The St. Clair – Detroit River System Initiative Science and Monitoring Strategy

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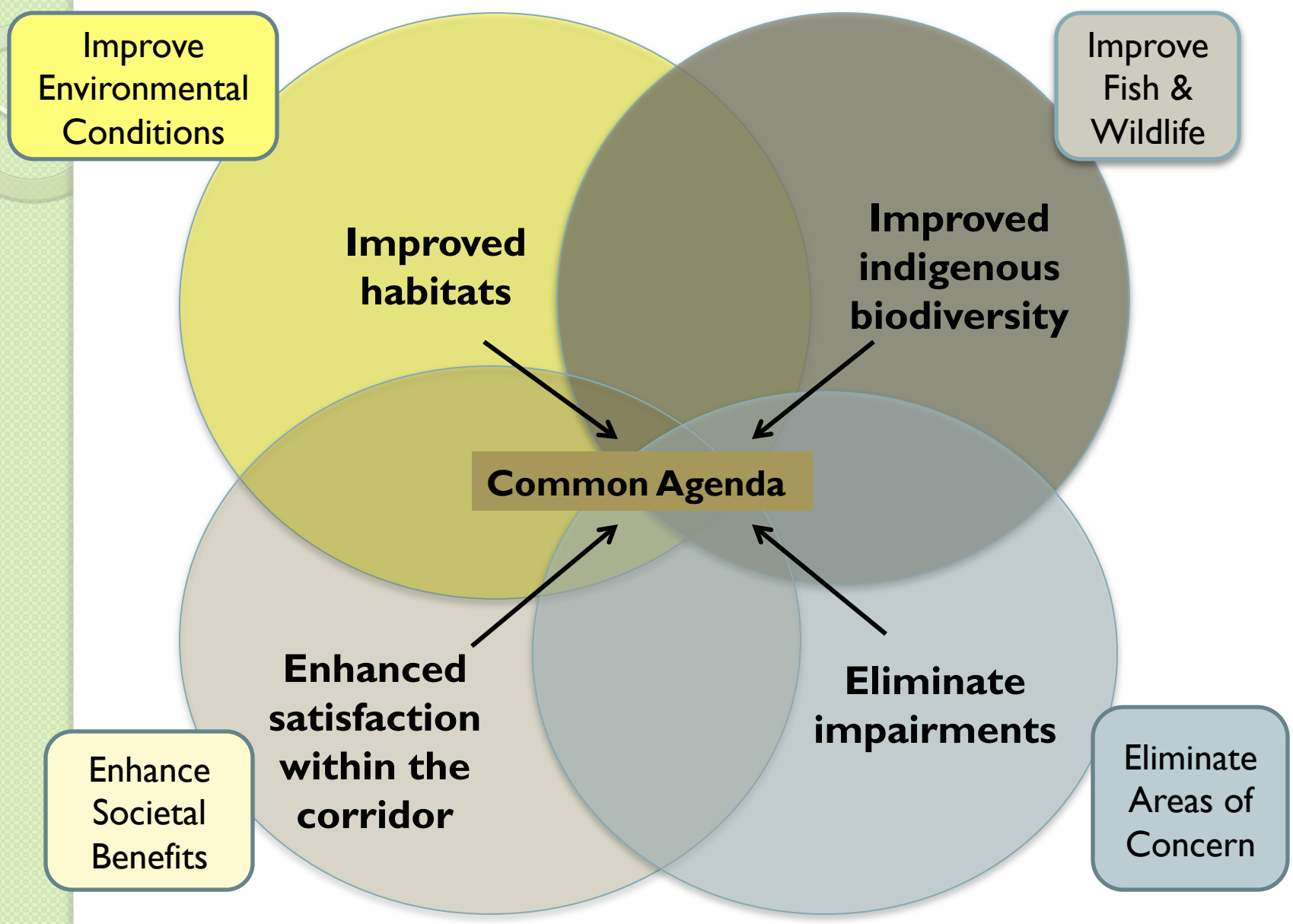
A Collective Impact Initiative

*Components**	*How*	*Who*
Common Agenda	commitment to shared vision and approach	Signatories
Shared Measurement System	common evaluation of success	USGS CAP work
Continuous Communication	frequent, informed interactions	Committees
Mutually Reinforcing Activities	coordination of signatory efforts thru mutually reinforcing plan of actions	Steering Committee
Backbone Support Organizations	facilitation	USGS, USEPA, MISG, GLFC, EC , TNC… ?

