



Urban Waters Federal Partnership 2nd Annual Meeting
Tuesday May 12, 2015 Villanova University

Update on Brownfields Community of Practice

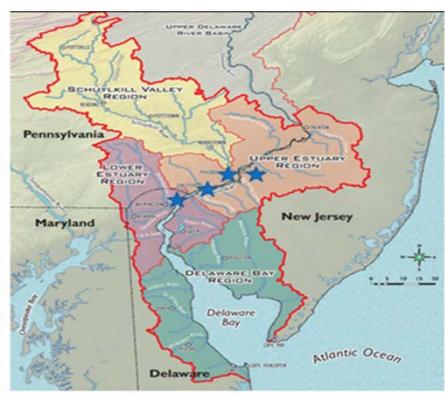
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Urban Waters Federal Partnership Delaware River Watershed

- Drinking water: >15 million people!
- Urban Waters area...4 cities:
 - Philadelphia, PA
 - Camden, NJ
 - Chester, PA
 - Wilmington, DE
- 5 UWFP Communities of Practice
 - Water Quality and Quantity
 - River Protection and Restoration
 - Climate Resilience
 - Trails, Parks & Open Space
 - Brownfields Revitalization



Why brownfields and urban waters?

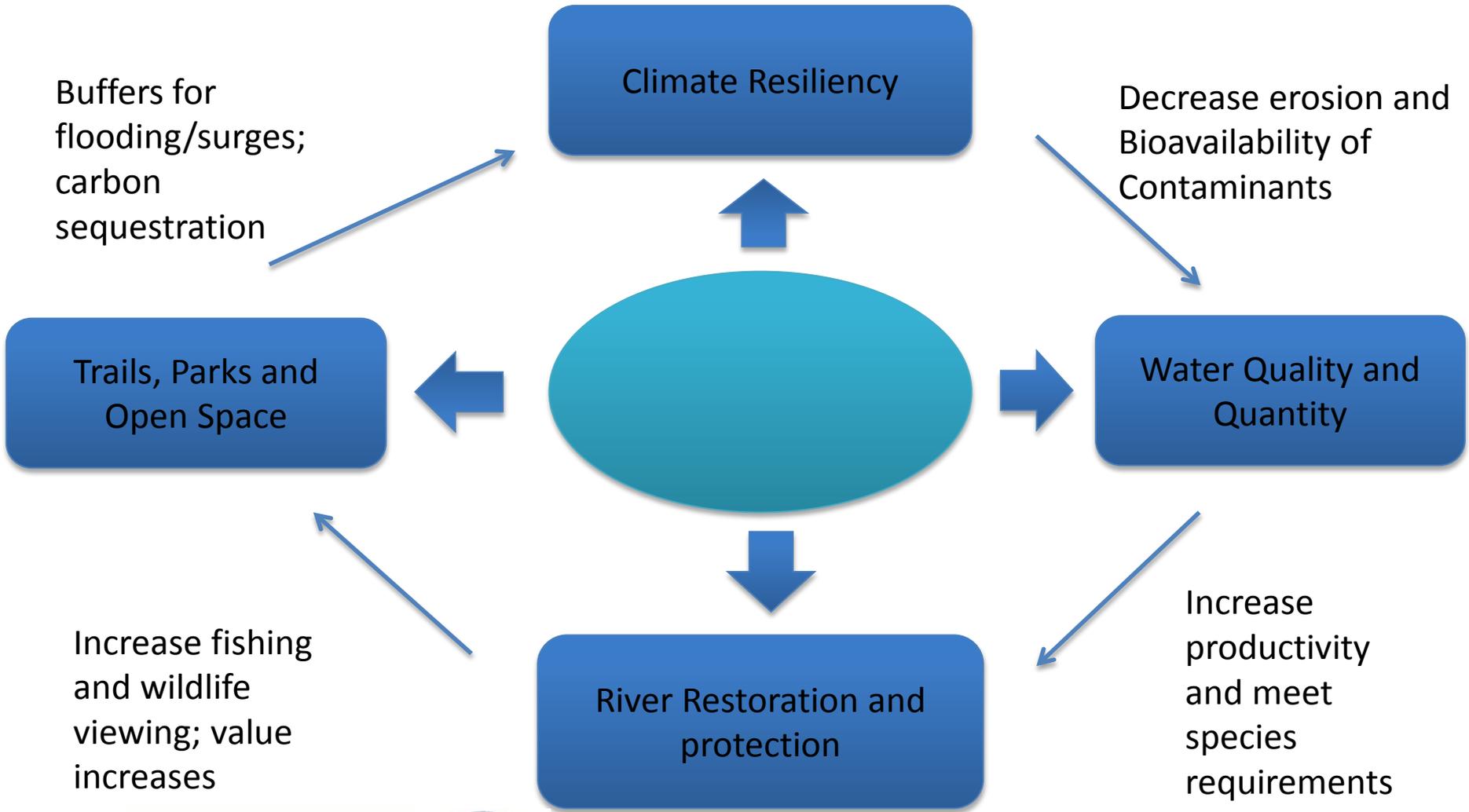


- ...available land for water quality, restoration, open space*
- ...strategic locations along waterways & infrastructure*
- ...integrate natural systems into the build environment*
- ...where future growth must happen*

05/11/2009

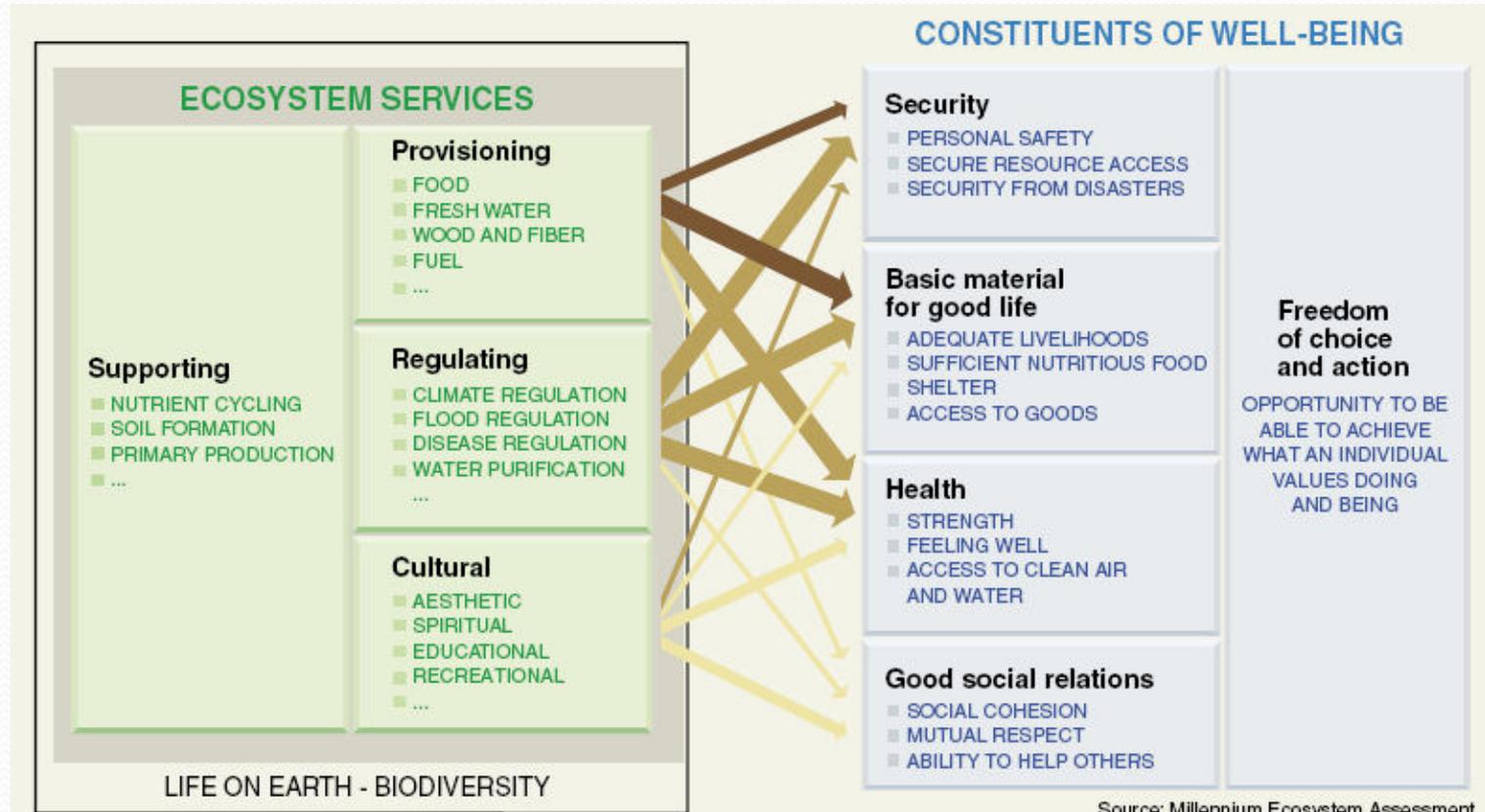
Partnering around Mutual Priorities...

