

Delta Mercury Control Program

Program Update
Data Analysis Discussion



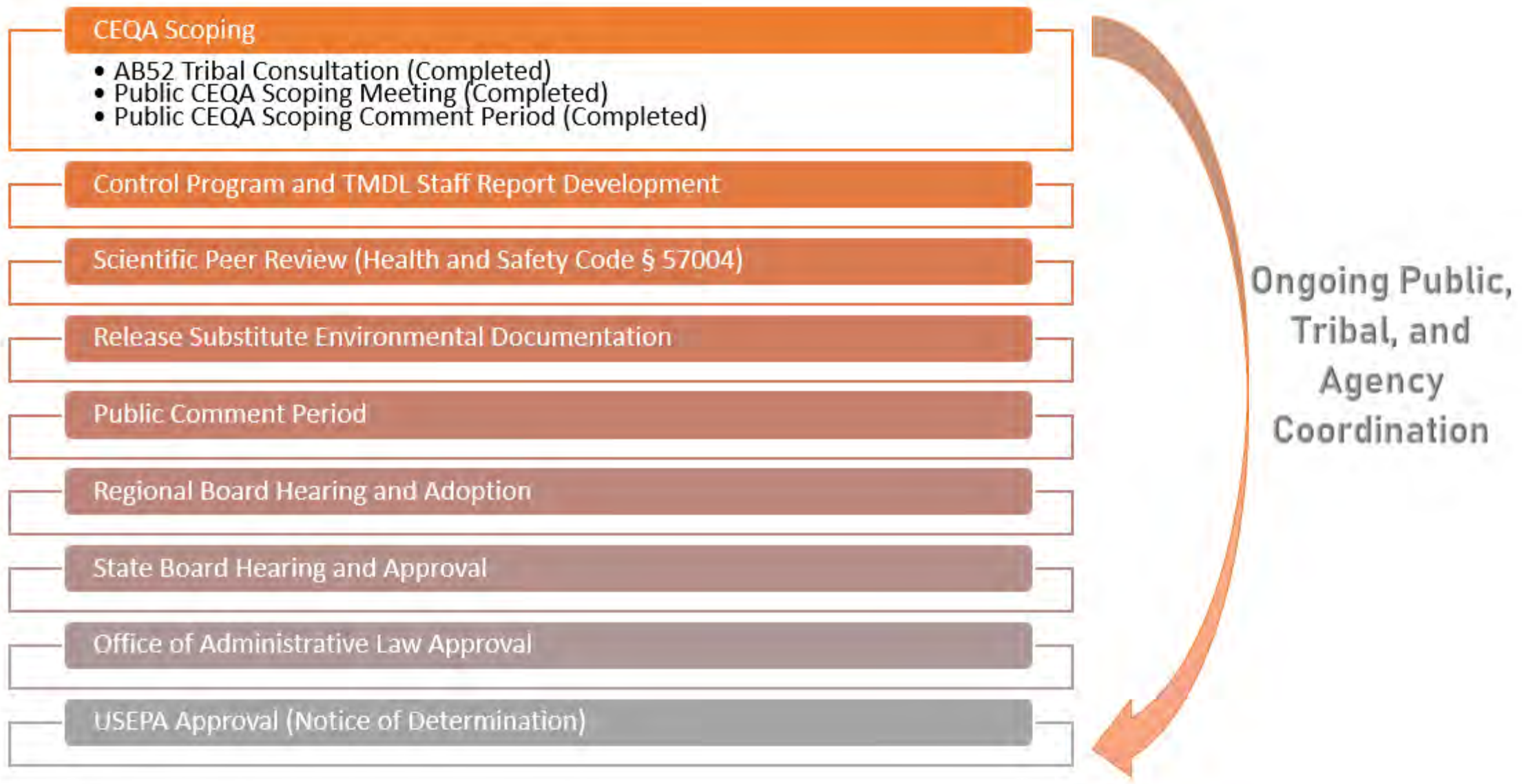
19 May 2021

Agenda

- DMCP Progress to Date
- Background of TMDL Linkage Data Analysis
- Current Data Availability
- Discussion
 - Data grouping options

