

APPENDIX C. CONCEPTUAL MODELS

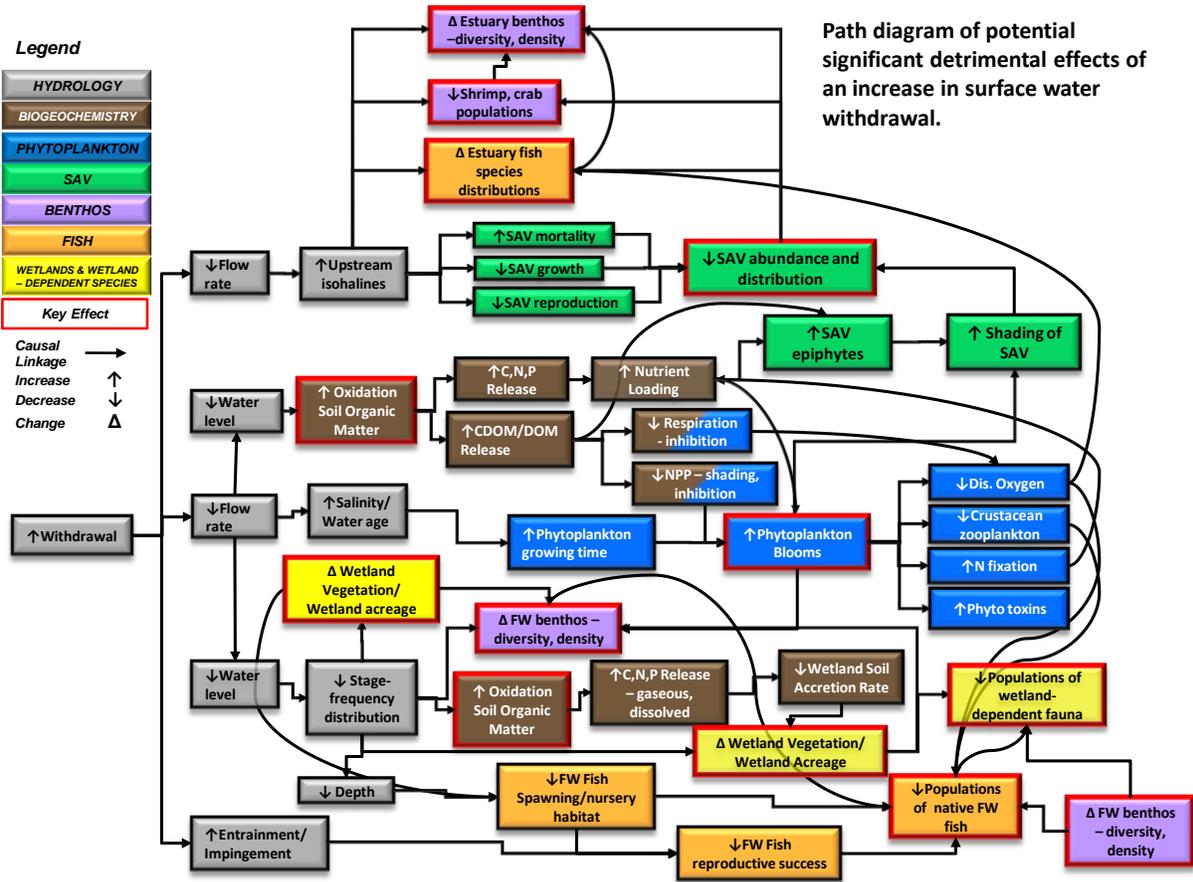


Figure 1. Initial overall conceptual model showing the plausible chain of causation linking hydrologic effects to key environmental attributes. Each step in the diagram represents a hypothesis regarding the potential effects of water withdrawals.

