Urban Waters Mapping Tool

Prepared for:

Denver Pilot - Urban Waters Partners Meeting

August 23, 2012

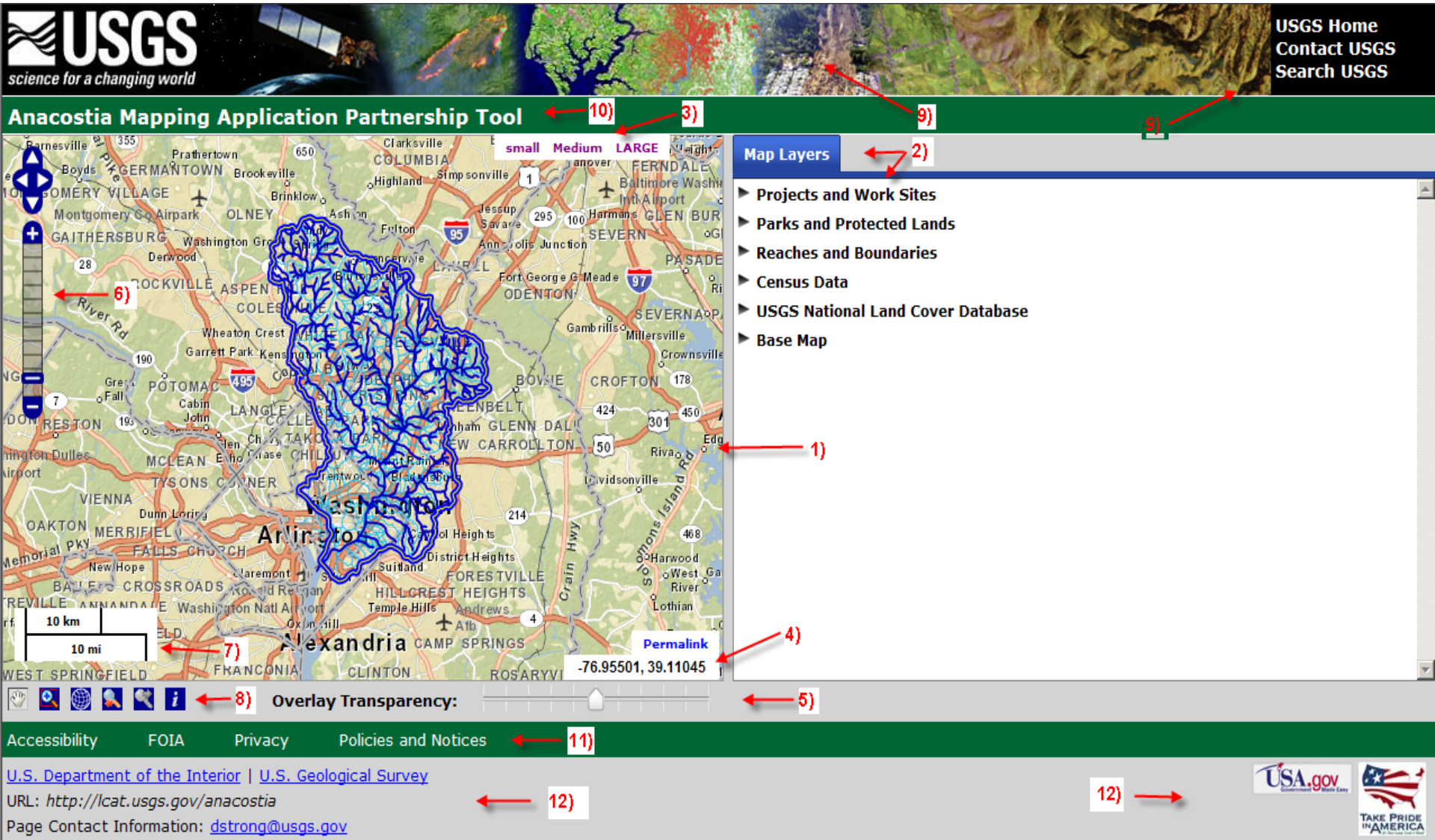
Presented by Scott Peterson, SAIC for US EPA

Origin of the Idea

- Several Denver Pilot Urban Waters Partners saw a mapping tool and said:
  - "I want that!"
  - So that organizations working on the South Platte River could be more informed about each other's activities

