

South River Science Team

Where We've Been, and
Where We're Going.....

April 23, 2010



Science Team Charter

Feb 14, 2001

- Composed of DEQ, VDH, DGIF, Citizen's Groups, Academia
- Mission - serve as a focal point for technical and scientific issues in support of steering committee
- Objectives - review data, trends, gaps; fate and transport issues, remediation, communications, ID and prioritize additional study areas; exposure issues; refine and develop conceptual models, develop plan to fill data gaps; explore watershed management options; fishery management options; monitor developments at other Hg sites; information transfer - expert lectures.



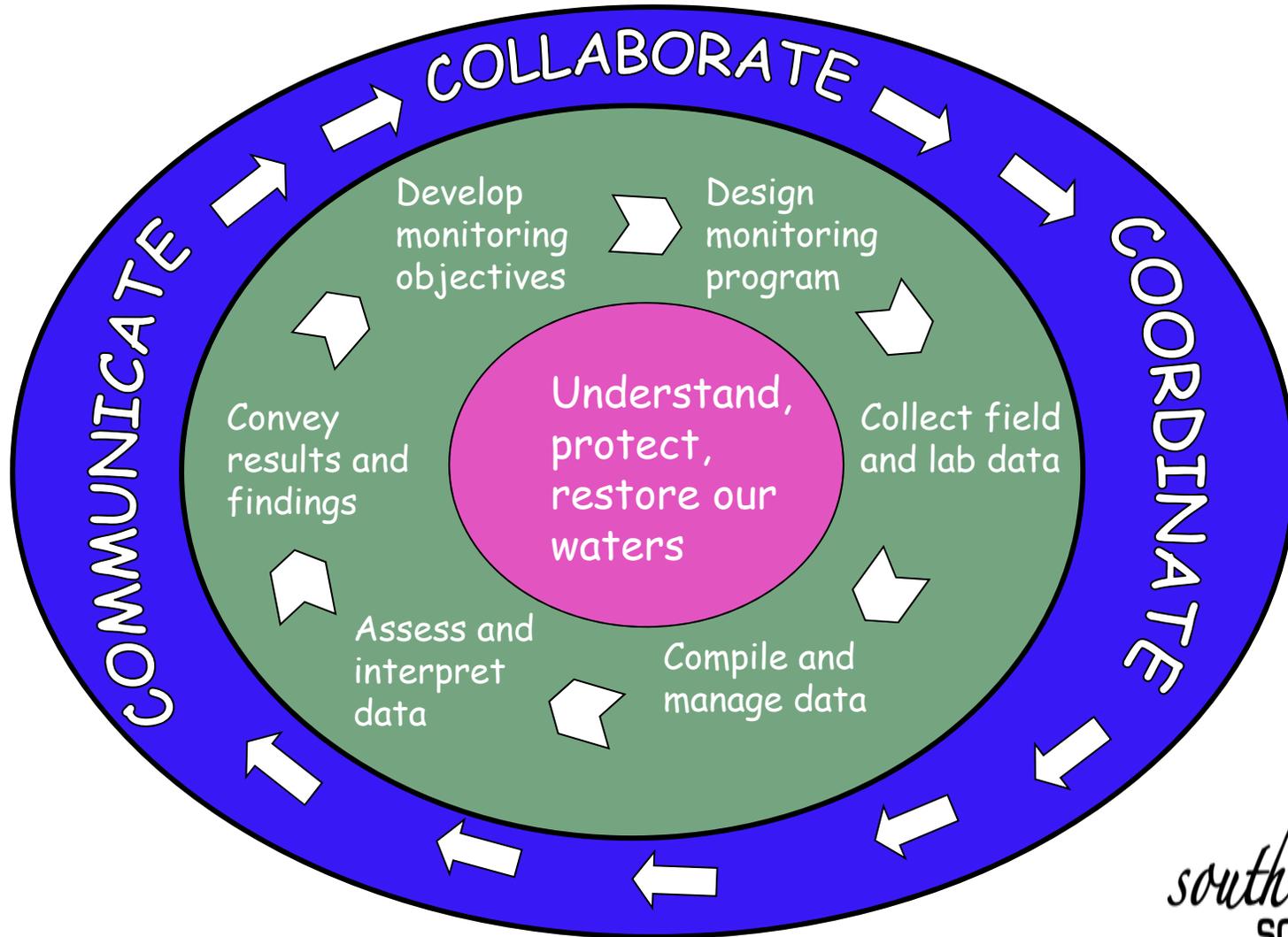
Science Team Charter

Revised October 6, 2009



- Membership - Government, Academia, Environmental Groups, and DuPont
- Mission - serve as a focal point for collecting and interpreting information to help mitigate legacy mercury contamination in the South River watershed.
- Objectives - collect, analyze and interpret diverse environmental datasets; conduct outreach at the local and state levels; communicate findings to scientific and lay audiences; explore remedial and restoration options.

Collaborative Approach



Timeline

	Started	Ending
RCRA Corrective Action	1998	?
SRST	2000	?
TMDL Study	2002	2008
Natural Resource Damage Assessment	2004	2012
NRDC Ecological Study	2005	2012

Data Collection in Progress

SRST - why Hg in fish remains elevated and what might be done to mitigate it	Geomorph, sediment budget, modeling, deer samples, Hg river flux & mass balance, Bank stabilization monitoring
NRDA - injury assessment and service loss; restoration options	Wren field study, avian feeding study, turtles, mink/otter survey, food web modeling
NRDC Ecological Study - why Hg in fish remains elevated	Fish community and diets, insect mesocosms, sediment Triad, statistical analyses
RCRA Corrective Action	Investigation report review, interim remedial measures, Corrective Measures, groundwater and outfall monitoring

Some Watershed Management Goals

- Reduce or eliminate fish consumption advisory
- Reduce or eliminate Hg loading to wildlife
- Identify and eliminate sources of Hg to South River and adjacent floodplain
- Minimize human exposures
- Restore human uses and ecological resources
- Maintain water supply for irrigation and agriculture
- Identify and prioritize restoration options.
- Enhance and improve cold water fishery
- Improve overall water quality



Some Things We've Learned

- Teamwork and collaboration are important
- Mercury is complicated
- We have an aquatic and a terrestrial problem
- The public cares about and values the SR
- For making decisions, some studies have been useful, some have not
- Testing remedial options is important
- Must have interested and dedicated participants



Overarching Goals

- Understand why mercury in fish has remained the same or increased, and what may be done about it.
- Estimate injuries and service losses to natural resources and determine how to offset them with remediation and restoration.
- Address Hg issues on the former facility.