# Getting to Know Integrated Assessment









## What is Integrated Assessment?

#### An Assessment...

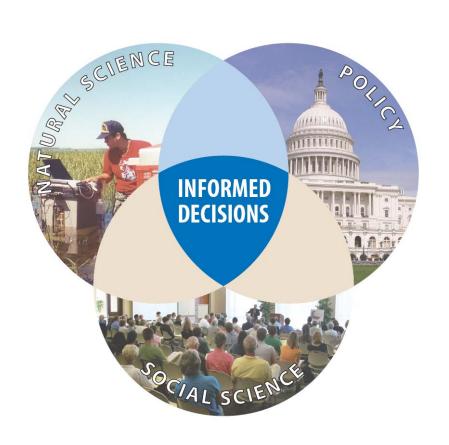
Or a review and analysis of research and data related to a specific issue.

#### That Integrates...

- Policy or management context
- Stakeholder perspectives
- Several disciplines
- An analysis of causes and possible solutions

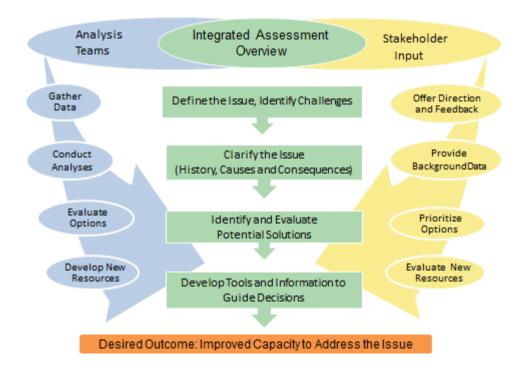
#### In order to....

- Build consensus
- Inform decisions



### What does the process look like?

- Four core elements (green boxes in graphic)
- Roles for technical specialists and stakeholders (blue & yellow arrows)
- Strong project coordination is essential
- Next few slides illustrate the process using an example project



**Analysis** Integrated Assessment Stakeholder Overview Teams Input Gather Offer Direction Define the Issue, Identify Challenges Data and Feedback Conduct Clarify the Issue **Background Data Analyses** (History, Causes and Consequences) **Evaluate Prioritize** Identify and Evaluate **Options Options Potential Solutions Develop New Evaluate New** Resources Resources Develop Tools and Information to **Guide Decisions** 

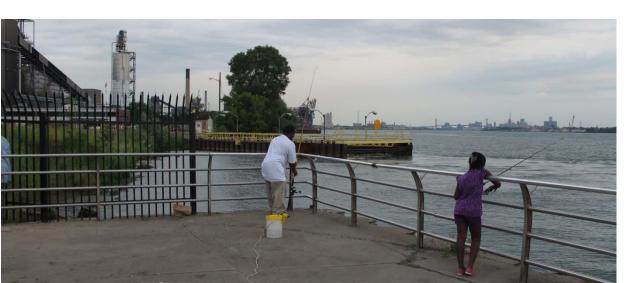
Provide

Desired Outcome: Improved Capacity to Address the Issue

#### **Example Project:**

# What are the Causes, Consequences and Correctives of Fish Contamination in the Detroit River that Cause Health Consumption Advisories?

PI: Donna Kashian, Wayne State University Funded by Michigan Sea Grant, 2007 - 2010 Example adapted by NERRS Science Collaborative staff



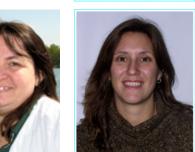




### Collaboratively Define the Issue and **Identify Challenges**

- A diverse project team, including people with expertise in natural science, social science and collaboration
- Broad stakeholder group, including representatives from several state agencies
- Stakeholder interviews and surveys, 3 workshops, several smaller meetings
- Prioritized research needs and identified a variety of obstacles to action

