Conceptual model for Biogeochemistry

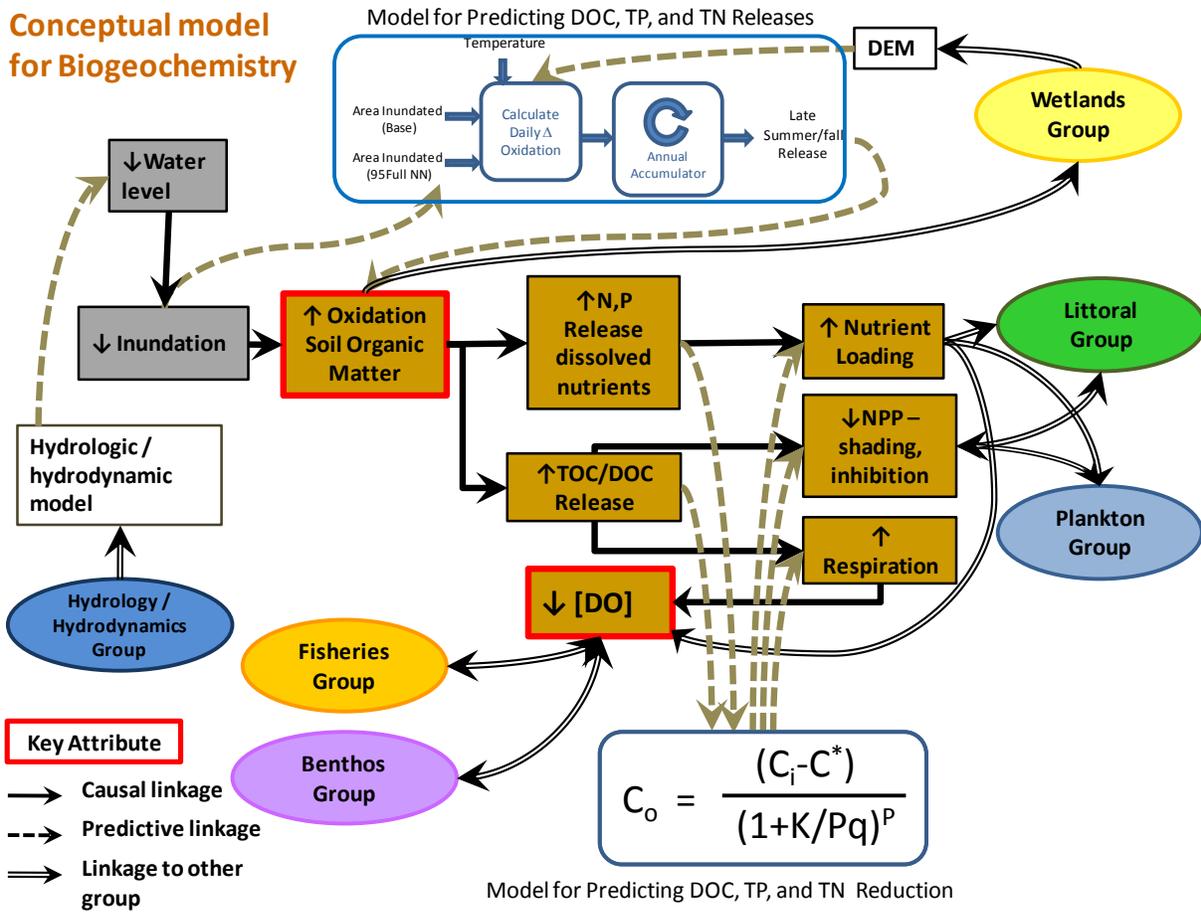


Figure 2. Conceptual model for the Biogeochemistry Workgroup showing hydrologic drivers (gray), biogeochemical responses (ochre), and information-data flows from and to other ecological work groups (various colors, double arrows). See Chapter 7 for details.

