Water Quality Implementation Program Updates

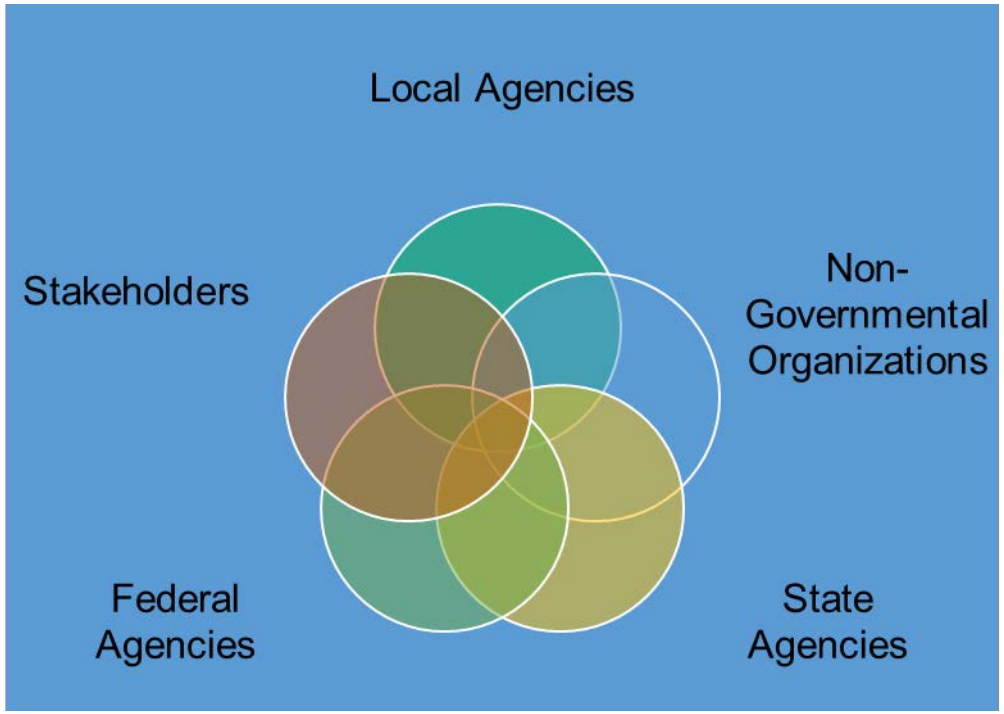
Kansas Water Office Webinar Series, KDHE Update

May, 8, 2020

- Watershed Restoration and Protection Program
- Drinking Water Protection Program
- Scaling Up

Kansas
Department of Health and Environment
Division of Environment

Annual Budget: $2.9M EPA; $730,000 SWP



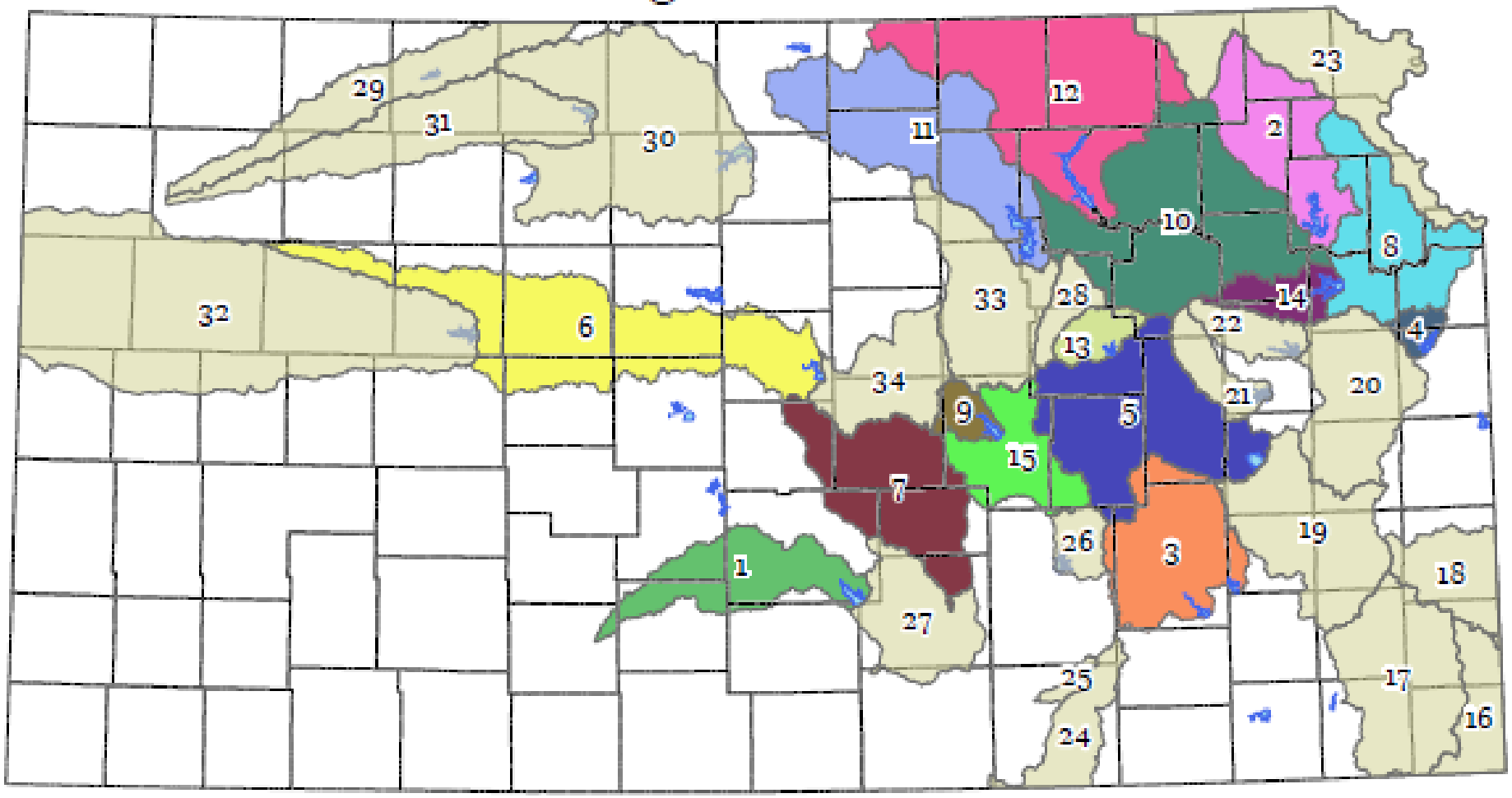
- Vision of WRAPS is to achieve improved water quality for the State of Kansas through collaborative watershed management.
- WRAPS Projects work collectively with many partners including state and federal agencies, local producers, industry, municipalities, and other stakeholders to develop, plan, and implement strategies to address water quality concerns.

