

**Indiana State Technical Committee:  
Sub-Committee = Source Water Protection Areas  
Date = July 25, 2023**

**Attendees:**

- Allen, John – USDA NRCS
- Chew, Jerod – USDA NRCS
- Cox, Mike – USDA NRCS
- Davis, Ginger Christine – Indiana Geological and Water Survey
- Days, Toby – Alliance of Indiana Rural Water
- Fagan, Katie – USDA NRCS
- Griffin, Josh – IDNR Division of Fish and Wildlife
- Hughes, Mike – USDA NRCS
- McElhinney, Cary – US Environmental Protection Agency
- Nurrenbern, Joshua – USDA NRCS
- Walker, Christian – Indiana Department of Environmental Management
- Wicker, Ben – Indiana Agriculture Nutrient Alliance
- Zezula, Shannon – USDA NRCS

## **Recommendation #1 - Indiana priority HUC 12 watersheds for FY24:**

- Using the that associated with the Drinking Water Viewer (<https://indwv.gecsws.com/>):
  - Christian Walker will attempt to pull data for water utilities that have a regular Nitrate level exceed 5.0, and identify the HUC 12 that these reside in
    - We will use these as the top priority HUC 12s until/if we reach the 20% land base limit.
  - If Christian is unable to get these data analyzed by the national deadline, or if the list does not reach the 20% limit, then we will use the percent of land of identified as a US EPA/IDEM Source Water Protection Areas within each HUC
    - This is the same process as used in 2021, 2022, and 2023.
- Prioritize 303d listed streams that feed surface water SWPAs
  - Ginger Davis provided these data
- Prioritize SWPAs that are of critical importance to a significant number of individuals (i.e. – Patoka Lake) or have had recurring water quality issues (i.e. – John Hayes Lake in Washington Co.)
  - Toby Days provided these data

## **Recommendation #2 – High Priority Practices in Source Water Protection Areas**

- Add 351 Well Decommissioning
- Increase the ranking priority for all High Priority Practice Source Water Protection Area practices

## NI440-313 – Guidance for Source Water Protection Targeting and Implementation to Meet the 2018 Farm Bill Provision

### Subpart A – Instruction and Guidance for Source Water Protection to Meet the 2018 Farm Bill Provisions

#### 313.0 Purpose

- A. To provide guidance to states on targeting and implementing source water protection practices to address drinking water threats.
- B. NRCS will track source water protection efforts across conservation programs using the procedures described in this instruction for FY 2019 through FY2023.

#### 313.1 Background

- A. The 2018 Farm Bill amends the Food Security Act of 1985, Section 1244, the administrative requirements for conservation programs, to add a provision for the protection of source water through targeting conservation practices. This provision, 1244(n), provides that the Secretary shall encourage practices that relate to water quality and water quantity that protect drinking water sources and that also benefit agricultural producers, through the following methods:
  - (1) Identify local priority areas for drinking water protection in each State in collaboration with State technical committees and community water systems and address concerns about either the quality or quantity of source water or both.
  - (2) Provide increased payment rates for practices that relate to water quality and quantity and protect drinking water sources while also benefitting producers.
  - (3) Dedicate at least 10 percent of the total funds available for conservation programs (excluding CRP), each year beginning in FY 2019 through FY 2023, to be used for source water protection. The 10% mandate is a cumulative total across all programs – the 10% does not need to be met by each program, nor do individual state contributions need to be 10%, although that should be each state's goal.
- B. During FY 2019, NRCS identified local priorities for source water protection as a first step in complying with the Farm Bill provision for source water protection. These local priority areas were selected in collaboration with community water systems and the State Technical Advisory Committee (STAC). A variety of approaches were used to identify these priorities, which led to significant differences in level of targeting and size of areas selected across all States. These local priorities may be considered in planning and ranking to address source water protection. However, states refined their source water priorities using the consistent targeted approach, described below.

#### 313.2 Targeted Approach

- A. NRCS uses a targeted approach in addressing threats to source water due to agricultural land uses (including private forest land) per the 2018 Farm Bill language.
- B. States have identified **high priority areas** for targeted implementation to address source water

threats. These areas are selected based on high risk factors and have the following characteristics:

