

The background is a light blue gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The title text is centered in the upper half of the image.

# IMPLEMENTING THE US GLOBAL WATER STRATEGY: NOTES FROM THE FIELD

MELINDA LAITURI

COLORADO STATE UNIVERSITY

20 MARCH 2019

# WATER EXPERTS PROGRAM



Nairobi River Basin River Restoration Program,  
Kenya, June 2017



Citarum River Basin Assessment,  
Indonesia, September 2018



# WATERSHED ASSESSMENT AND COMMUNITY PARTICIPATION



# ASSESS INSTITUTIONAL CAPACITY

- COMMUNICATION BETWEEN GOVERNMENT OFFICES
- HIGH LEVEL OF COMMUNITY ENGAGEMENT
- UPSTREAM/DOWNSTREAM COLLABORATION
- LOCAL GOVERNMENT COMMITMENT

*USG Strategic Approach:*  
Engage diplomatically

# CONDUCTING RESEARCH

- RESEARCH ACTIVITY BY THEMATIC AREA
- LINKAGES TO UNIVERSITIES; FACILITATED BY GOVERNMENT OFFICES
- INTERNSHIPS IN GOVERNMENT OFFICES AND FACILITIES
- INVESTMENT IN COMMUNITIES

*USG Strategic Approach:*  
Promote science, technology, innovation and information



# DATA INVESTMENT AND DEVELOPMENT

- DEVELOP A DATA POLICY: OPEN ACCESS
- INTEGRATED DATABASE – BUILT ON OPEN SOURCE TOOLS
- PILOT PROJECT

## EXPLORE:

- MOBILE TOOLS
- REMOTE SENSING DATA

**2.2 Data coverage for river monitoring stations with 2014 data**

ID	NAME	Sub-Region Office	LAT	LONG	FIRST_YEAR	LAST_YEAR	DIFFERENCE
1AB01	MALAKISI	KITALE	0.843	34.524	1978	2014	36
1BA01	MOIBEN	KITALE	0.804	35.443	1953	2014	61
1BC01	NOIGAMEGET	KITALE	0.928	35.133	1948	2014	66
1BD01	LITTLE NZOIA	KITALE	0.819	35.125	1961	2014	53
1BG07	RONGAI	KITALE	0.774	34.925	1960	2014	54
1BH07	SOSIO	KITALE			2004	2014	10
1CB08	ENDOROTO	ELDORET	0.446	35.367	1964	2014	50
1CB09	ELLEGIRINI	ELDORET	0.457	35.383	1964	2014	50
1CE01	KIPKARREN	ELDORET	0.608	34.965	1948	2014	66
1DA02	NZOIA	ELDORET	0.589	34.807	1947	2014	67
1EF01	NZOIA AT RUAMBWA	SIAYA	0.124	34.090	1974	2014	40
1FF02	ZAABA	SIAYA			1959	2014	55

*USG Strategic Approach:*

Promote science, technology, innovation and information

# TECHNICAL PARTNERSHIPS

- WATER SUPPLY INFRASTRUCTURE
- WATER QUALITY MONITORING
- WASTEWATER TREATMENT
- STORMWATER RUN-OFF
- DATA MANAGEMENT AND GEOSPATIAL APPLICATIONS