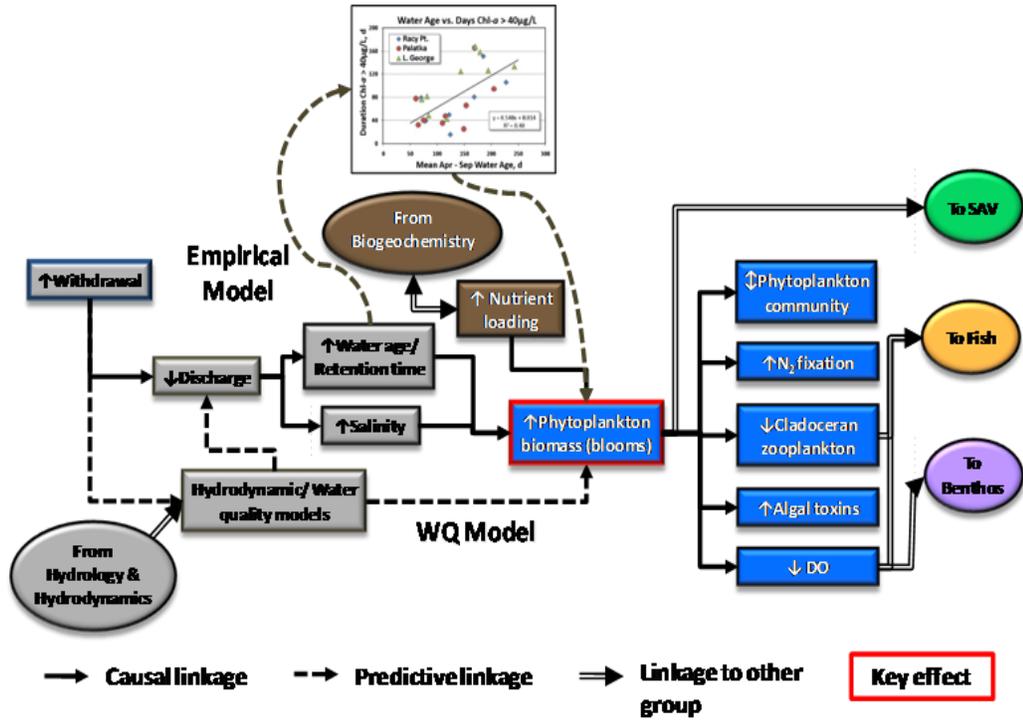


Figure 3. Conceptual model for the Plankton Workgroup showing hydrologic drivers (gray), plankton responses (blue), and information-data flows from and to other ecological work groups (various colors, double arrows). See Chapter 8 for details.