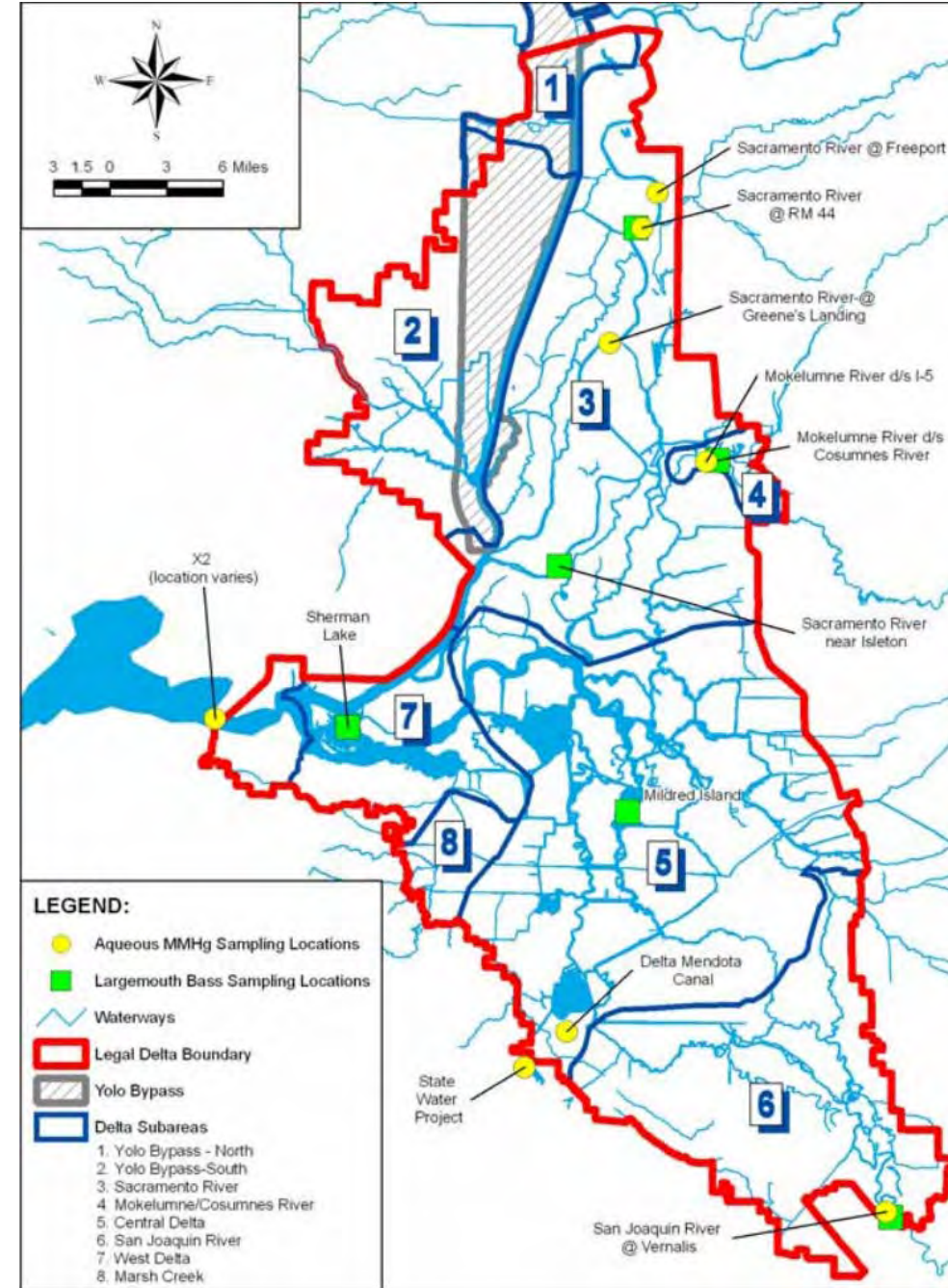
Status

- CEQA Scoping Meeting – 24 February 2021
 - 4 entities submitted written comments
 - Offset Program (varying positions)
 - Support for only using LMB in linkage
 - Support tribal outreach and engagement
 - Support stakeholder engagement
 - ADA document availability
 - Support using models for linkage & attainability of allocations and objectives
- Phase 1 Control Studies
 - Board staff to review all control studies
 - Independent Scientific Review Panel
 - Part 1 finalized
 - Part 2 (tidal wetlands, open water) delayed