*USG Strategic Approach:*

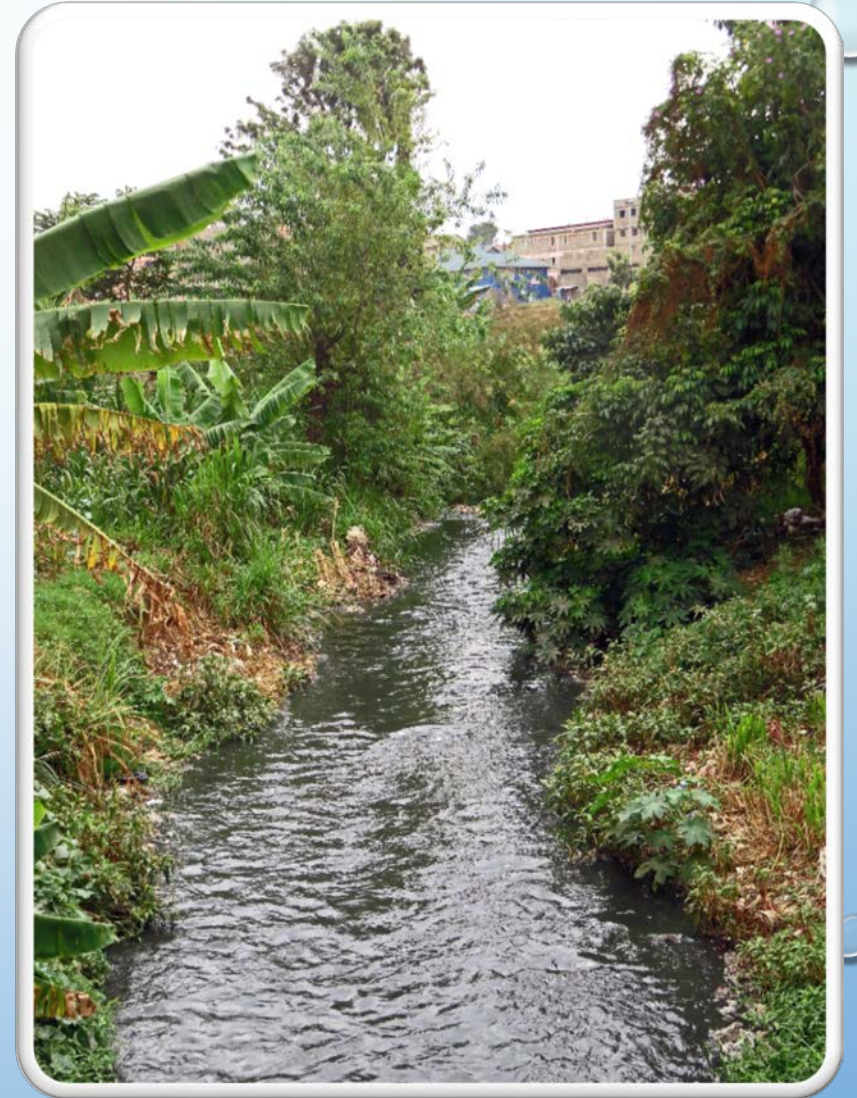
Promote science, technology, innovation and information

# RIVER AS PARTICIPANT: IDENTIFY HOW THE RIVER CAN DO ITS JOB

- ECOSYSTEM SERVICES
  - FLOOD MANAGEMENT
  - RIPARIAN ZONES
  - RIVER PARKS AND GREEN SPACES
- 
- *RIVERS PROVIDE CONNECTIVITY ACROSS THE LANDSCAPE*

*USG Strategic Approach:*

Invest in sustainable infrastructure and services



# COMMUNITY ENGAGEMENT THROUGH PARTICIPATORY MAPPING

- 1) Identify issues and hotspots
- 2) Prioritize
- 3) Demonstration/Pilot Projects
- 4) Community monitoring

USG Strategic Approach:  
Strengthen partnerships, intergovernmental organizations, and the international community



# DEVELOP PARTNERSHIPS → IDENTIFY ACTIVITIES → CREATE NETWORKS

- SCHOOLS/UNIVERSITIES

- RIVER CLEAN-UPS
- RAPID STREAM ASSESSMENTS
- WATER QUALITY KITS

- INDUSTRY AND BUSINESS

- SPONSOR RIVER CLEAN-UPS
- PARTNER WITH SCHOOLS

- LOCAL GOVERNMENT

- FACILITATE AND SUPPORT
- PUBLIC RELATIONS
- PUBLICITY



*USG Strategic Approach:*  
Strengthen partnerships,  
intergovernmental organizations,  
and the international community

# WATER + LOCAL DATA +COMMUNITY ENGAGEMENT = SHARED GOVERNANCE



- CIVIC TECHNOLOGY
- IDENTIFY COMMON PROBLEMS
- DETERMINE SHARED GOALS
- FACILITATE AND ENSURE COMMUNICATION

*USG Strategic Approach:*

Strengthen partnerships, intergovernmental organizations, and the international community

# SOLUTIONS ARE CYCLICAL, NOT LINEAR

- IDENTIFY WASTE STREAMS
  - DETERMINE SOLUTIONS FOR EACH SEPARATE WASTE STREAM
    - RECYCLING, VALUE-ADDED TRASH, ENERGY SOURCE, REMOVAL AND DISPOSAL
    - MONITORING
- LOCAL COMMUNITY PARTICIPATION
- ENGAGE LOCAL BUSINESSES
- TRANS-AGENCY COLLABORATION



# COMMITMENT

- LONG TERM INVESTMENT AND PARTNERSHIPS
- BENCHMARKS AND DELIVERABLES
  - ACCOUNTABILITY AND RESPONSIBILITY
- INVESTMENT IN YOUTH:  
SUSTAINABILITY DRIVERS!