Conceptual Model for SAV

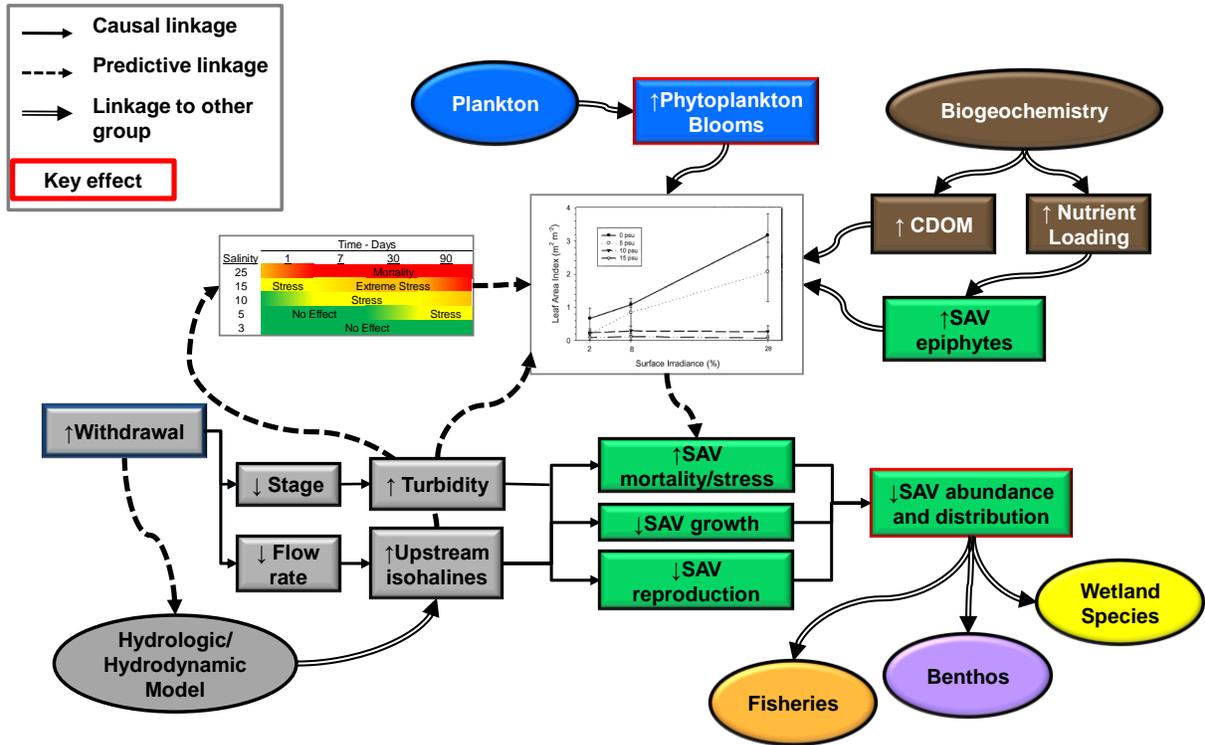


Figure 4. Conceptual model for the SAV (Littoral Zone Workgroup) showing hydrologic drivers (gray), SAV community responses (green), and information-data flows to and from other ecological work groups (various colors, double arrows). See Chapter 9 for details.

