

Watershed Planning and Partnerships: Confusion and Resolution

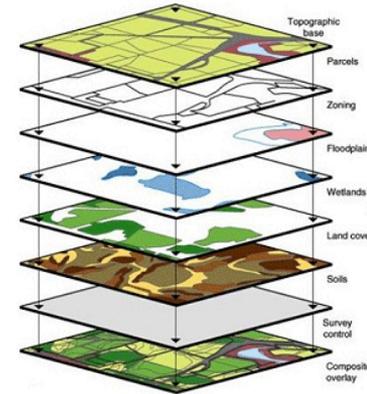
Critical Thinking Piece

Final Presentation

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Water Resource Regions



The Problem (Starting Position)

1. Lack of common language and understanding of integrated watershed planning between individuals, organizations and agencies.

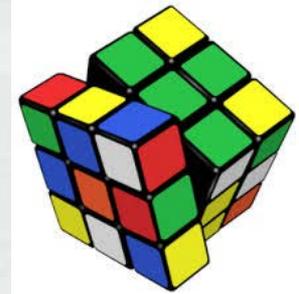
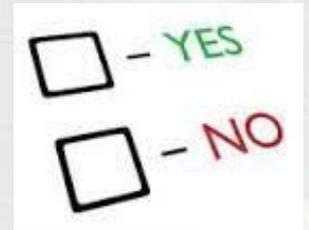


2. Fragmented nature is expensive, inefficient and often ineffective in addressing the nation's water resource challenges.



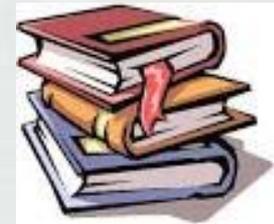
The CTP Challenge

- Is there really a problem?
- If so, what is the magnitude of the problem?
- If there is a problem, why hasn't it been solved yet?
- What are the opportunities or benefits from solving the problem?
- What can we do to address the problem?



Activities

- Interview Sr. Leaders – Internal and External
- Review strategic and academic documents
- Map partnership tiers
local ⇒ state ⇒ national ⇒ international
- Address CTP Challenge questions and make recommendations



Results (common language)

- Problem? **Yes**
- Magnitude of the problem? **Modest**
 - ▶ All define WSP as boundary and purpose
 - ▶ All recognize IWRM in strategic docs, little understanding of how to operationalize
- Why hasn't it been solved?
 - ▶ "Water is infinitely more complicated than Weather" – NOAA representative



▶ Agencies view Turf Wars – agency, local, etc.



Results (common language)

- What are the opportunities or benefits from solving the problem?
 - ▶ Identify the right agency to implement actions (seamless partnerships)
 - ▶ Prioritize Investments with limited funding
- What can we do to address the problem?
 - ▶ Participate even when no immediate need
 - ▶ Operationalize IWRM nationally and regionally (IWRSS, RFRMT, NESP, etc.)



Results

(expensive and inefficient)

- Problem? **Yes**
- Magnitude of the problem? **Modest**
 - ▶ Lots of money invested, some improvements but many of same problems 50 years later (UMR Level B Report)
- Why hasn't it been solved yet?
 - ▶ Limited Synergy – Sum of the Parts
 - ▶ External stressors – Political, Budget, Technology and Science



Results

(expensive and inefficient)

- What are the opportunities or benefits from solving the problem?
 - ▶ What is the opportunity cost of NOT solving?
- What can we do to address the problem?
 - ▶ Participate even when no immediate need
 - ▶ Operationalize IWRM nationally and regionally (IWRSS, RFRMT, NESP, etc.)
 - ▶ Demonstrate success with Partnerships



Recommendations



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Invest corporately in system analysis (CWMS, NIM) that can be used by individual studies and partners.



- Strengthen technical collaboration with USDA agencies, especially NRCS, FSA and RMA.





watertoolbox.us

Federal Support Toolbox for Integrated Water Resources Management

Utilize Federal Water Toolbox, WIB process and other agency tools to generate indices that describe the geography and related systems to frame trade-offs in terms of value to the nation.

America's Watershed Initiative
Mississippi River Watershed
Report Card

PRELIMINARY RESULTS

C

America's
WATERSHED Initiative >>



BUILDING STRONG®

- Establish Silver Jackets style teams for each of the business lines



- Explore using SVP techniques for State Partnering and Congressional visits.