*from Kania, J. and M. Kramer, 2011. Collective Impact. Stanford Social Innovation Review.

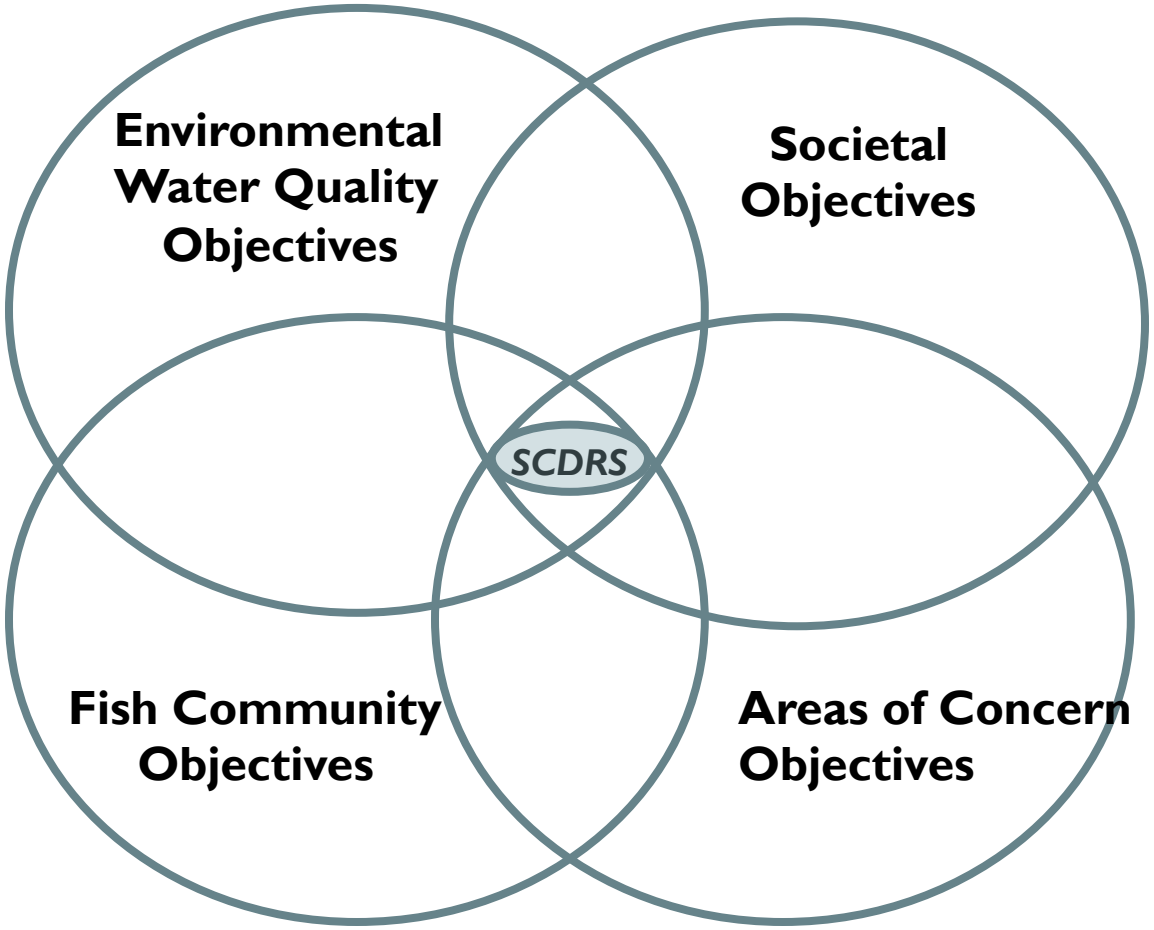
Common Agenda : an integration of strategies

(example)



The Shared Vision Statement

The St. Clair-Detroit River System is a thriving ecosystem managed with science-based principles and broad social support, providing desired environmental services for the region and the Great Lakes.

