**Ideas for revising the “Queryable database tool” based on how we envision RCs would use it**

**July 15, 2021**

**Phase 1**

* “Complete BCGs for each habitat and ecotype that show changes over time wrt historical”
* “Identify a range of long-term targets”
  + Keep “Habitats by ecotype” tab largely the same, but
    - Rename it as “Phase 1”
    - Extend the x-axis timeline to 2050
    - Add long-term targets – need input on visualization
      * Add target as future point, connected by dotted line
      * ~~Add target as horizontal dotted line (so it can be visually connected back to historical?)~~
      * ~~Potentially add table that summarizes acres needed to reach target for each ecotype~~
* Conceptualize ESGs as simple models of how certain ecosystem services increase when habitat extent/quality increases
  + Need to add option to Phase 1 tab to view ecosystem services summaries
    - Under “Choose data option”
      * Percent habitat remaining
      * Acres of habitat
      * Ecosystem services (index?)
        + Need to think about how the long-term acres target translates to ES
  + For “Totals” – need synthesis of ecosystem services – provisioning capacity, % of 1996 value
  + For each habitat, could be broken out by ES type, like this

Chart, line chart

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**Phase 2**

* “RCs select place-based long-term targets for each embayment based on habitat trends and stressors of concern”
  + For ES, add “All” to dropdown so you can see across all embayments and all habitats how ES have changed
  + Click on embayment in map to see the data
  + Change “Embayment” tab to “Phase 2
  + Add tab for “Current status”
    - Section for Habitat status – could be a table and/or a zoomed in map of the embayment showing the habitat data
    - Section for “Current stressors of concern”
      * This would be based on the EDA 2.0 / Stressor-resource categories
      * Not a time series, just a graph of relative stressor magnitude so that dominant stressors could be easily visually identified
  + Change “Habitat data” to “Habitat & ecosystem services trends”
    - Add radio button option for ES synthesis trends as above
    - Add long-term targets – need input on visualization
    - Potentially add table that summarizes acres needed to reach long-term target for each embayment
  + Add tab for “Messaging – What people care about” but name it something better
    - What people care about in this location, pie chart or bar

Chart

Description automatically generated

* Place-based targets are informed by more detailed ES analyses that consider how services are affected when one habitat is replaced with another
  + ?

**Cool ideas that would take a lot more work but could come later, depending on MassBays input**

* Create a function in Phase 2 where users can enter a long-term target and the tool outputs # acres to attain and estimates increase in ES benefits for given target