- Be part of the national water conversation
... Staff the National Water Center as IWR field office or MSC responsibility.
- Use IWRSS framework to connect Universities and Regional Centers of Expertise



Special Thanks

Federal Partners

- NOAA – Mr. Ed Clark
- USDA-FSA– Mr. Matt Ponish
- USDA-NRCS - Mr. Leonard Jordan and Ms. Jacqueline Davis-Slay
- USEPA– Ms. Lisa Hair and Mr. Stuart Lehman
- USGS – Mr. Bill Guertal and Ms. Marie Pepler

Corps of Engineers

- Mr. Steve Stockton
- Mr. James Dalton
- Ms. Karen Durham Aguilera
- Mr. Theodore “Tab” Brown
- Mr. Bob Pietrowski
- Ms. Robyn Colosimo
- Mr. Will Logan
- Ms. Meg Gaffney-Smith
- Mr. Michael Pfenning
- Mr. Michael Deegan

Corps of Engineers

- Mr. David Olsen
- Ms. Jodi Creswell
- Mr. Jeremy LaDart
- Ms. Sue Hughes
- Mr. Wes Coleman
- Ms. Camie Knollenberg
- Mr. Brian Harper
- Ms. Joy Muncy
- Mr. Marshall Plumley
- Ms. Mary Rodkey



Thank You



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Back-up slides



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Activities

- Establishing a common language and purpose for the Corps and typical agency stakeholders.
- Identifying an approach for projects to be identified, prioritized and implemented by the agency/entity best suited to accomplish the project.
- Identifying ways to align program funding and resources to achieve timely completion of watershed studies and projects identified as part of watershed studies.
- Identifying the people that should be involved in making watershed decisions across a range of agencies and stakeholder groups.
- Identifying roadblocks to successful collaboration and recommending policy or organizational actions to remove or overcome roadblocks.



Activities

■ Interview Sr. Leaders

▶ Asked 5 questions:

- How do you define watershed planning (WSP)?
- What are the opportunities for WSP to advance how we deliver WR solutions?
- How does WSP tie in with strategic direction/vision for how your organization conducts business?
- How can WSP strengthen internal and external partnerships (State and Fed)?
- How can WSP and partnership activities improve budget process for Corps projects and programs?



Results

- The Corps is the Integrator (all parties agree)
- Interagency partnerships are critical to working aligning missions/working together. Must participate even when no immediate need.
- Most agencies have WSP as a strategic goal, few examples of tactical operations.



FSA Pilot – DSS

CRP Scenario

Riparian: Average 6hr_100yr [5.8in]

Please select point of interest on the map →

Watershed Index	Down Stream	Current	Up Stream
Index Number	14	13	12
Stage(ft.)	769.6	781.3	787.6
Peak Change (ft.)	-0.5	-0.7	-0.7

Additional Information for the Selected Index Point

Term Explanation(1) Cross Section

Index point 13

Stage (ft)

Distance (ft)

[hover over the figure for actual distance and stages]

Flood Peak Change (Feet)

- 0.3 to 0.8
- 0.2 to 0.2
- 1.2 to -0.3
- 2.2 to -1.3

Map Layers

- Index points
- Indexed drainage area

Basemap

Topographic

Reset Application Reset Map



FSA Pilot – DSS

http://s-iihr71.iuhr.uiowa.edu/Web_Application.html

File Edit View Favorites Tools Help

CRP Scenario

Partial Average 6hr_100yr [5.8in]

Please select point of interest on the map →

Watershed Index	Down Stream	Current	Up Stream
Index Number	13	12	11
Stage(ft.)	775.7	782.6	788
Economic Damage (x1000\$)	0.0	9.1	3.9

Additional Information for the Selected Index Point

Compare damage for all scenarios

The graph plots Economic Damage (x1000\$) on the y-axis (0K to 400K) against Stage (ft) on the x-axis (719 to 899). A black curve shows the relationship. A vertical blue line at Stage 775.7 is labeled 'Selected Scenario' with a red arrow pointing to approximately 250K on the y-axis. A vertical green line at Stage 859 is labeled 'Reference Scenario' with a red arrow pointing to approximately 280K on the y-axis.

The map displays the Indian Creek Watershed with various watershed indices highlighted in different colors corresponding to the legend. The legend for Economic Damage (\$*1000) is as follows:

- 0 K to 10K (Blue)
- 10K to 50K (Cyan)
- 50K to 100K (Green)
- 100K to 500K (Yellow)
- 500K to 1000K (Orange)
- 1000K to 5000K (Red)

Map Layers:

- Index points
- Indexed drainage area

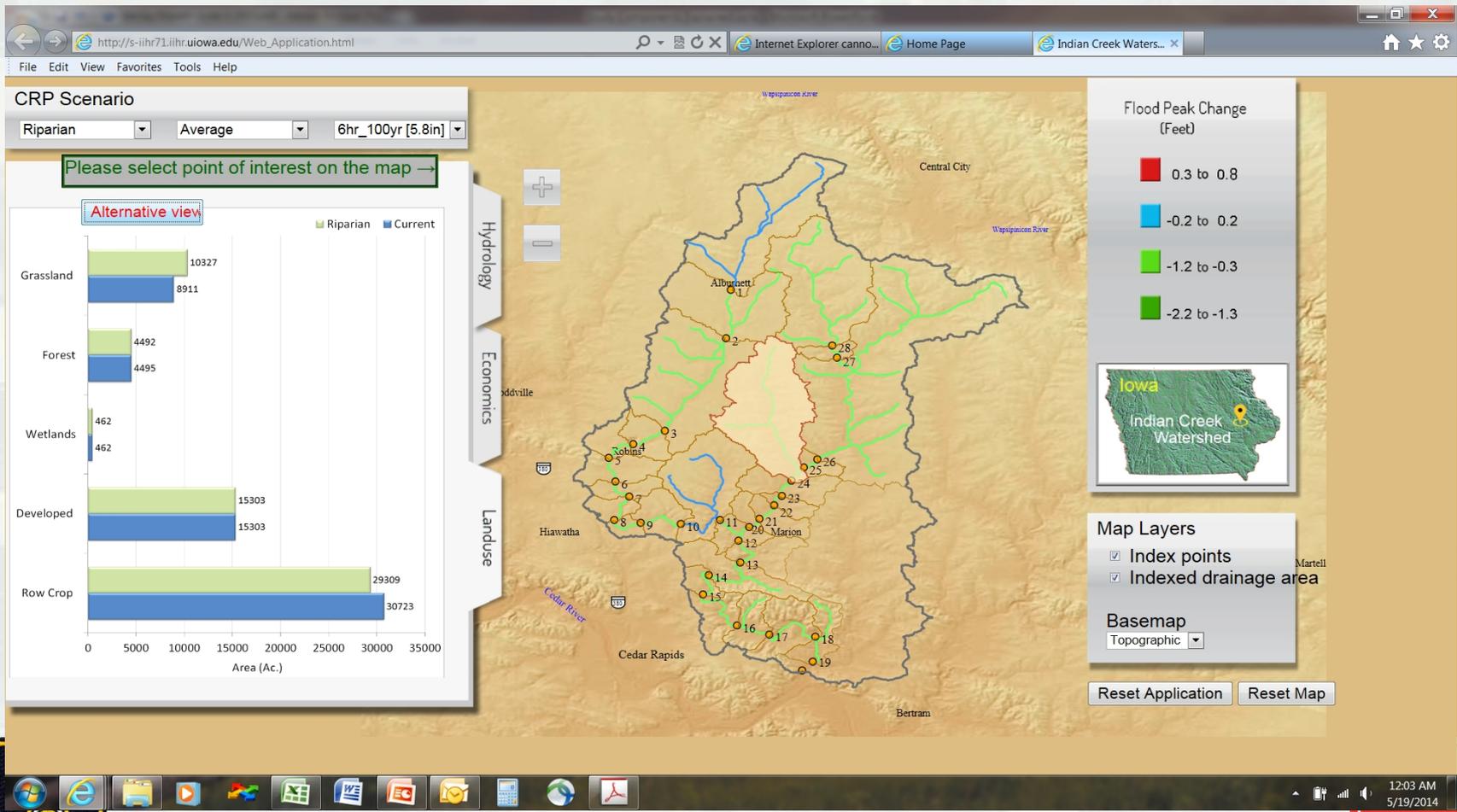
Basemap: Topographic

Reset Application Reset Map

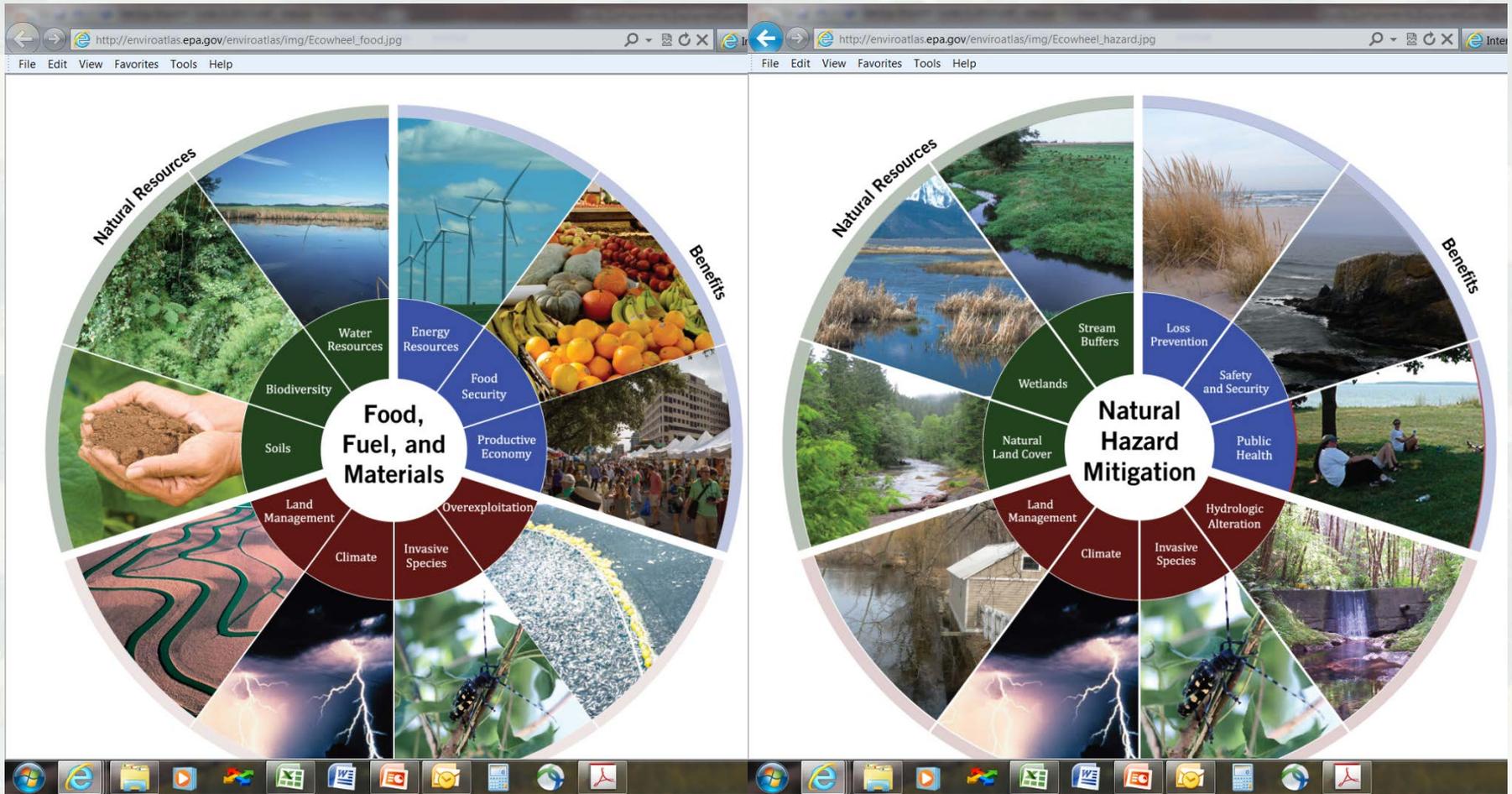
11:57 PM 5/18/2014



FSA Pilot – DSS



EnviroAtlas – Combined - ES



EnviroAtlas – Combined - ES

The screenshot displays the EnviroAtlas web application interface. At the top, the EPA logo and navigation menu are visible. The main content area features a satellite map of the United States with yellow outlines representing subwatersheds. A left-hand panel titled "National" lists various data layers, including "CLEAN AND PLENTIFUL WATER" (with sub-options like Natural Filtration, Climate, Aquatic Habitat and Biota, Water Supply and Demand, and Potential Water Stressors), "Natural Hazard Mitigation", "Climate Stabilization", "Recreation, Culture, and Aesthetics", "Food, Fuel, and Materials", and "Biodiversity Conservation". A right-hand panel titled "Map Legend" shows "Boundaries" with sub-options for "HUC (12 Digit) Subwatershed", "States", and "Counties". The interface includes a search bar, navigation controls, and a status bar at the bottom showing the time as 12:44 AM on 5/19/2014.



EnviroAtlas – Combined - ES

The screenshot displays the EnviroAtlas web application interface. At the top, the EPA logo and navigation menu are visible. The main content area features a satellite map of a watershed with a blue-shaded area representing the analysis region. An 'Analyze Ecosystem Services (Experimental)' tool is overlaid on the left, showing a radar chart with seven categories: Food, Fuel, and Materials; Clean Air; Recreation, Culture, and Aesthetics; Natural Hazard Mitigation; Climate Stabilization; Clean and Plantif ul; and Biodiversity Conservation. The chart shows varying levels of service across these categories. A 'Map Legend' and 'Elevation Data' tool are also visible on the right side of the map. The bottom of the screen shows a Windows taskbar with various application icons and a system tray displaying the time as 12:22 AM on 5/19/2014.