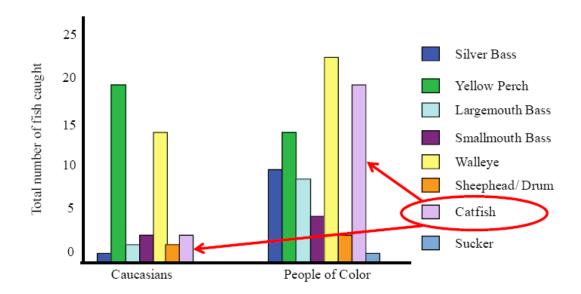






## **Examine and Clarify the Issue** (History, Causes and Consequences)

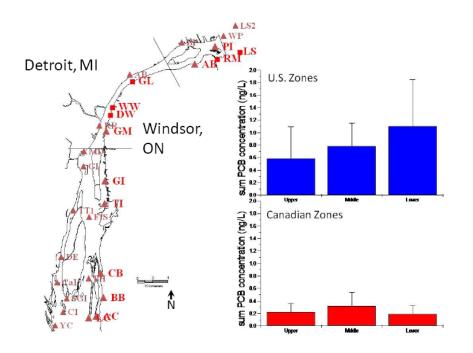
- Gathered and summarized a range of existing data on fish and sediment contamination
- Conducted interviews with anglers
- Evaluated consequences of current situation, e.g., certain groups are eating highly contaminated fish that are not covered by current advisory
- Identified uncertainties and information gaps





#### **Identify and Evaluate Potential Solutions**

- Compared different approaches for sampling fish, assessing risk and developing advisories.
- Modified existing contaminant bioaccumulation models.
   Modeling estimated that 73% of PCBs in fish are from legacy pollution, mostly on U.S. side, but some on-going inputs of PCB to river are likely.

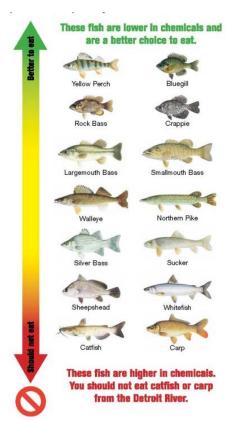


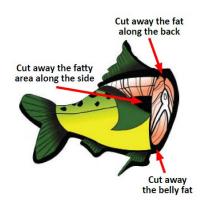


#### **Develop Tools and Information to Guide Decisions**

- Predicted risks for untested fish species
- With leadership from stakeholder committee, developed new communication tools to target vulnerable anglers, posted new signs, developed brochures









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Provide

**Prioritize** 

**Options** 

Desired Outcome: Improved Capacity to Address the Issue

#### What Resulted from the Assessment?

- Project stakeholders posted 30 new signs along Detroit River.
- The state has revised their system for developing and communicating fish consumption guidelines.
- Project PI continues to work with stakeholder groups and has secured several large, related grants.

#### More Information about this Assessment

- Michigan Sea Grant project webpage, <u>LINK</u>
- Journal article: Capacity building in stakeholders around Detroit River fish consumption advisory issues, <u>LINK</u>
- New Michigan Eat Safe Fish Program, <u>LINK</u>





#### Tangible and Intangible Benefits

Quotes from Participants

#### **New Relationships**

"Those meetings brought together a lot of people who I hadn't had contact with before. It got people talking.... Anytime you can get multiple people together from different jurisdictions it is a positive thing."
--- Participant, Friends of the Detroit River

#### **New Information**

"We now have a much better idea about who is eating what from the Detroit River. I'm glad to have access to the report and have referred to it many times."

--- Particpiant, US EPA

#### New Tools, New Ideas

"It was a **new approach** to tailor fish consumption information to specific audiences and water bodies." --- Participant, U.S. EPA

"The one-page info sheets on fish consumption have been really useful. We have been making them available in health centers."
--- Participant, City of Detroit Health Department

#### **New Resources and Opportunities**

"MDCH had a small pot of money.... It would have been very difficult to **realize the maximum potential** of those funds without the support of the stakeholder group."

--- Participant, MDCH

"The project helped leverage resources in a huge way.... We worked with MDCH to prepare two proposals that received \$850,000 from GLRI."

--- Participant, Wayne State University

#### More information about Integrated Assessment

#### Reports

- An Integrated Assessment Primer, <u>LINK</u>
- Benefits of Integrated Assessment, <u>LINK</u>

#### **Other Example Projects**

- The Integrated Assessment Center, Graham Sustainability Institute, <u>LINK</u>
- Michigan Sea Grant, <u>LINK</u>

#### **IA Funding Information**

NERRS Science Collaborative, <u>LINK</u>