Conceptual Model: Effects of Water Withdrawal on Wetland Plant Communities

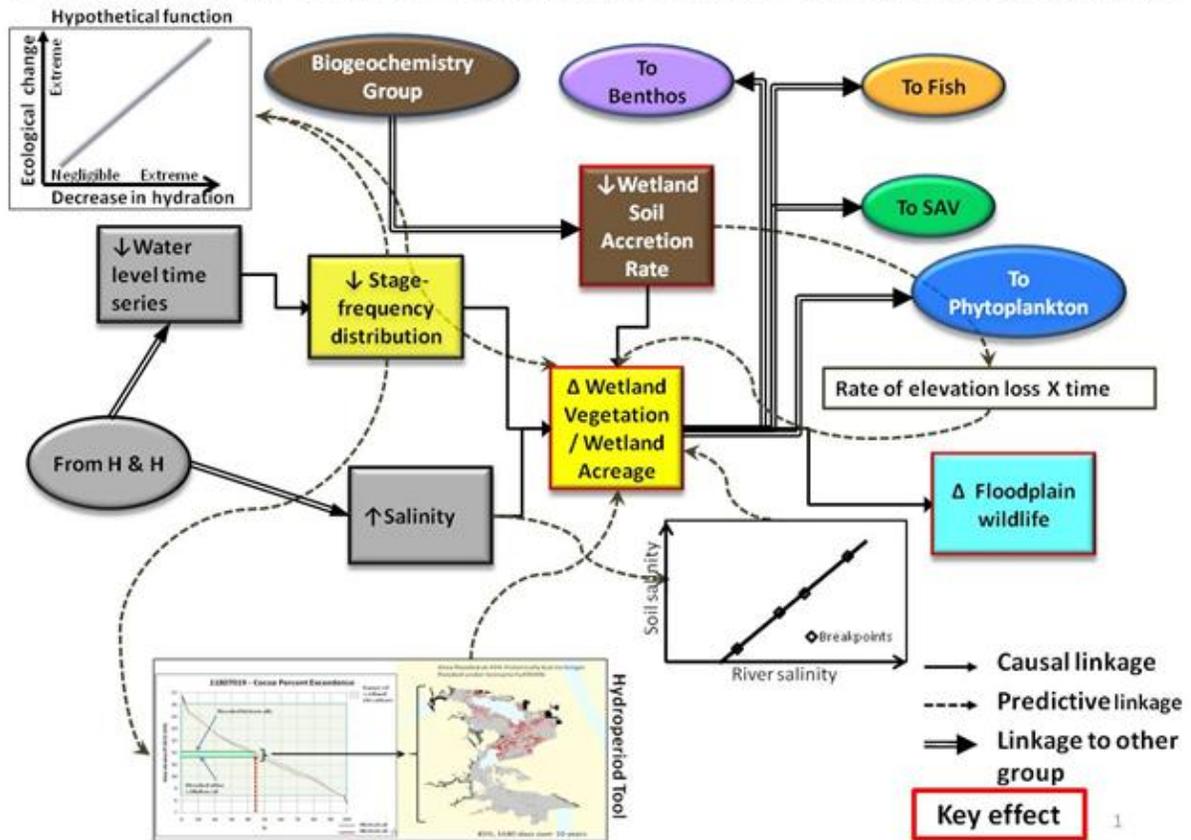


Figure 5. Conceptual model for the Wetland Vegetation Workgroup showing hydrologic drivers (gray), wetland vegetation responses (yellow), and information-data flows from and to other ecological work groups (various colors, double arrows). See Chapter 10 for details.

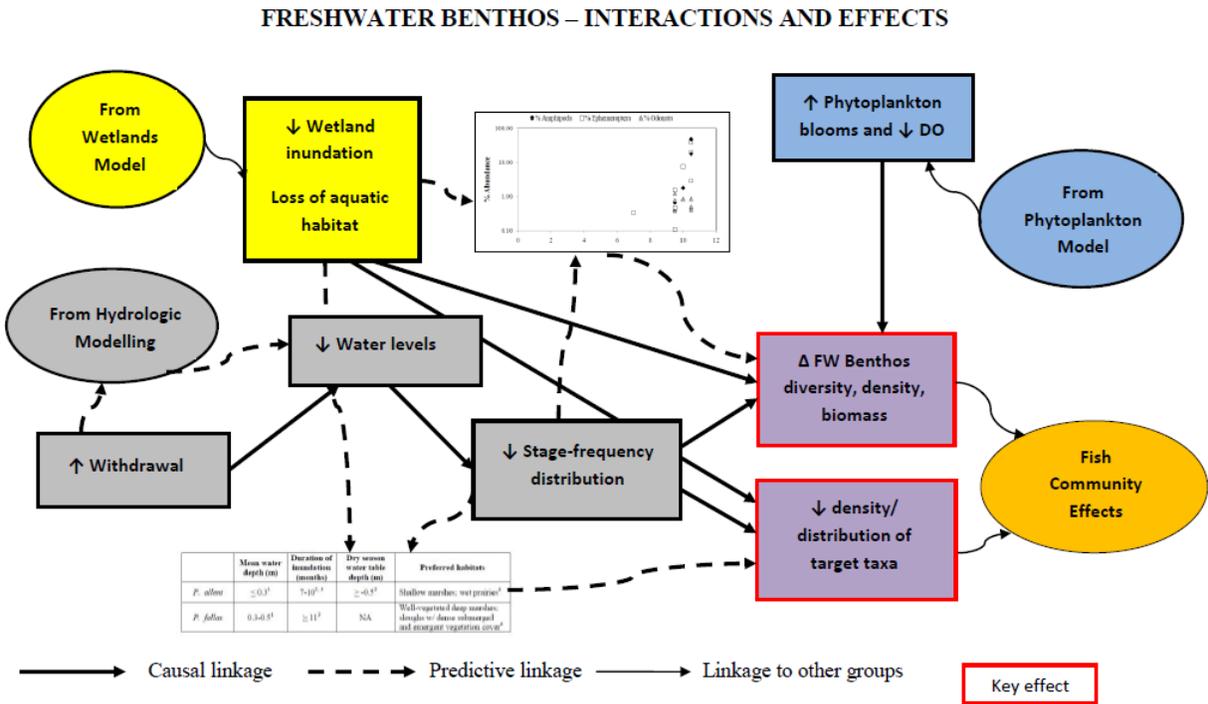


Figure 6. Conceptual model for the Benthos Workgroup showing hydrologic drivers (gray), benthic macroinvertebrate responses (lavender), and information-data flows from and to other ecological work groups (various colors, double arrows). See Chapter 11 for details.