- (1) The total area of all selected high priority areas represents no more than 20 percent of total land area of the State.
  - (2) Selected using HUC12 watershed boundaries (i.e. states select contiguous or non-contiguous HUC12s that contain the priority source water protection areas). Selected HUC12s that cross state boundaries will be truncated at the state line.
  - (3) Selected HUC12s attributed with data indicating the type of water source addressed (surface, ground) and the potential threats (water quality, aquifer depletion).
  - (4) Selected with consideration for State/utility source water protection area (SWPA) delineations and for EPA's density data for location and extent of SWPAs provided in their drinking water database (<https://geopub.epa.gov/DWWidgetApp/>).
  - (5) Selected with drinking water partners to determine highest priority areas where NRCS programs can address identified threats to source water. Variable risk factors considered in this selection included size of population served, reported or likelihood for harmful algal blooms (HABs), water system violations, sole-source aquifers or areas of aquifer depletion, known water quality concerns, areas of karst geology, etc. Each state developed their own criteria for prioritization.
- C. NRCS publishes high priority areas to inform partners and the public on NRCS efforts to address threats to source water in these areas, while preventing release of potentially secure information (specific source water protection areas delineations, intake locations, etc.).
- D. Leadership will determine any future opportunities to revise or update the high priority areas, and this will be noted in a future directive.

### 313.3 Source Water Priority Practices

- A. All states will provide source water priority practices with increased payment rates. Source water practices with increased payment rates can only be used within the high priority areas as defined in the Targeted Approach section above.
- B. STCs will collaborate with drinking water partners to identify key suites of practices that can address threats to source water. Safe Drinking Water Act (SDWA) source water assessments, other source water assessments or protection plans, watershed plans, ground water management plans, etc., should be the basis to determine specific threats to drinking water sources in high priority areas.
- C. State Conservationists should consider the following guidance for the selection of source water protection practices for increased payment rate:
- (1) Use the National Water Quality Initiative (NWQI) core practices (refer to National Instruction 440-307.28) as guidance for practice selection.
  - (2) Select practices that have a primary purpose of either water quality or water quantity (or both if applicable), based on the threats to drinking water in the local priority area(s).
  - (3) Use the Conservation Practices Physical Effects (CPPE) to assist in determining impacts.
  - (4) Consider selecting only primary or core practices that have significant impact on water quality or water quantity, as defined in CPPE, and not all supporting practices.
  - (5) Select practices that specifically address the source of the drinking water (ground vs. surface water systems).

- (6) Include management practices where applicable.
- (7) With respect to irrigation practices and water quantity – consider whether water savings estimated using various tools will actually be realized, with respect to state water law.

### **313.4 Tracking and Reporting on Source Water Protection**

NRCS will use a two-tiered approach to track and report on source water protection practices:

#### **A. Tier 1 - Official Accounting**

- (1) NHQ will use the EPA national source water protection area (SWPA) geospatial database for drinking water to track the total conservation program funding within these areas that address water quality or quantity concerns. These SWPAs are modeled by EPA using a consistent national process and are not expected to change significantly over time, so they provide a good basis to compare progress in addressing source water protection through NRCS programs. These SWPAs are secure data and cannot be shared for use by NRCS staff at the State level. While they may not directly coincide with state- or utility-delineated SWPAs, a high degree of overlap occurs with the State delineated high priority areas.
- (2) All contracts (EQIP, CSP, RCPP) that address the resource concerns : water quality degradation or insufficient water (FY 2019) or field pesticide loss, field sediment/nutrient/pathogen loss, salt losses to water, source water depletion, storage and handling of nutrients/agricultural/chemicals/petroleum (FY 2020-2023) will be identified annually. Those contracts that intersect the EPA national database will count towards the minimum 10 percent of agency conservation funding for source water protection. Contract obligations for source water protection will be compared to total obligations for each FY for the primary conservation programs. The FAPD Projects Branch will determine the procedure to identify the non-contract financial assistance funding for RCPP 2018 associated with source water protection.
- (3) Annually enrolled easements (Wetland Reserve Easements (WRE), selected Agricultural Land Easements (ALE)) that intersect the EPA national database will count towards the 10%. This will include acquisition costs and other appropriate obligations.
- (4) Technical assistance funds for all programs will be included.

#### **B. Tier 2 – Report on Annual Investments within State-Submitted High Priority Areas**

- (1) In addition to the minimum 10 percent conservation funding at the national level accounting for compliance with the source water protection provision, annual reports will be developed by the Areawide Planning Branch to show the total source water protection investments within the high priority areas that States identified.
- (2) These reports will be shared with NRCS leadership, State Conservationists and interested partners.

The Areawide Planning Branch within CPTAD maintains the Standard Operating Procedure (SOP) document detailing the tracking and reporting of source water protection and will provide the document upon request.

### **313.5 Business Tool Guidance for Source Water Protection**

This guidance establishes annual action items that STCs must complete to support source water protection.

A. Protracts Guidance

- (1) STCs may choose to establish separate ranking pool for source water protection, or they can use General EQIP ranking pool.
- (2) States work with drinking water partners to identify the source water priority practices that will have increased payment rates. Increased payment rates for selected source water protection practices are to be applied only within the identified high priority areas and meet the objectives of the source water protection assessments. The increased payment rates will apply only to EQIP and RCPP-EQIP. States will select source water protection practices within the Payment Schedule Application (PSA) tool. Source water protection priority practices are coded as “WP” in the payment schedules.