Brownfields...a 'natural' fit for combining resources



Why Focus on Urban Water Areas?

MEA Defined Ecosystem Services as “the Benefits that People Obtain from Ecosystems (2005)



ARROW'S COLOR
Potential for mediation by socioeconomic factors

- Low
- Medium
- High

ARROW'S WIDTH
Intensity of linkages between ecosystem services and human well-being

- Weak
- Medium
- Strong



Partnering around Priorities!

Camden's Priority = Flooding



Why brownfields & flooding?

~1 million gallons of contaminated stormwater runoff annually per acre of impervious surface

Partnering around Priorities...

Camden SMART Initiative (2011)

Stormwater Management and Resource Training



City of Camden



Cooper's Ferry Partnership



Camden County Municipal Utilities Authority



Rutgers Cooperative Extension Water Resources Program



New Jersey Tree Foundation



New Jersey Department of Environmental Protection



Camden SMART Projects 2011-2013



Camden's Collaboration on Flooding Camden SMART



992 Trees Planted

+



27 Green Infrastructure Projects Installed

= **3.1 million** gallons of stormwater captured annually



=

>55 million gallons of stormwater captured annually

www.CamdenSMART.com

Partnering Around Priorities: Wilmington



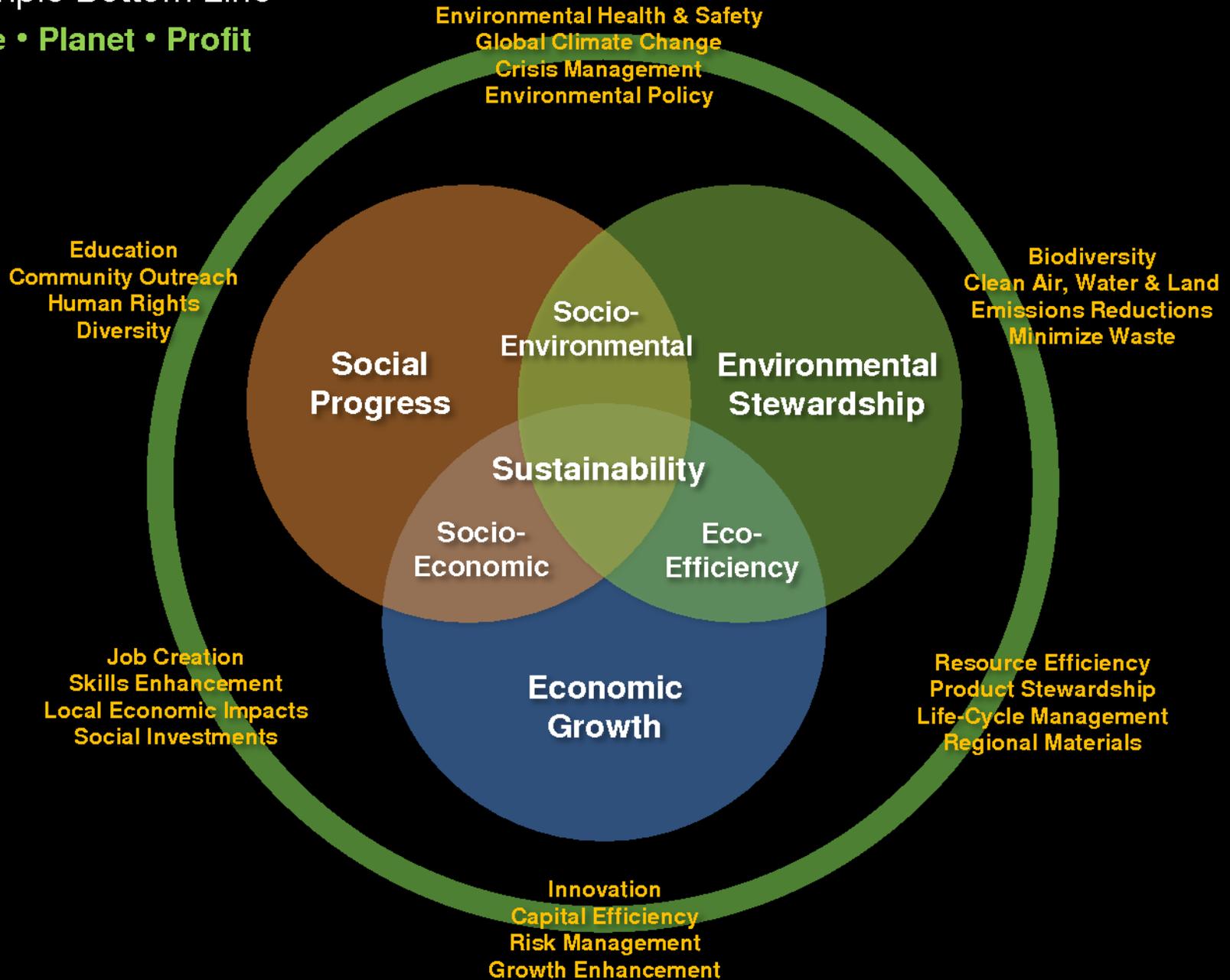


**UWFP_WATER PROJ:
SIRS SITES WITHIN
100 YARDS OF A WATERWAY
AND THE 1.5 METER
SEA LEVEL RISE**

0 1:11,000 0.25
Miles

The Triple Bottom Line

People • Planet • Profit



*TBL diagram adapted from www.gcbl.org

Partnering Around Priorities: Chester PA

Chester Waterfront Redevelopment Project



Draft, Work In Progress, & For Discussion
Purposes Only

Soccer Stadium: Philadelphia Union



Draft, Work In Progress, & For Discussion
Purposes Only



Partnering around Priorities!

