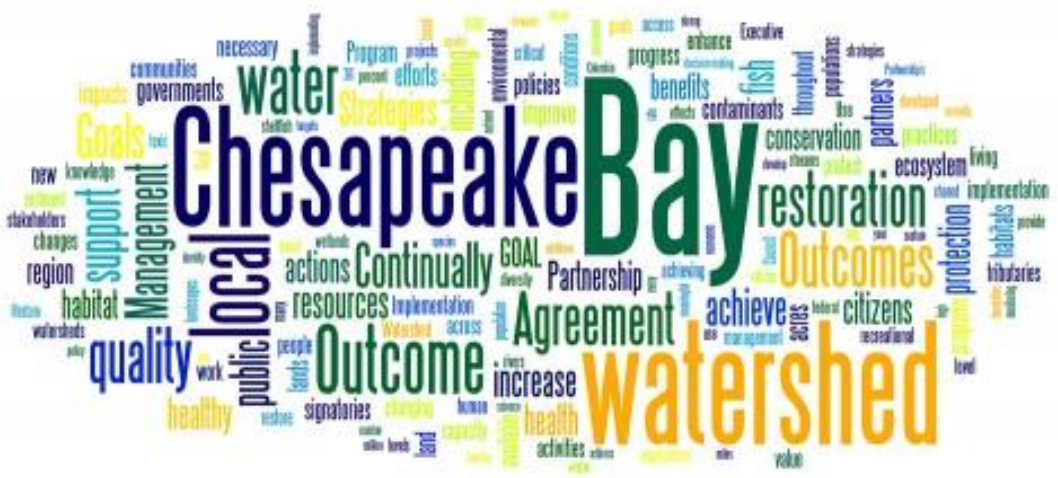
Research Outcome



Revisions to the Management Strategy and Work Plan

Toxic Contaminant Workgroup,
August 2018

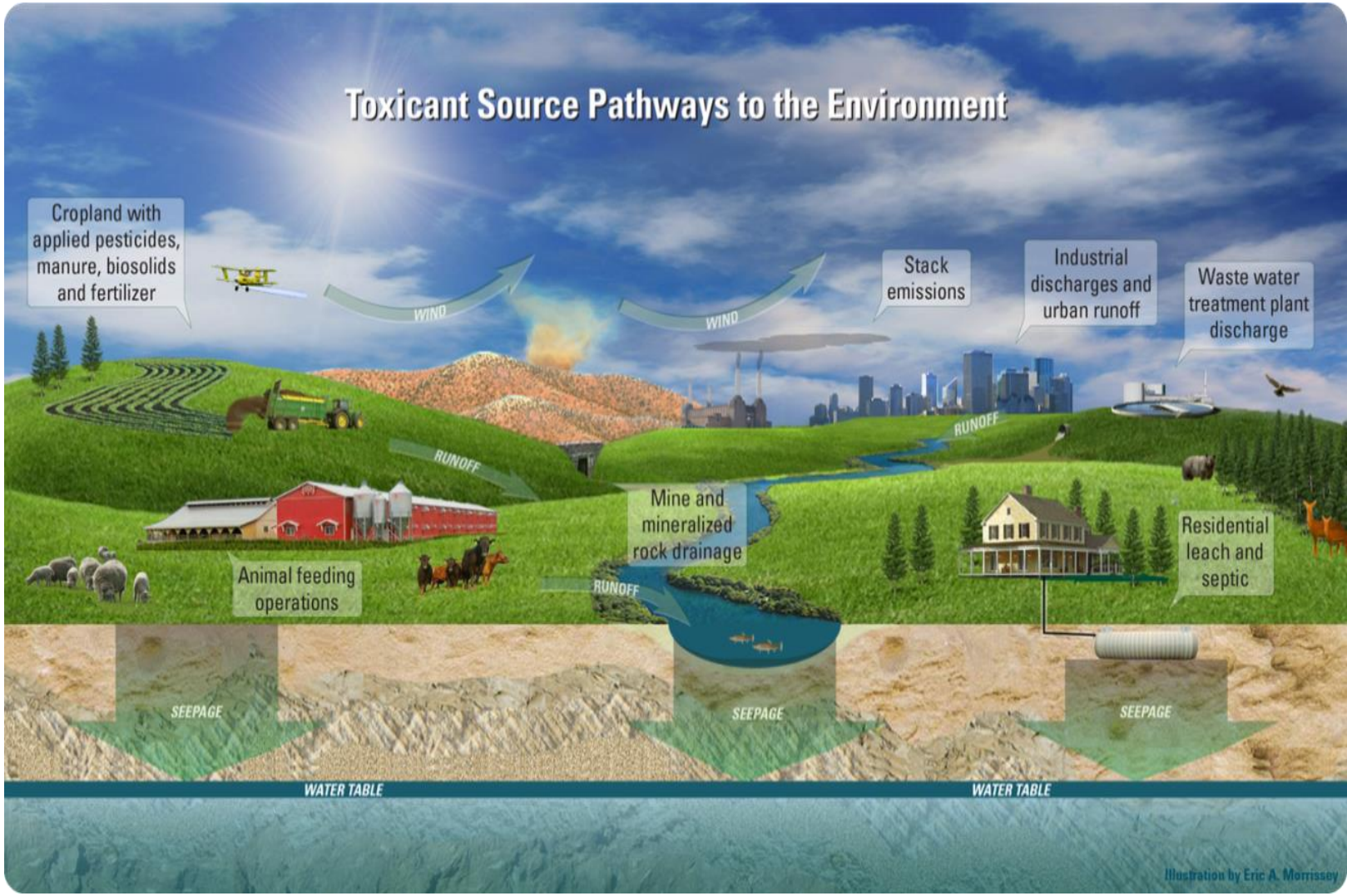
Goal: *Toxic Contaminants Goal*

Outcome:

Continually increase our understanding of the impacts and mitigation options for toxic contaminants. Develop a research agenda and further characterize the occurrence, concentrations, sources and effects of mercury, PCBs and other contaminants of emerging and widespread concern. In addition, identify which best management practices might provide multiple benefits of reducing nutrient and sediment pollution as well as toxic contaminants in waterways.