Watershed Protection and Restoration Strategy (WRAPS)

- Plan – Effectively and efficiently increase the number of water bodies meeting surface water quality standards through targeted implementation of water quality practices

- Content –
  - Water Quality Goal and Sources of Pollution
  - Watershed Needs (what's the problem)
  - Efficiency and Cost Effective BMPs
  - Targeted Subwatersheds
  - Short, Mid and Long Term Milestones

August 2019


29
31
30
12
23
11
2
10
8
32
6
33
28
14
22
4
13
34
9
5
21
20
15
7
26
3
19
1
18
27
25
17
24
16

Annual Budget: $350,000 SWP

- Protect small community water supplies source water from non-point source pollution
- Create more sustainable water supply systems
- Prevent financial burden of small communities from increased treatment costs

Generalized DWPP Process

Targeting and formal request to City/PWS → Assessment & Investigation → Creation of Local Leadership Team → Plan Development → Plan Implementation → Monitoring

Program Progress

City of Ford

- Became out of Compliance with drinking water standard for nitrates in spring 2019.
- Signed agreement with KDHE to participate in DWPP in early fall of 2019.
- Formed Local Leadership Team, meeting late 2019 and early 2020.
- KDHE completed early assessment work and developed a workplan for assessing nitrate contamination sources in March 2020.
- Awarded a bid for services in April 2020.
- Well testing will begin in early summer 2020.

Lessons Learned

- Communities less interested than expected in participating.
- The process as presented is overwhelming.
- Changed strategies for recruitment and program execution.

Lessons Learned

- February/March 2020 decided to offer free assessments to communities with increasing nitrate levels.
- Have since secured 7 additional communities to complete assessments for. Kanopolis, Dighton, Copeland, Andale, Belle Plain, Hoxie, Highland
- KDHE has drafted 4 workplans and will put them out for bid in May 2020.

