 01 January – 23 February have been downloaded and are in-hand.
- Monthly and annual (current 2015) average salinity conditions are listed in Table 1.

### Forest monitoring

- Monthly measurements of baldcypress tree growth, determined via dendrometer band expansion, began February 2015 and were last taken 23 March.
  - Some trees have shown minimal (< 1 mm) growth. Growth rates will become more pronounced after leaf-out.

Table 1. Monthly and (current) annual average, maximum, and minimum aboveground and belowground salinity (practical salinity units = psu) measured at marsh tidal forest monitoring areas.

| Area     | Month    | Aboveground Salinity (psu) |      |      | Belowground Salinity (psu) |      |      |
|----------|----------|----------------------------|------|------|----------------------------|------|------|
|          |          | Avg. (std. err)            | Max  | Min  | Avg. (std. Max)            | Min  |      |
| Back 1   | January  | 0.11 (0.01)                | 0.17 | 0.03 | 0.17 (0.00)                | 0.20 | 0.12 |
|          | February | 0.13 (0.01)                | 0.17 | 0.02 | 0.17 (0.00)                | 0.19 | 0.15 |
|          | Annual   | 0.12 (0.01)                | 0.17 | 0.02 | 0.17 (0.00)                | 0.20 | 0.12 |
| Back 2   | January  | 0.09 (0.01)                | 0.23 | 0.00 | 0.24 (0.00)                | 0.37 | 0.15 |
|          | February | 0.16 (0.01)                | 0.41 | 0.00 | 0.23 (0.00)                | 0.30 | 0.17 |
|          | Annual   | 0.13 (0.01)                | 0.41 | 0.00 | 0.24 (0.00)                | 0.37 | 0.15 |
| Back 3   | January  | 0.13 (0.02)                | 0.90 | 0.00 | 0.76 (0.01)                | 1.19 | 0.29 |
|          | February | 0.17 (0.03)                | 1.23 | 0.00 | 0.75 (0.01)                | 1.01 | 0.33 |
|          | Annual   | 0.16 (0.02)                | 1.23 | 0.00 | 0.76 (0.01)                | 1.19 | 0.29 |
| Back 3.5 | January  | 0.17 (0.02)                | 1.36 | 0.00 | 2.09(0.00)                 | 2.33 | 1.85 |
|          | February | 0.28 (0.04)                | 2.17 | 0.00 | 2.11 (0.00)                | 2.25 | 1.92 |
|          | Annual   | 0.22 (0.02)                | 2.17 | 0.00 | 2.10 (0.00)                | 2.33 | 1.85 |
| Back 4   | January  | 0.47 (0.05)                | 5.01 | 0.00 | 3.13 (0.01)                | 3.63 | 2.75 |
|          | February | 0.62 (0.07)                | 5.77 | 0.00 | 2.95 (0.01)                | 3.30 | 2.38 |
|          | Annual   | 0.54 (0.04)                | 5.77 | 0.00 | 3.05 (0.01)                | 3.63 | 2.38 |
| Front 1  | January  | 0.06 (0.01)                | 0.17 | 0.00 | 0.34 (0.00)                | 0.42 | 0.24 |
|          | February | 0.11 (0.01)                | 0.33 | 0.00 | 0.30 (0.00)                | 0.36 | 0.23 |
|          | Annual   | 0.08 (0.01)                | 0.33 | 0.00 | 0.32 (0.00)                | 0.42 | 0.23 |
| Front 2  | January  | 0.21 (0.03)                | 2.55 | 0.00 | 0.80 (0.00)                | 1.07 | 0.59 |
|          | February | 0.43 (0.06)                | 4.75 | 0.00 | 0.81 (0.01)                | 1.28 | 0.58 |
|          | Annual   | 0.31 (0.03)                | 4.75 | 0.00 | 0.81 (0.00)                | 1.28 | 0.58 |
| Middle 1 | January  | 0.11 (0.01)                | 0.50 | 0.00 | 0.51 (0.00)                | 0.60 | 0.36 |
|          | February | 0.15 (0.02)                | 0.93 | 0.00 | 0.53 (0.00)                | 0.65 | 0.37 |
|          | Annual   | 0.13 (0.01)                | 0.93 | 0.00 | 0.52 (0.00)                | 0.65 | 0.36 |
| Middle 2 | January  | 0.28 (0.05)                | 1.95 | 0.00 | 0.60 (0.01)                | 1.25 | 0.37 |
|          | February | 0.47 (0.12)                | 3.19 | 0.00 | 1.00 (0.02)                | 2.08 | 0.46 |
|          | Annual   | 0.36 (0.06)                | 3.19 | 0.00 | 0.77 (0.01)                | 2.08 | 0.37 |
| Middle 3 | January  | 0.17 (0.05)                | 2.05 | 0.00 | 1.44 (0.01)                | 2.15 | 0.93 |
|          | February | 0.24 (0.11)                | 2.34 | 0.00 | 1.80 (0.02)                | 3.40 | 1.23 |
|          | Annual   | 0.19 (0.05)                | 2.34 | 0.00 | 1.59 (0.01)                | 3.40 | 0.93 |
| Middle 4 | January  | 0.28 (0.05)                | 3.59 | 0.00 | 2.84 (0.01)                | 3.47 | 2.22 |
|          | February | 0.30 (0.07)                | 5.55 | 0.00 | 2.78 (0.01)                | 3.19 | 2.39 |
|          | Annual   | 0.29 (0.04)                | 5.55 | 0.00 | 2.82 (0.01)                | 3.47 | 2.22 |
| Middle 5 | January  | 0.21 (0.02)                | 1.93 | 0.00 | 1.12 (0.01)                | 1.79 | 0.58 |
|          | February | 0.33 (0.04)                | 2.36 | 0.00 | 1.23 (0.01)                | 1.80 | 0.84 |
|          | Annual   | 0.27 (0.02)                | 2.36 | 0.00 | 1.17 (0.01)                | 1.80 | 0.58 |
| Swamp 1  | January  | 0.04 (0.00)                | 0.06 | 0.01 | 0.07 (0.00)                | 0.08 | 0.06 |
|          | February | 0.04 (0.00)                | 0.05 | 0.01 | 0.06 (0.00)                | 0.07 | 0.05 |
|          | Annual   | 0.04 (0.00)                | 0.06 | 0.01 | 0.07 (0.00)                | 0.08 | 0.05 |
| Swamp 2  | January  | 0.06 (0.00)                | 0.13 | 0.00 | 0.17 (0.00)                | 0.18 | 0.15 |
|          | February | 0.06 (0.00)                | 0.10 | 0.00 | 0.15 (0.00)                | 0.16 | 0.13 |
|          | Annual   | 0.06 (0.00)                | 0.13 | 0.00 | 0.16 (0.00)                | 0.18 | 0.13 |
| Swamp 3  | January  | 0.03 (0.00)                | 0.20 | 0.00 | 0.14 (0.00)                | 0.29 | 0.07 |
|          | February | 0.05 (0.01)                | 0.58 | 0.00 | 0.31 (0.01)                | 1.11 | 0.08 |
|          | Annual   | 0.04 (0.00)                | 0.58 | 0.00 | 0.24 (0.01)                | 1.11 | 0.07 |