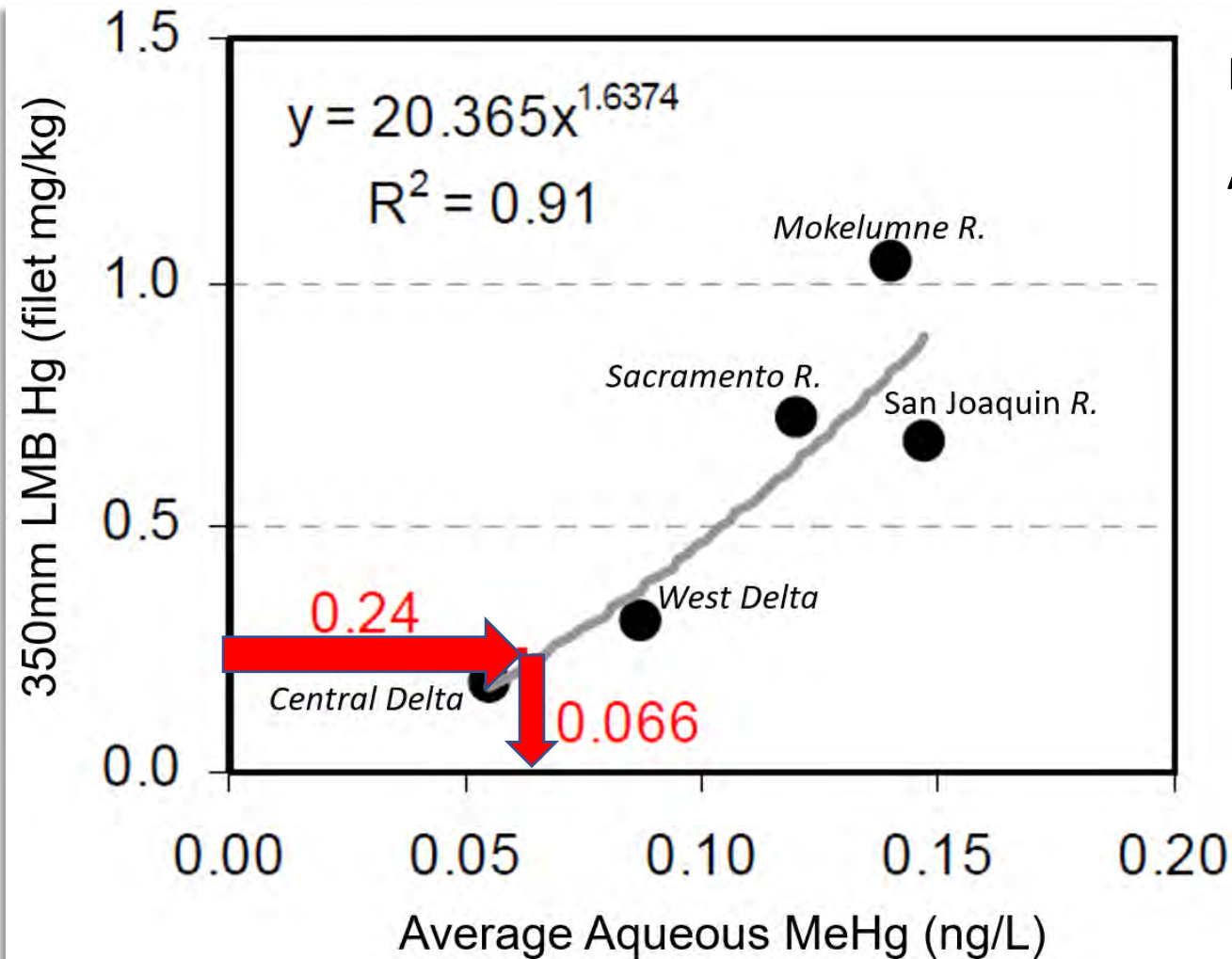
Original Linkage Sample Locations

- Only LMB data were available for the same sampling period and locations as aqueous MeHg data
- Subareas with inadequate or no data
 - 2 – North Yolo Bypass
 - 3 – South Yolo Bypass
 - 8 – Marsh Creek