Origin of the Idea

- The mapping tool they saw is the **Anacostia Mapping Application Partnership Tool**
  - Developed by USGS
  - Developed for the Anacostia Watershed in Washington DC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Map Layers
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Projects and Work Sites
Parks and Protected Lands
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Census Data
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Base Map
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U.S. Department of the Interior | U.S. Geological Survey
URL: http://lcat.usgs.gov/anacostia
Page Contact Information: dstrong@usgs.gov
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Anacostia Mapping Tool Map Layers

Projects and Work Sites

- Anacostia Waterfront Initiative (AWI) Projects
  - Stormwater Retrofit Stream Restoration
  - Wetlands Restoration Fish Blockage Removal/Modification
  - Riparian Reforestation, Meadow Creation, Street Trees, and
  - Invasive Management
  - Trash Reduction Parkland Acquisition
- EPA NPDES Dischargers: Major, Minor
- EPA Brownfields
- EPA Toxic Release Inventory
- EPA Sewer Overflow Outfalls

Anacostia Mapping Tool
Map Layers

Projects and Work Sites (cont.)

- USGS Gages
  High-Intensity Water Quality Active Inactive
- USGS Wells
  Water Quality Observation
- USFWS Work Sites
  Env. Contaminants Coastal Program Schoolyard Habitat
  Environmental Stewardship Compensatory Mitigation
- NPS Work Sites
- USGS/NPS Surface Elevation Tables - Marker Horizon

Anacostia Mapping Tool Map Layers

Parks and Protected Lands

- Anacostia Riverwalk
- Other Trails
- Parks: NPS County, Regional/District

Anacostia Mapping Tool Map Layers

Reaches and Boundaries

- Anacostia Watershed
- Anacostia 303(d) Impaired Waters
- Anacostia Reaches
- Anacostia Subwatersheds
- Counties
- DC Wards

Anacostia Mapping Tool Map Layers

Census Data

- Population Density
- Percent Vacant
- Per Capita Income
- Median Family Income
- Percent Poverty
- Percent Minority

Anacostia Mapping Tool Map Layers

USGS National Land Cover Database

- USGS NLCD 2006 Land Cover
- USGS NLCD 2006 Impervious Surface
- USGS NLCD 2001 Land Cover
- USGS NLCD 2001 Impervious Surface

Anacostia Mapping Tool Map Layers

Base Map

- The National Map
- The National Map Imagery
- USA Topo Maps
- ESRI Topo
- ESRI Imagery
- ESRI Street

Mapping Tool for South Platte Watershed

- At US EPA R8's request, US EPA HQ initiated requirements gathering for a South Platte watershed mapping tool

Mapping Tool Requirements Gathering

- An electronic survey was created and Denver Pilot Urban Waters Partners were asked to complete the survey
  - 26 partners provided responses to the survey from which we obtained a number of functionality and map layer requirements

Mapping Tool Requirements Gathering

- Four (4) webinars were conducted to continue identifying mapping tool needs:
  - 2 focusing on South Platte Headwaters partners
  - 2 on Denver area partners

Mapping Tool Requirements Gathering

- We have identified:
  - Basic minimum of functionality for the tool
  - The need to see other organizations' projects
  - Ability to add and update their own projects depicted on the maps

A National UW Mapping Tool

- US EPA requires that this mapping tool can service groups operating in any part of the country

Current Plans for an Urban Waters Mapping Tool

- Build a basic mapping tool with the key base map layers
- Estimate the effort of adding spreadsheets and other organization-sourced data to the mapping tool in batch form

Current Plans for an Urban Waters Mapping Tool

- Build a basic entry page that requires user login in order to map events and projects on a one-by-one basis
- Create an Excel spreadsheet template that allows people to get data into that template format but then to submit to EPA to batch upload to the mapping tool.

Identify Key Base Map Layer

- We want to take advantage of having you all together for this meeting to move further along and so we have some work for you
- Please work through the handout "Mapping Tool Layers Needed and Sources"
  - Start by supplying the information at the top of the first page (Name, contact info, and organization)

Identify Key Base Map Layer

- Please work through the handout "Mapping Tool Layers Needed and Sources" (cont.)
  - In the column "Check if Critical", check those map layers you believe are **critical** to a UW Mapping Tool
    - **Bear in mind that not all will be part of the tool due to funding limitations**

Identify Key Base Map Layer

- Please work through the handout "Mapping Tool Layers Needed and Sources" (cont.)
  - For those layers that you (your organization) possess, please record:
    - Indicate by a check mark if it is a spreadsheet, GIS layer, or Map Service