ESTUARINE BENTHOS – INTERACTIONS AND EFFECTS

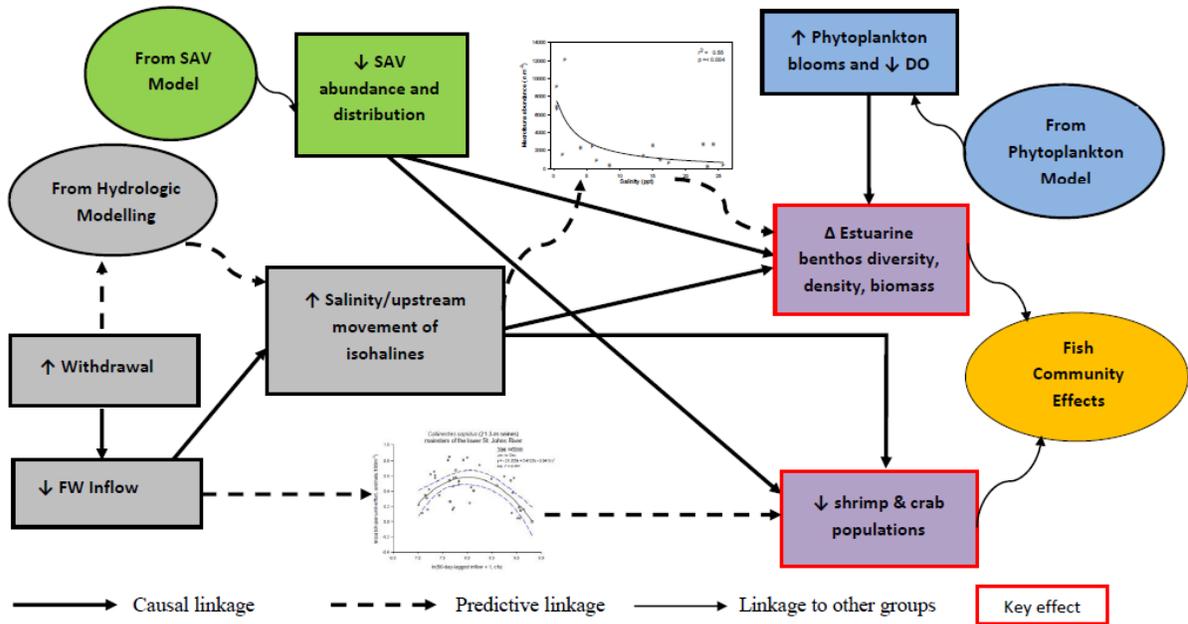


Figure 7. Conceptual model for the Benthos Workgroup showing hydrologic drivers (gray), benthic macroinvertebrate responses (lavender), and information-data flows from and to other ecological work groups (various colors, double arrows). See Chapter 11 for details.