B. CART Ranking Guidance

- (1) States that choose to establish separate ranking pools for source water protection should develop weightings that reflect the Resource Concern Category and subcategories that relate to threats to source water. Include all land uses that have the potential to impact source water.
- (2) States should include ranking questions in ranking pools that can further identify and elevate applications that have the highest potential to address threats to drinking water, based on applicable assessments. Ranking should promote applications with conservation practices and activities planned in specific source water protection area delineations within the high priority HUC12 watersheds.

C. Funding and Allocation Guidance

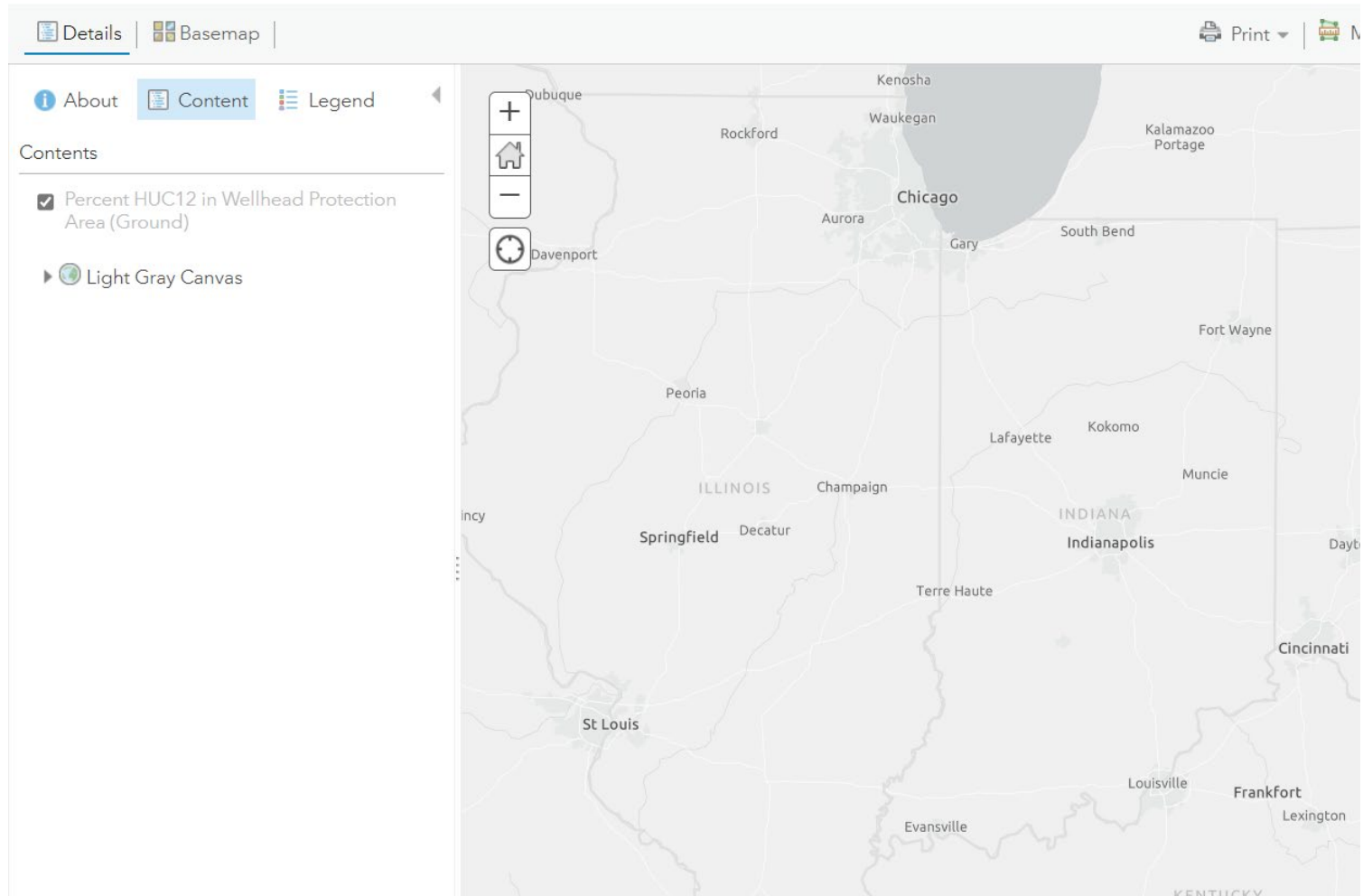
- (1) Nationally, the Farm Bill requires that NRCS invest at least 10 percent of conservation program funding each year from FY 2019-FY 2023 to source water protection.
- (2) Ideally, STCs should target 10 percent of their program funding to support source water protection activities in high priority areas.