WRAPS Program Strategic Planning

Strategic Plan to accompany WRAPS 9 Element Plan

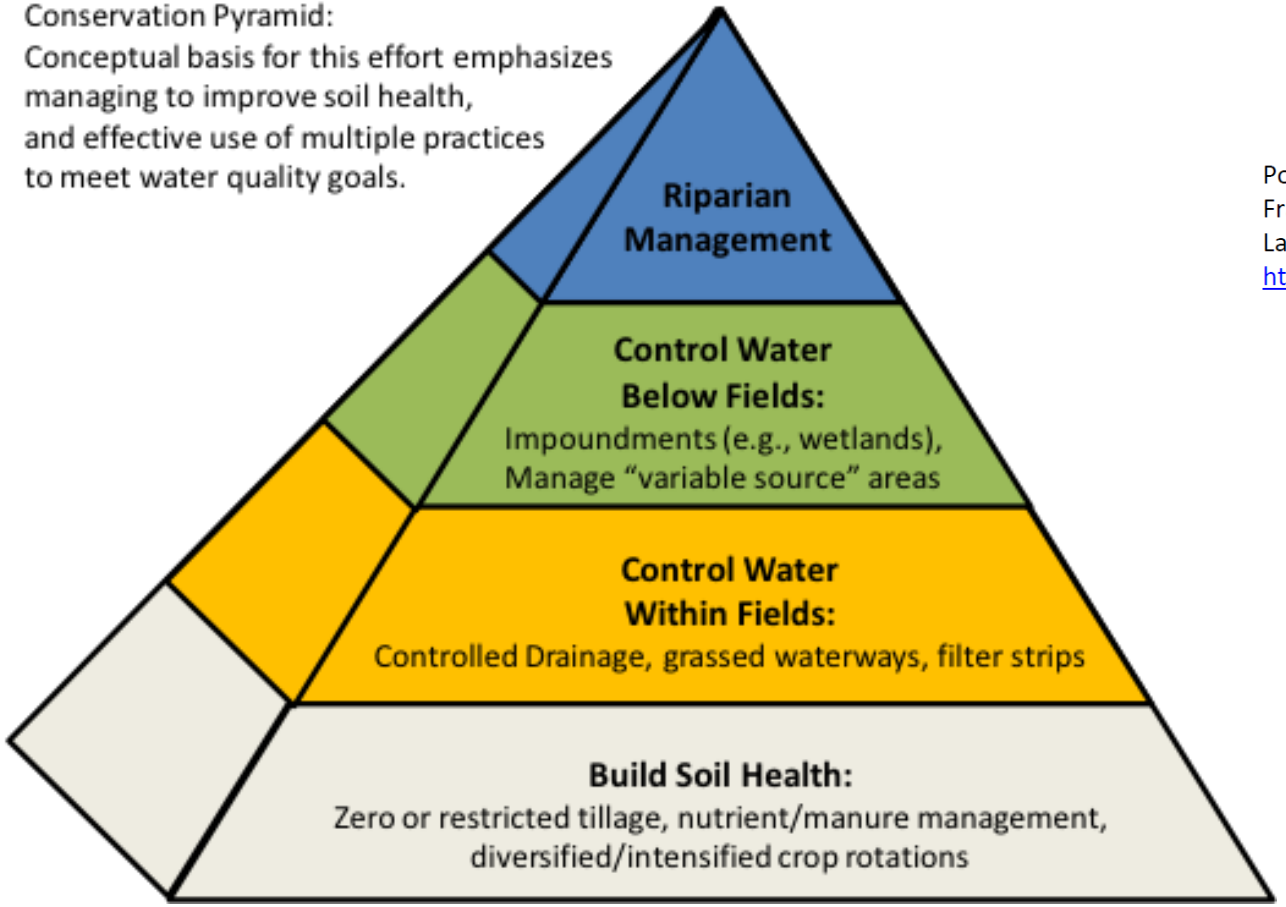
- Define strategy for each WQ Impairment & BMP type
- Identify budget needed to utilize strategies
- Define timeline for each strategy
- Identify funding opportunities outside WRAPS grant for each strategy
- Put more tools in the toolbox!

Water Quality

Ecosystem Restoration
Rural Development
Carbon Sequestration
Food Nutrient Density
Wildlife Habitat
Water Quantity
Profitability per Acre
Drought Mitigation
Producer Quality of Life
Flood Mitigation
Water Quality

New Conservation Approach

Conservation Pyramid:
Conceptual basis for this effort emphasizes managing to improve soil health, and effective use of multiple practices to meet water quality goals.



Porter, S.A., M.D. Tomer, D.E. James, and K.M.B. Boomer. 2015. Agricultural Conservation Planning Framework: ArcGIS®Toolbox User's Manual. USDA Agricultural Research Service, National Laboratory for Agriculture and the Environment, Ames Iowa. Available: http://northcentralwater.org/acpf/ (Verified – date)

Scaling Up Conservation

Cost-share

Information & Education

Outreach & Advocacy

Partner with Agencies

Relationships with Agricultural Service Providers

Partner with Implement Manufacturers

Global Food & Ag Companies

Ecosystem Services

Scaling Up Conservation

Ormiston Farms

SRF – Kansas Cover Crop Interseeding for Clean Water in Northeast Kansas

Scaling Up Conservation

Scaling Up Conservation

Scaling Up Conservation

Figure 4: Anticipated Water Quality Benefits

The seven interseeders are contractually required to plant at least 10,000 acres of cover crop each year.

Annual load reductions for 70,000 acres of cover crop are:

136,639 pounds of Nitrogen

Planted acres will be evenly split between Tuttle Creek Watershed and Delaware River Watershed. Each watershed will reduce:

68,319 pounds of Nitrogen

34,201 pounds of Phosphorus

23,383 tons of Sediment

Scaling Up Conservation

SOIL HEALTH ACADEMY

General Mills

Scaling Up Conservation

SOIL HEALTH ACADEMY

General Mills

MISSION: To advance ecosystem service markets that incentivize farmers and ranchers to improve soil health systems that benefit society.

Drinking Water Protection Program

Amanda Reed
785-296-7165
Amanda.Reed@ks.gov