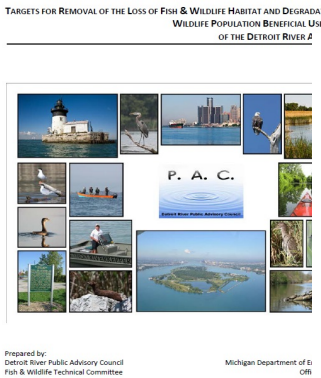


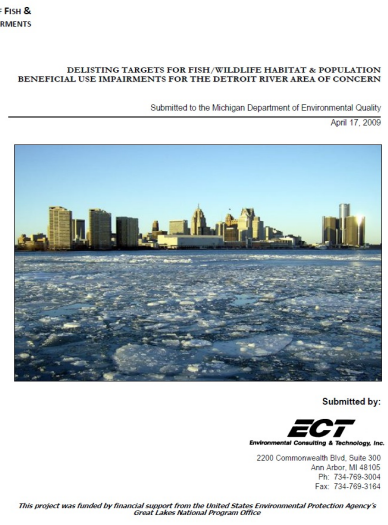
The Right Context for Collaboration

- Regional, cross-agency initiatives
- Proximity and relationships
- Early successes and challenges
- Recent funding - Great Lakes Restoration Initiative

Integration with Larger Plans

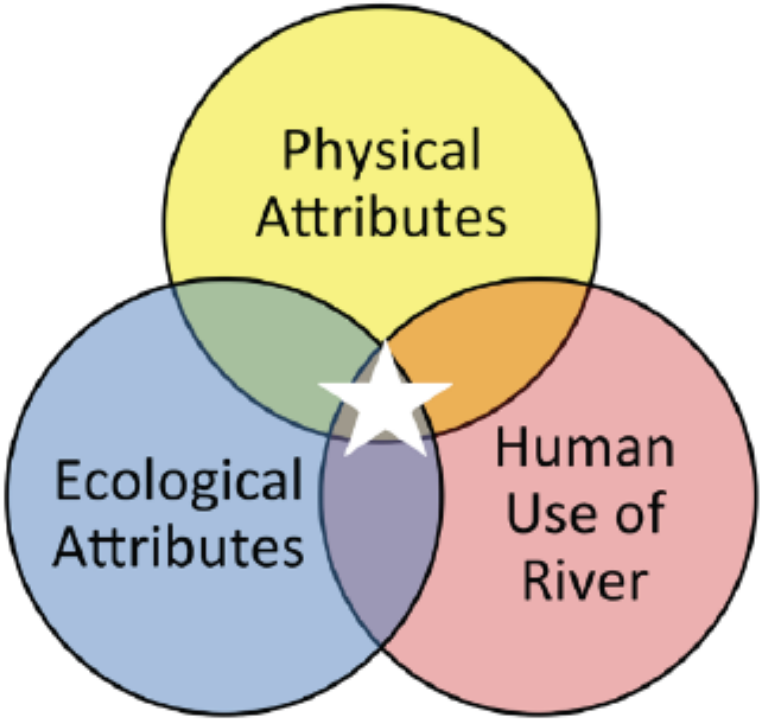
- St. Clair and Detroit River Area of Concern plans
- Great Lakes Fishery Commission Strategic Plans
- Lake Erie Biodiversity Conservation Strategy
- Lake Erie Environmental Objectives
- Lake Erie LAMP