April 2010 TMDL Staff Report Fig. 5.1

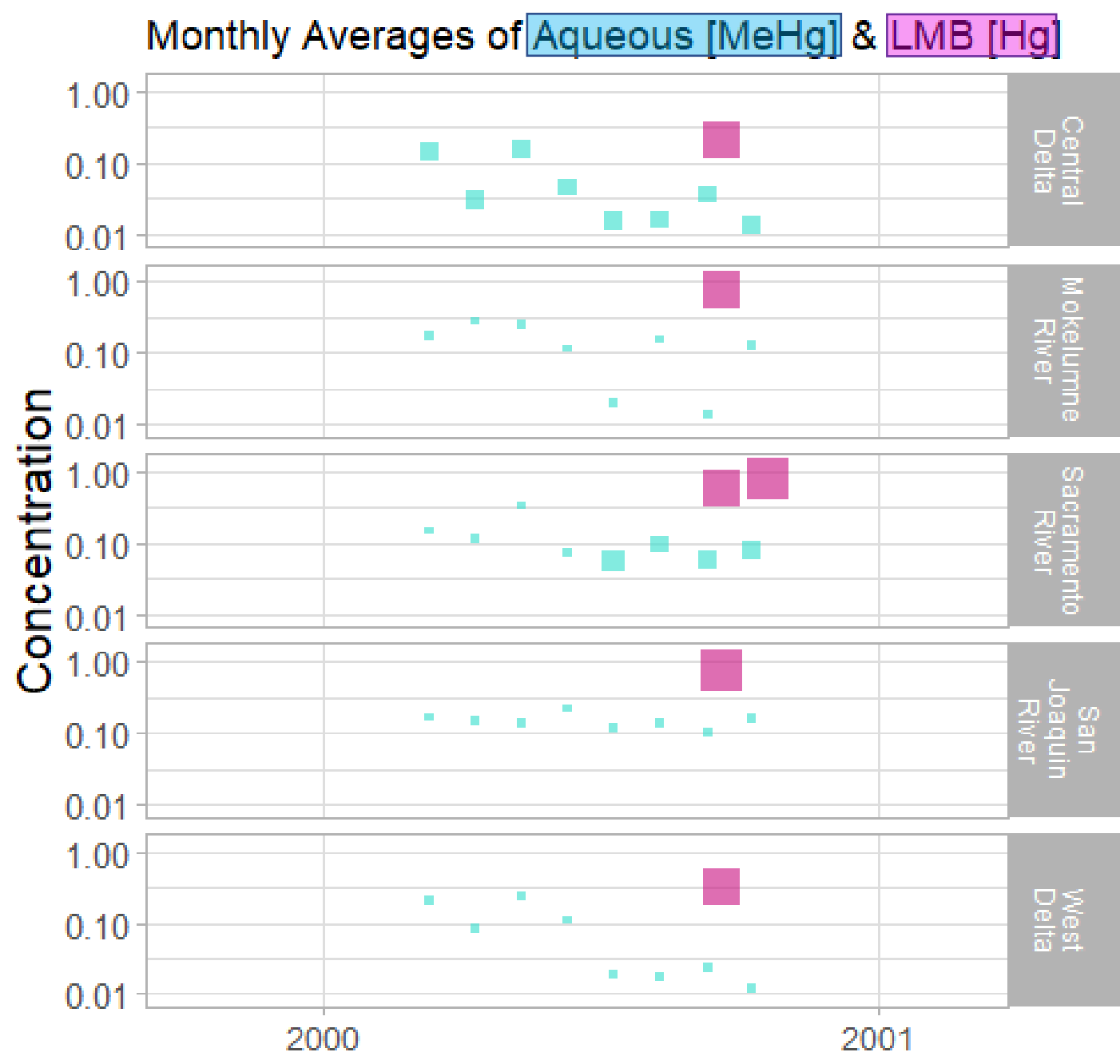
Original Linkage Analysis



LMB Hg Implementation Goal = 0.24 mg/kg

