

Middle St. Johns TMDLs

Issues Deferred During TMDL Development

Crane Strand, Crane Strand Drain, & Long Branch Bacteria TMDLs

- Identification of coliform sources and their relative order of magnitude did not occur during the TMDL. This will need to occur in the BMAP.
- One fecal coliform TMDL and one total coliform TMDL were developed for the Crane Strand/Crane Strand Drain system. Although sufficient bacteria data was available to verify impairments independently, insufficient flow data was available to calculate independent TMDLs. As such, Crane Strand and Crane Strand Drain were considered as one waterbody when the TMDL targets were calculated. Is it appropriate to consider these as one system when identifying sources and developing management actions? Or should we focus primarily on collecting more flow data to enable calculation of allocations between the two waterbodies?

Long Branch and Crane Strand Drain Dissolved Oxygen TMDLs

- Although it meets the minimum requirements for calculating a TMDL, available DO data is limited.
- Low DO is likely due to natural causes. Should collecting more data to confirm DO trends and relationship to nutrient levels should be a priority?

Long Branch Iron

- Elevated iron is most likely a natural condition in Long Branch, based on soil types, lack of point sources, high groundwater concentrations, high interaction between surface and groundwater, acidic soils that enhance the exchange between groundwater iron and surface water iron, and the high color and low pH of surface water that increase the solubility of iron. Do we need to address this TMDL in the implementation phase, or is the evidence for natural causes sufficient such that management actions for iron are not needed?

Knowledge Gaps

- Calculation of the TMDLs identified several key gaps in our understanding of how these systems function. One example is quantifying the effect of nitrogen fixation in Lake Jesup. What are the other knowledge gaps? Which are significant enough that their potential effect on allocations needs to be considered? Which can be deferred to incorporation in a revisiting of the TMDL in the next cycle?