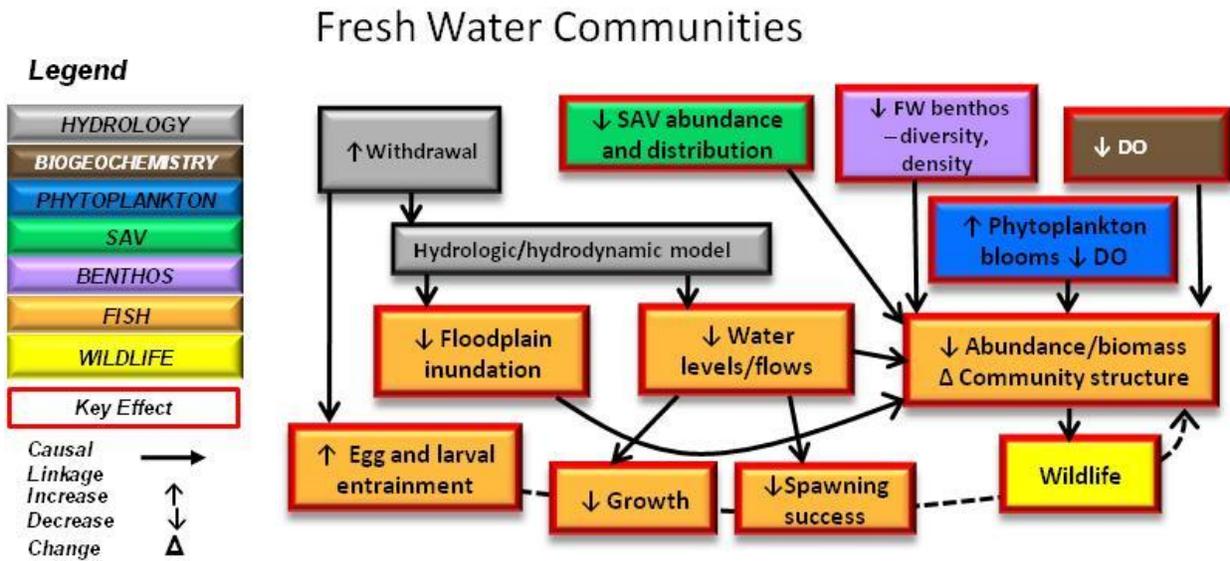


Figure 8. Conceptual model of the Fish Workgroup for freshwater fish showing hydrologic drivers (gray), fish responses (orange), and information-data flows from and to other ecological work groups (various colors, double arrows). See Chapter 12 for details.

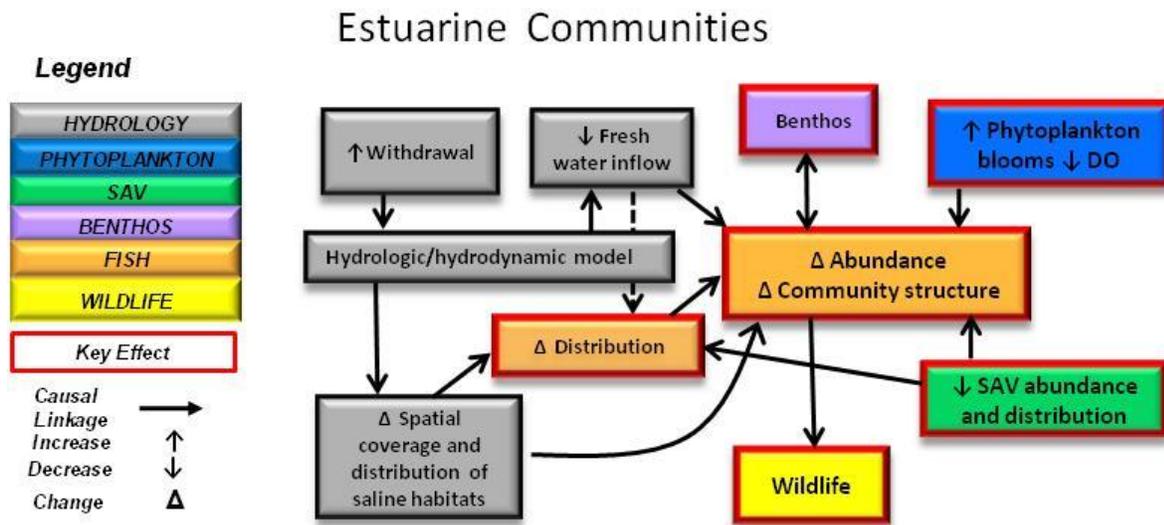


Figure 9. Conceptual model for the Fish Workgroup showing hydrologic drivers (gray), fish responses (orange), and information-data flows from and to other ecological work groups (various colors, double arrows). See Chapter 12 for details.