Aqueous MeHg Implementation Goal = 0.06 ng/L

Original Linkage Data



Sample

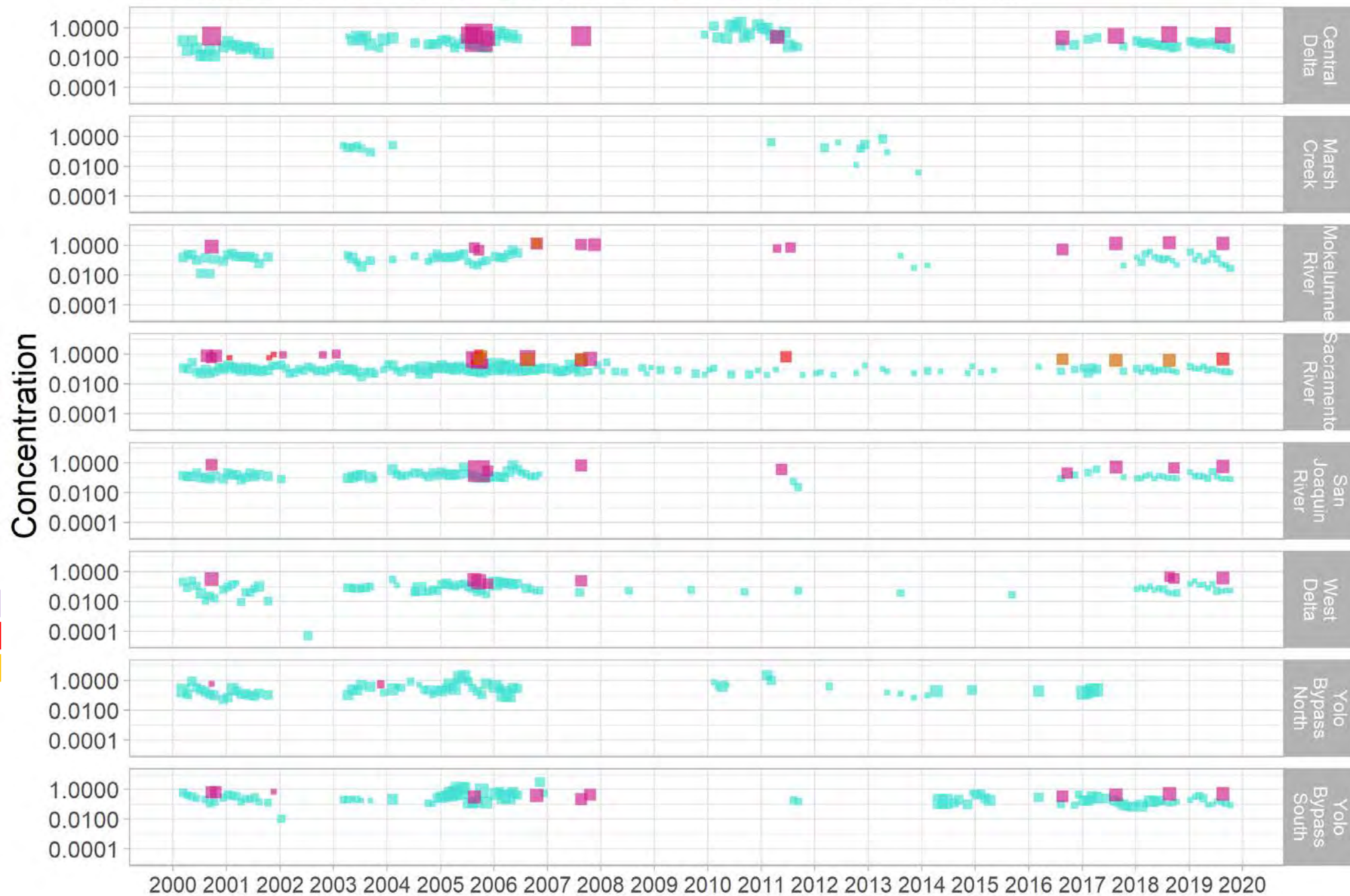
- Aq [MeHg]unf
- Fish [Hg]fillet

Sample Size

- 1
- 5
- 10