Major Revisions

- Modified two of 5 issues
- Updated baseline conditions
- Revised factors
- Each Issue: REVIEW NEEDED
  - Current efforts
  - Research gaps
  - Approach and actions



Organizing Issues

- Fish and shellfish safer for human consumption
- Contaminants degrading the health, and contributing to mortality, of fish and wildlife
- Sources, Occurrence, and transport of contaminants in different landscape settings;
- Identify and prioritize options for mitigation to inform policy and prevention strategies
- Issues of emerging concern

Factor for each Issue

- Different assumptions about fish consumption
- Multiple factors affecting health and mortality of fish and wildlife
- Lack of data on occurrence and trends
- Limited information on practices to reduce contaminants and relation to nutrients and sediment
- Limited knowledge and implications of emerging issues
- Synthesis and implications

Fish and shellfish safer for human consumption;

What we learned

- Consolidate PCB science into P&P strateg
- Address mercury

Revisions:

- PCBs text moved on gaps and science to P&P
- Mercury:
  - Added info on baseline conditions
  - Need to better reflect current efforts
  - Proposed data inventory; improved status information;

Contaminants degrading health and mortality of fish and wildlife;

What we learned

- Multiple factors affecting fish health, including disease
- Wildlife synthesis
- More synthesis and implications

Revisions

- Updated fish health baseline and efforts;
- Gaps for fisheries: reproduction; tumors; disease
- Review current efforts
- Review approaches and actions

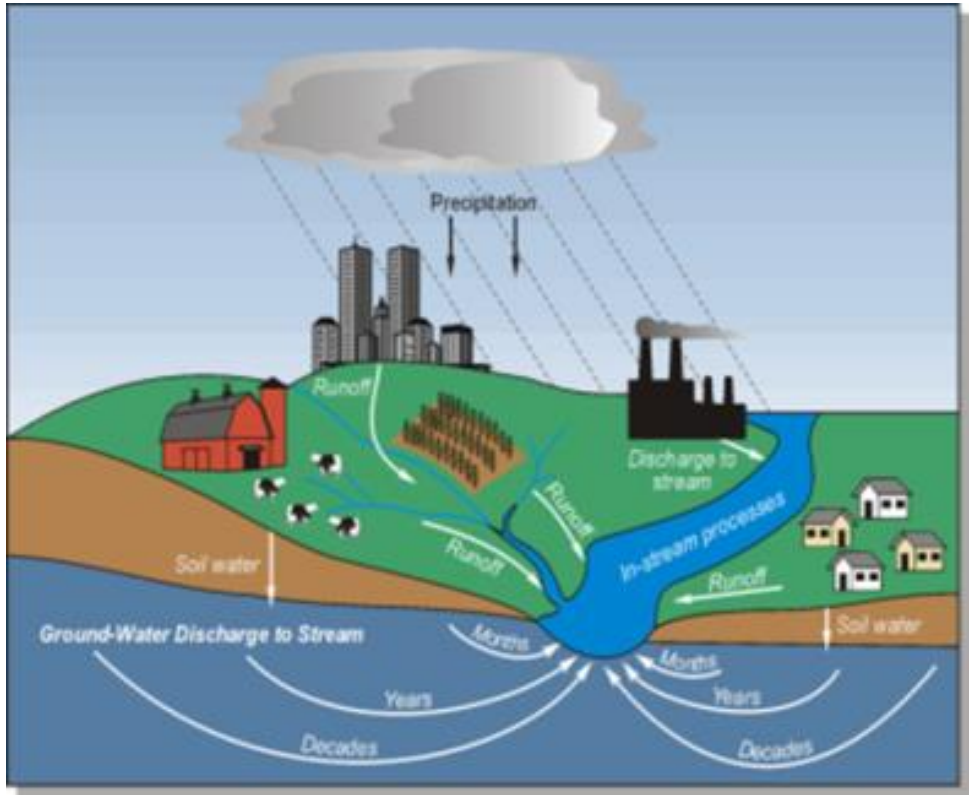
Sources, Occurrence, and Transport

What we learned

- EDCs in ag settings
- More use of state/academic activities

Revisions:

- Co-occurrence of contaminants in different settings
  - Ag, urban, WWTPs
  - Sources, pathways, indicators
- Relation with nutrient and sediments
- Current efforts and approaches/actions



Identify and prioritize mitigation options to inform policy and prevention strategies

What we learned

- Difficultly for relative risk; Interest in co-benefits
- Synthesis and implications
- Interaction with WQ GIT and teams

Revisions

- Focus on management implications
- More emphasis on mitigation studies
- Effectiveness of BMPs
- Use of CBP tools (CAST) and connect with source teams
- Approaches and actions

Issues of Emerging Concern

What we learned

- Microplastics
- UOGs
- Pollinators

Revisions

- Algal toxins
- Flame retardants
- Road salts

Priorities?