Philadelphia





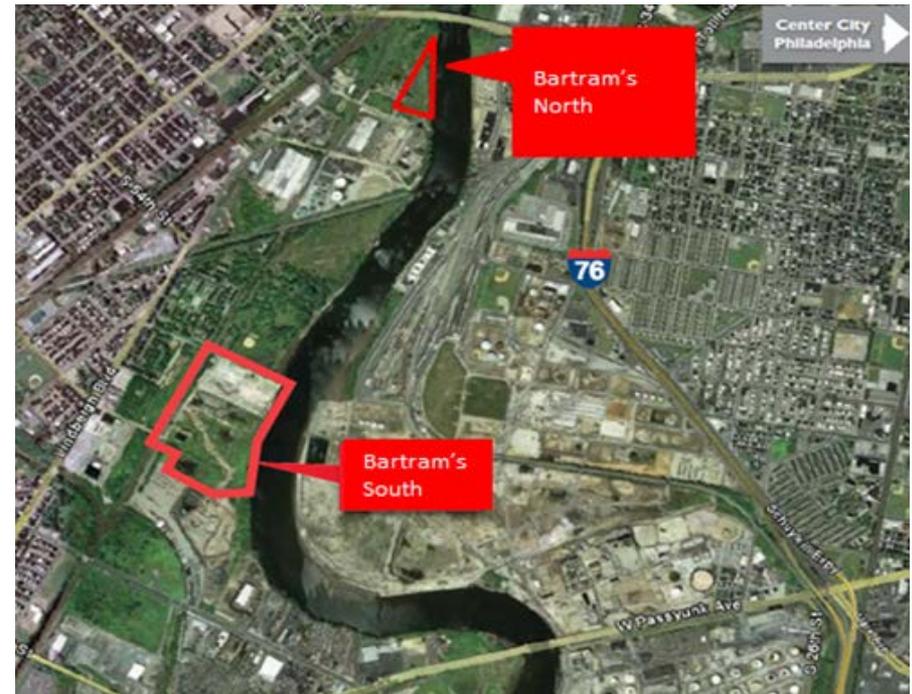
Developing Philadelphia's New Innovation District:

*Early Action Projects from the
Lower Schuylkill Master Plan*



INNOVATION DISTRICT – WEST BANK DEVELOPMENT SITES

- Remediate contamination on 12 and 28 acre sites to support redevelopment & public recreational trail
- **Status** – Underway
- **Funding** - Fully funded
 - EPA, PADCED, City of Phila.
- **Target Completion** – June 2015



Partnering Around Priorities...Camden
Former American Minerals site becomes...

PHOENIX PARK



BENEFITS:

- Connects community to waterfront
- Remediation of abandoned brownfield site
- New 5.3-acre park with riverfront access
- Manages >5 million gallons of stormwater/yr
- Resilient shoreline & water quality benefits

FUNDING:

- \$800,000 Camden County Open Space
- \$2.7 million NJ Environmental Infrastructure Trust
- \$655,000 (p/o) NJDEP Supplemental Environmental Project
- \$19,000 NJDEP/USEPA Living Shoreline Grant

Grand Opening ~June 1, 2015



Phoenix Park Living Shoreline Conceptual Design
Prepared by the Partnership for the Delaware Estuary 2014



- Cc (1.0)
- Trees
- MLLW
- L'level Br.
- SAV Beds
- High Marsh
- ▲ WADs
- Potential Mussel & SAV Area (0.4 ha)

Phoenix Park Concept Plan

Camden, New Jersey



Draft, Work In Progress, & For Discussion Purposes Only



Partnering Around Priorities...Camden

Salvation Army (Kroc) Center & park & solar & living shoreline on Harrison Ave Landfill

**(proposed) Living Shoreline, Wetlands Creation
Habitat Restoration & Community Access**

**(proposed) Park & Solar
Constructed Wetlands**

Bioretention Basins



**Kroc Community Center
120,000 ft² facility & 24-acre campus**

Funding:

- SRP HDSRF \$22 million
- SRP Publicly-Funded \$4.1 million
- EPA Brownfields \$1.4 million
- EPA 319H Living Shoreline \$323,000

Green Remediation Elements:

- On-site waste management
- Use of Local Dredge Material for Cap
- Alternate (Permeable/Vegetative) Cap
- Reuse of site materials (e.g. concrete)

Green Infrastructure Elements:

- Permeable / Water infiltration Cap
- ~1.1-acre constructed wetlands
- 2000 feet bioretention basins
- 25 million gal/year stormwater management
- no connection to adjacent CSO...**
- Planned restoration of riparian corridor

Draft, Work In Progress, & For Discussion
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Questions?
Comments?
Good luck!
Contact us!!!