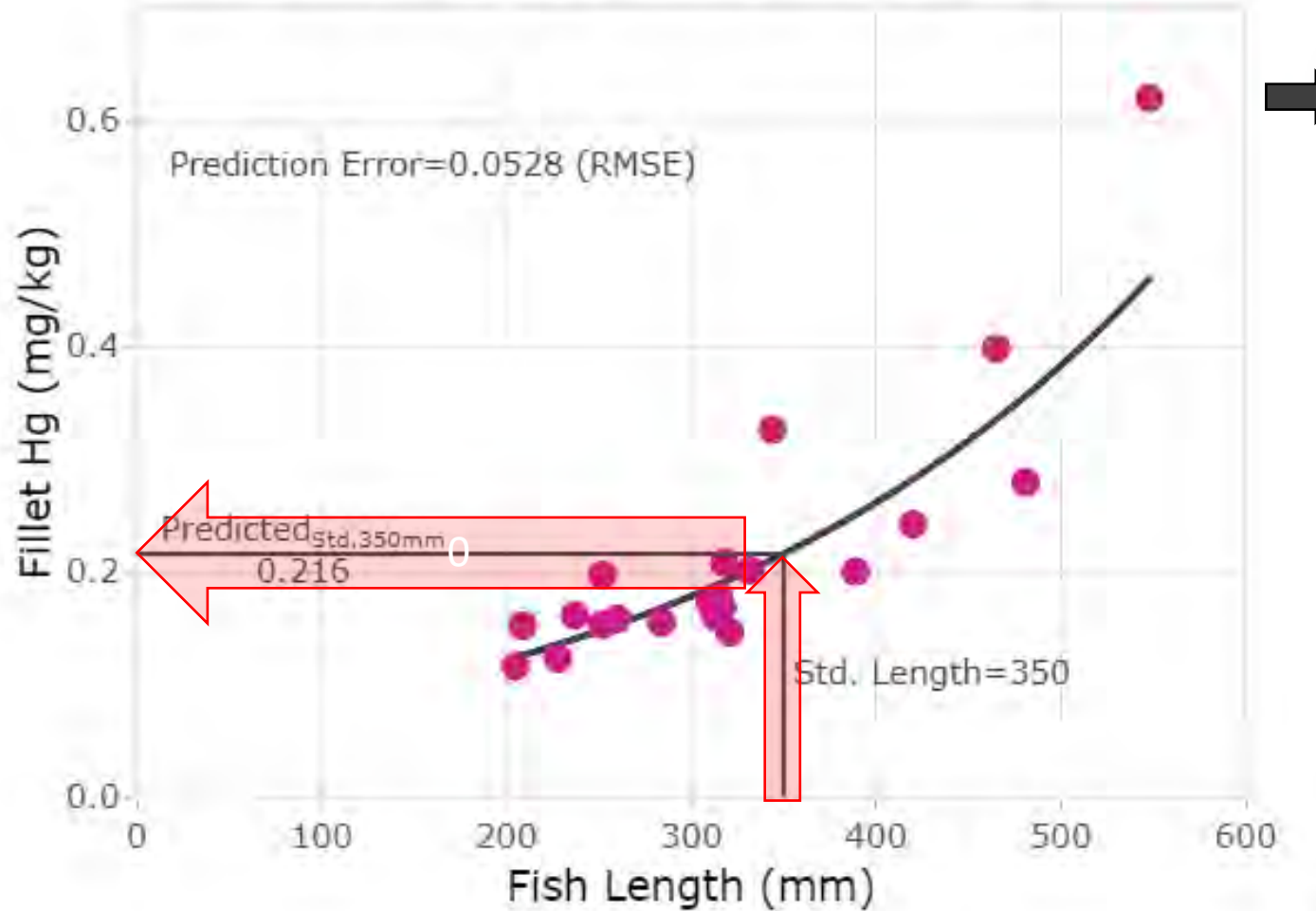
After Data Merger

Monthly Averages of Aqueous [MeHg] & Black Bass [Hg] from Data Merge



LMB Hg Conc. Standardized to 350mm