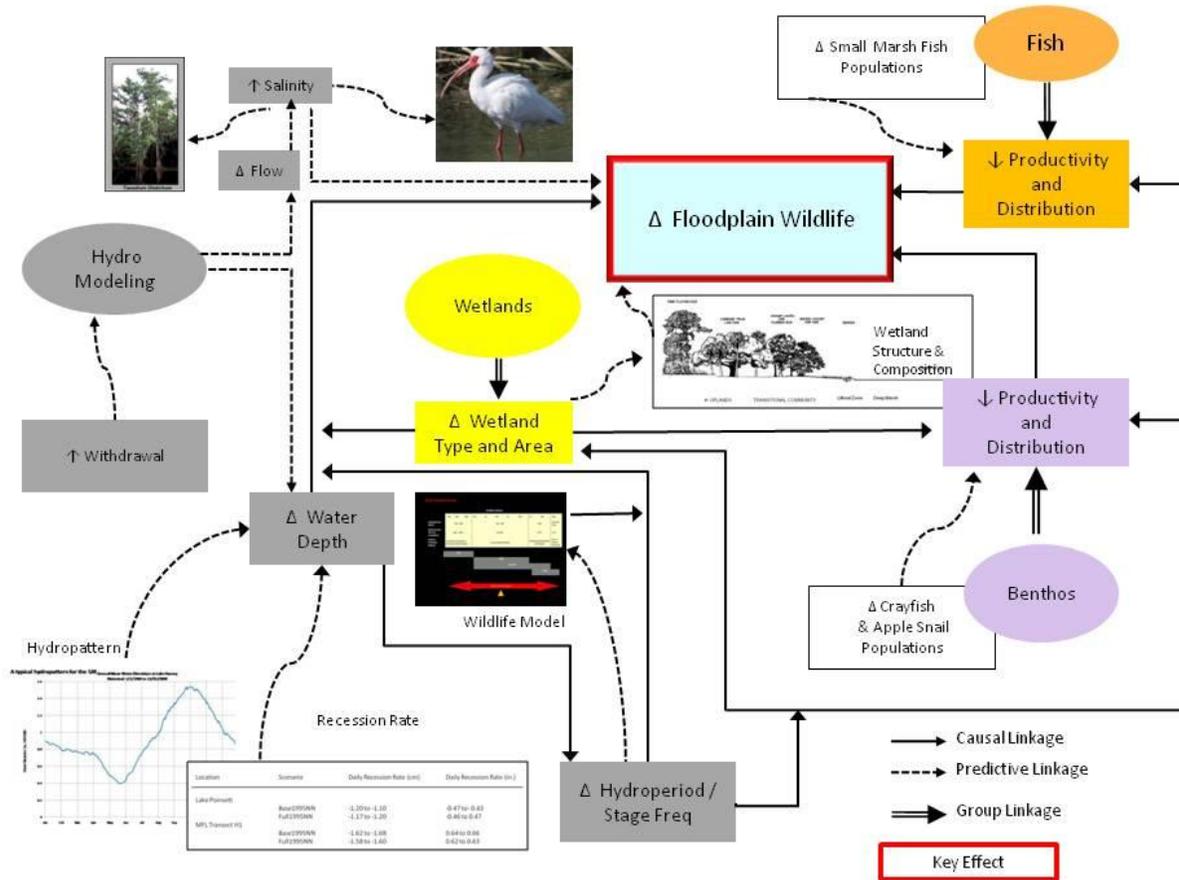


Figure 10. Conceptual model for the Floodplain Wildlife Workgroup showing hydrologic drivers (gray), wildlife responses (light blue), and information-data flows from and to other ecological work groups (various colors, double arrows). See Chapter 13 for details.