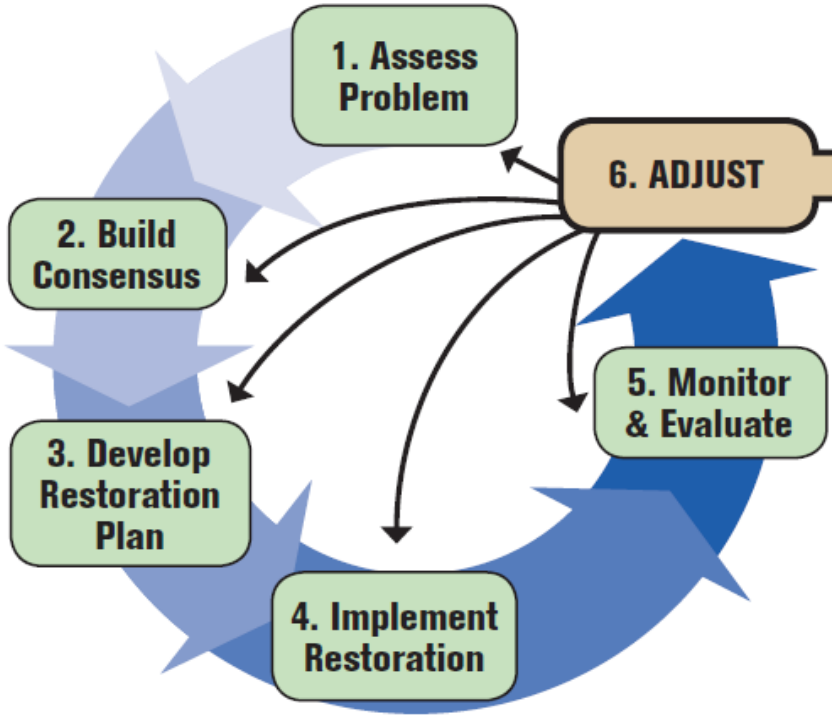




Science and Monitoring Committee

<u>Purpose</u>: to help the Steering Committee coordinate partner efforts toward achieving a common agenda over the next decade.





Science and Monitoring Committee

Themes

- ✓ **sources of nutrients, sediments, and pollutants**
- ✓ **protection, enhancement, and restoration of physical habitat**
- ✓ **connectivity of habitat features to fauna and society**
- ✓ **fish population status, production, and behavior**
- ✓ **sea lamprey control**
- ✓ **prevention of new AIS threats**
- ✓ **human behavior and satisfaction**

Development of Priority Objectives

- Working groups developed a list of 20 initial objectives
- 77 participants voted/ranked the 20 objectives
- Steering Committee chose nine key priority objectives