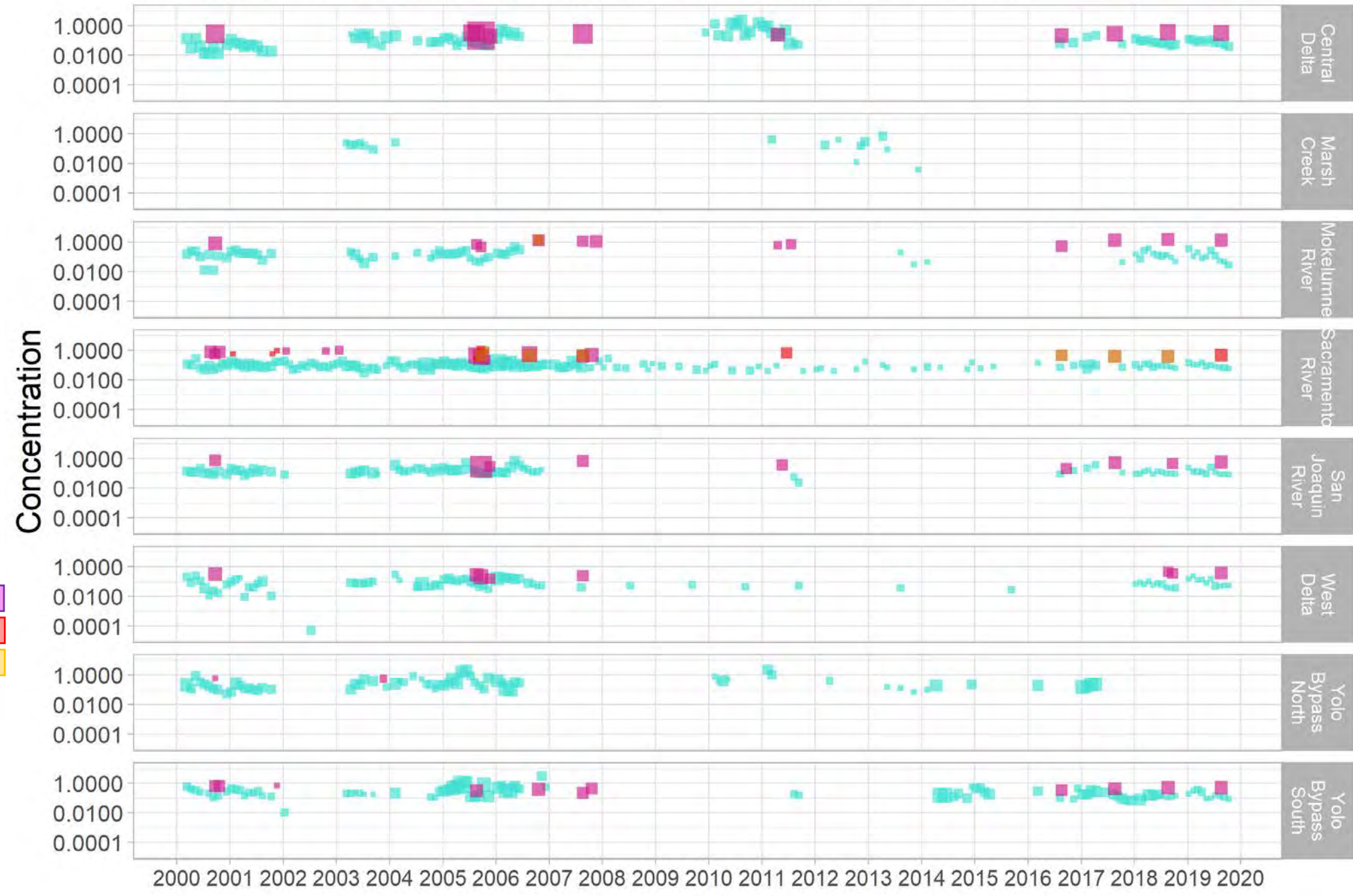
LMB Sampled in Central Delta Aug 2016



Year	Std. 350mm LMB [Hg]	n
2016	0.216	22
2017	0.289	33
2018	0.357	33
2019	0.335	33
Wt. Avg	0.306	121