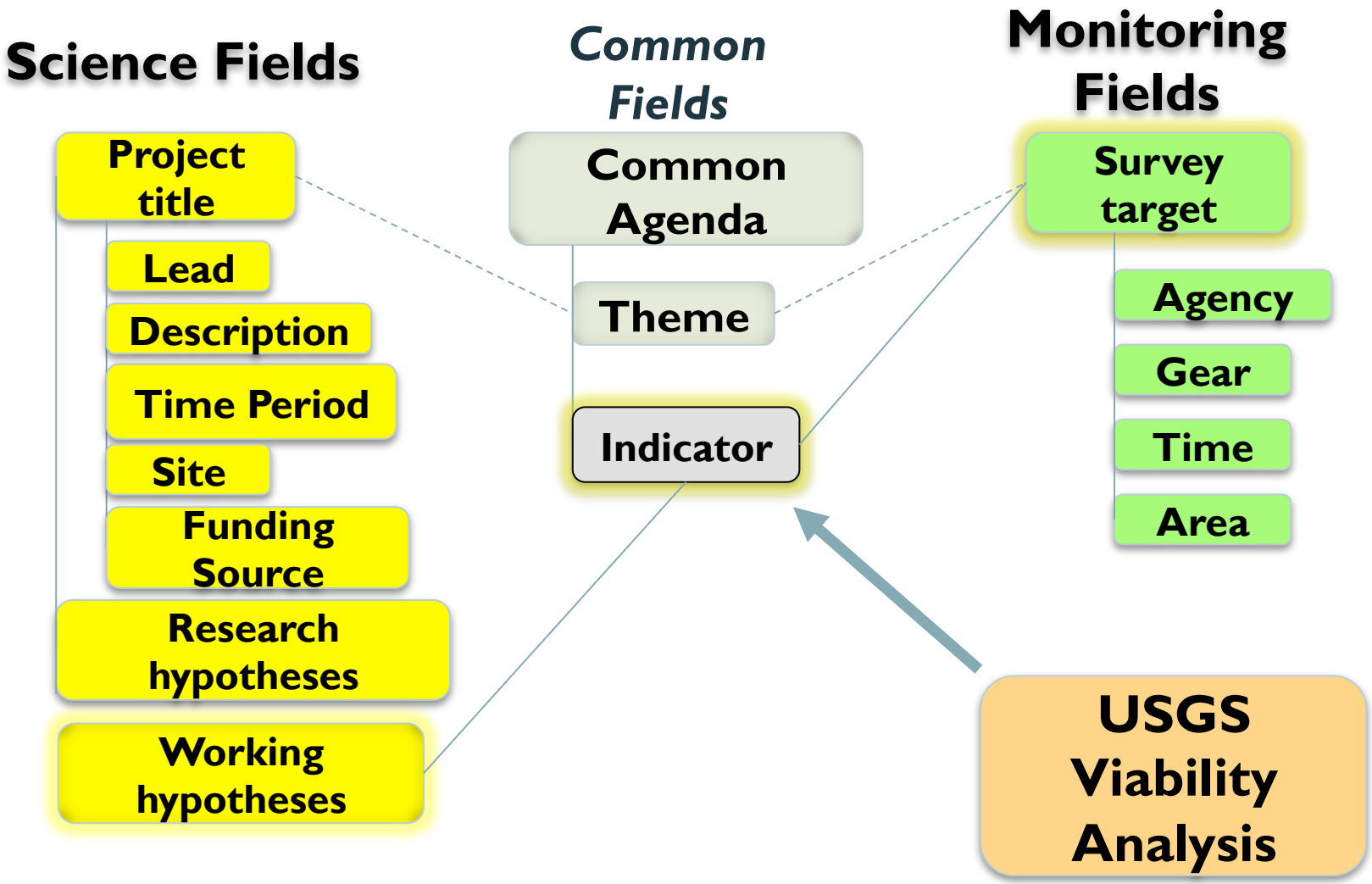
10-Year Priority Objectives

1. Complete habitat improvements projects to remove loss of fish and wildlife habitat BUI.
2. Reduce loading from regulated and unregulated sources of TP/DRP.
3. Identify contaminants of concern, determine sources and develop load reduction strategies.
4. Increase riparian complexity/connectivity through increased softened shorelines and native riparian vegetation.
5. Increase continuous area of functional wetlands and their connectivity to the SCDRS.
6. Increase river spawning habitat.
7. Identify and protect critical habitat areas for rare species, including river mouth habitats & connectivity within tributaries.
8. Develop surveillance monitoring for AIS based on habitat requirements and availability.
9. Implement preventive strategies through information / education programs and management of potential sources and pathways (AIS).

Previous Workshops & Accomplishments

- **2013-2015** Viability Analysis (DeBruyne et al.)
  - 2008 and newer data sources
- **30 September 2014** Monitoring committee
  - Developed inventory of monitoring programs
- **13 November 2014** Science Committee
  - Developed list of science objectives
- **4 February 2015** SCDRS Annual meeting
  - Consensus on list of objectives & indicators
- **15 September 2015** Science and Monitoring Committee
  - Development of indicators
- **2016 - 2017** Develop and populate DataBase
  - Fill in information about monitoring programs

Science and Monitoring Strategy Database



Potential Application of the Science and Monitoring Database for SCDRSI Coordination

Actions Needed (Objectives)	Expected Outcomes by 2023	Key Uncertainties	Indicators	Supporting Hypotheses	Monitoring Programs

- ✓*What monitoring surveys are needed for key indicators?*
- ✓*What is status of key indicators?*
- ✓*What research is needed to address key knowledge gaps?*
- ✓*How are projects distributed across common agenda priorities?*
- ✓*Who is doing what?*
- ✓*How is a project linked to the common agenda and themes?*
- ✓*How does a project connect to external initiatives?*

SCDRSI Coordination: Process

2017 Annual Meeting

- March 2 @ Weber's Inn, Ann Arbor
- http://www.miseagrant.umich.edu/workshops/registration/event.php?id=74
- Priority Objectives and associated Indicators related to Fisheries, Habitat, AIS, AOCs, Contaminants of Emerging Concern, and Nutrients