After Data Merger

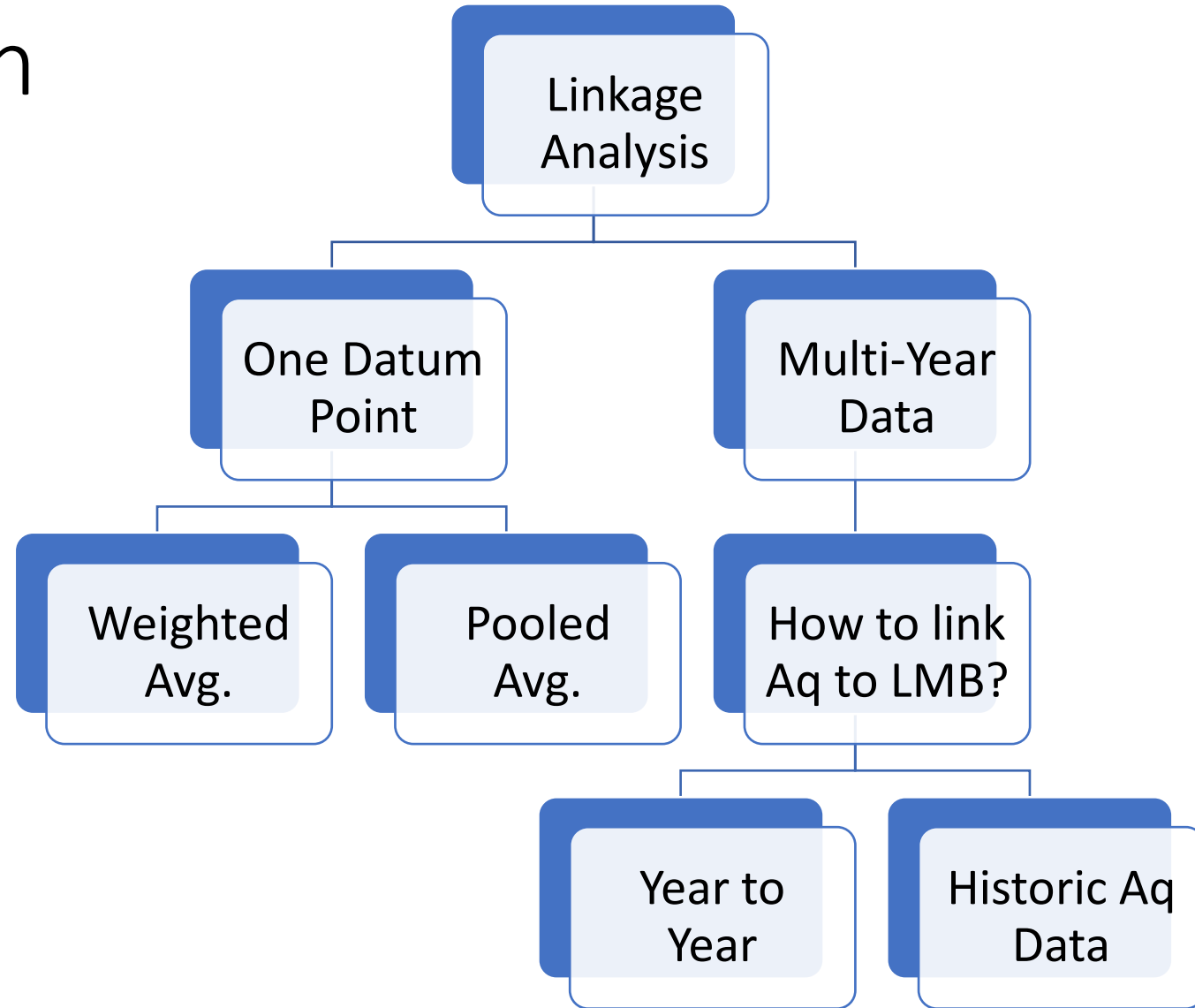
Monthly Averages of Aqueous [MeHg] & Black Bass [Hg] from Data Merge



- Sample**
- Aq [MeHg]unf
 - Largemouth Bass [Hg]fillet
 - Smallmouth Bass [Hg]fillet
 - Spotted Bass [Hg]fillet

- Sample Size**
- 1
 - 10
 - 50
 - 100

Discussion



Flowchart Discussion Questions

One Data Point per Subarea (original linkage) vs Multiple Data Points per Subarea (alternative)

Considering our data set is not in a typical or ideal format (i.e., a measured fish Hg conc. does not have a corresponding aqueous MeHg conc.)...

What's the optimal way to pair aqueous data with fish data?

Should we use data from the original linkage (2000) through 2019 or is there a reason to limit data to other years (e.g., limitations of pairing sparse aqueous data with fish data)?

Are there any other options we should consider?