### 313.6 Program Contact Information

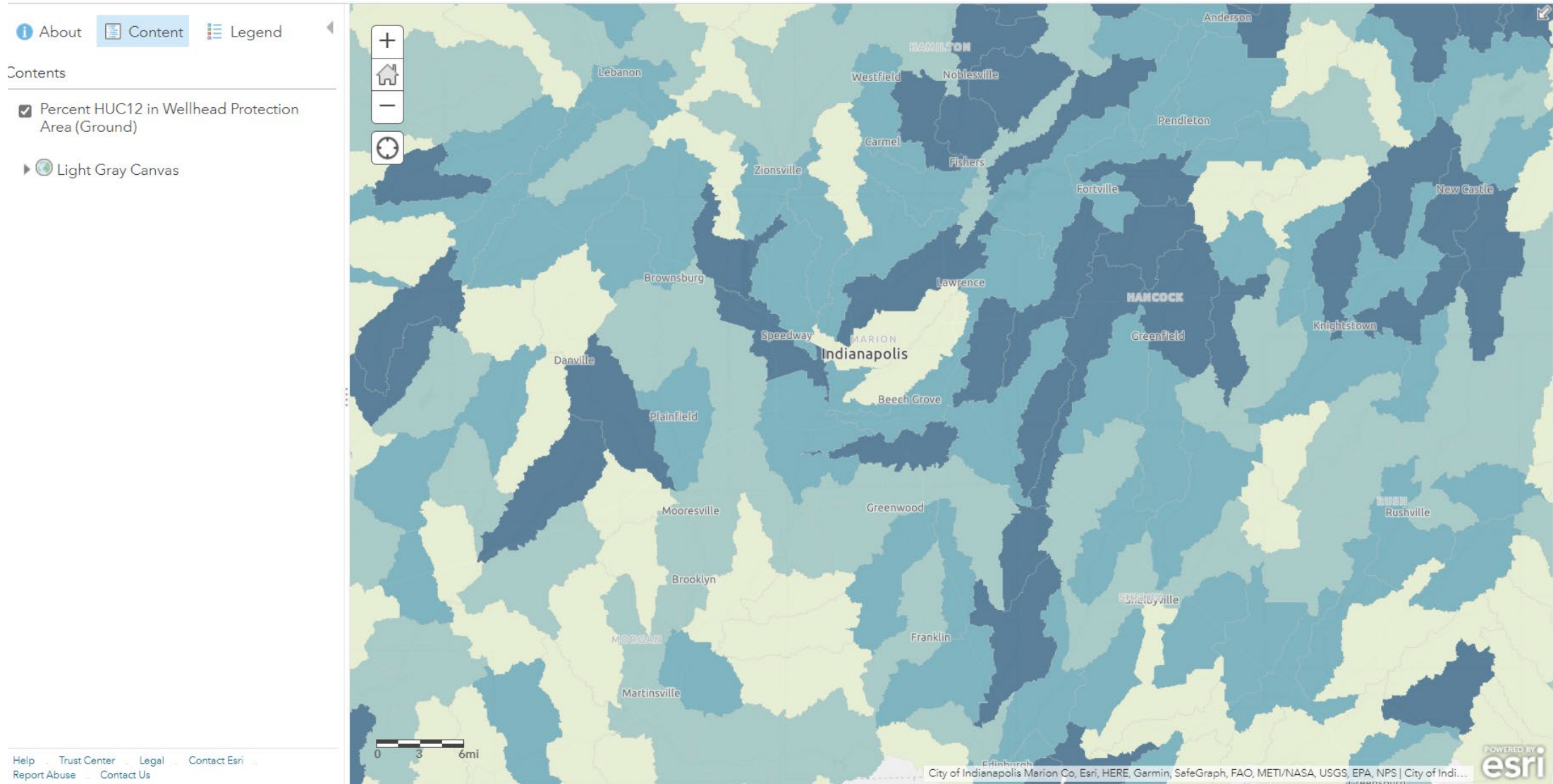
[Conservation Planning and Technical Assistance Branch](#), Areawide Planning Branch Chief: Martin Lowenfish, (202) 690-4979, [martin.lowenfish@usda.gov](mailto:martin.lowenfish@usda.gov)

Financial Assistance Programs Division, Implementation Branch Chief (Acting): Danielle Balduff, (202) 720-6168, [danielle.balduff@usda.gov](mailto:danielle.balduff@usda.gov)

# US EPA SWPA HUC 12 Data

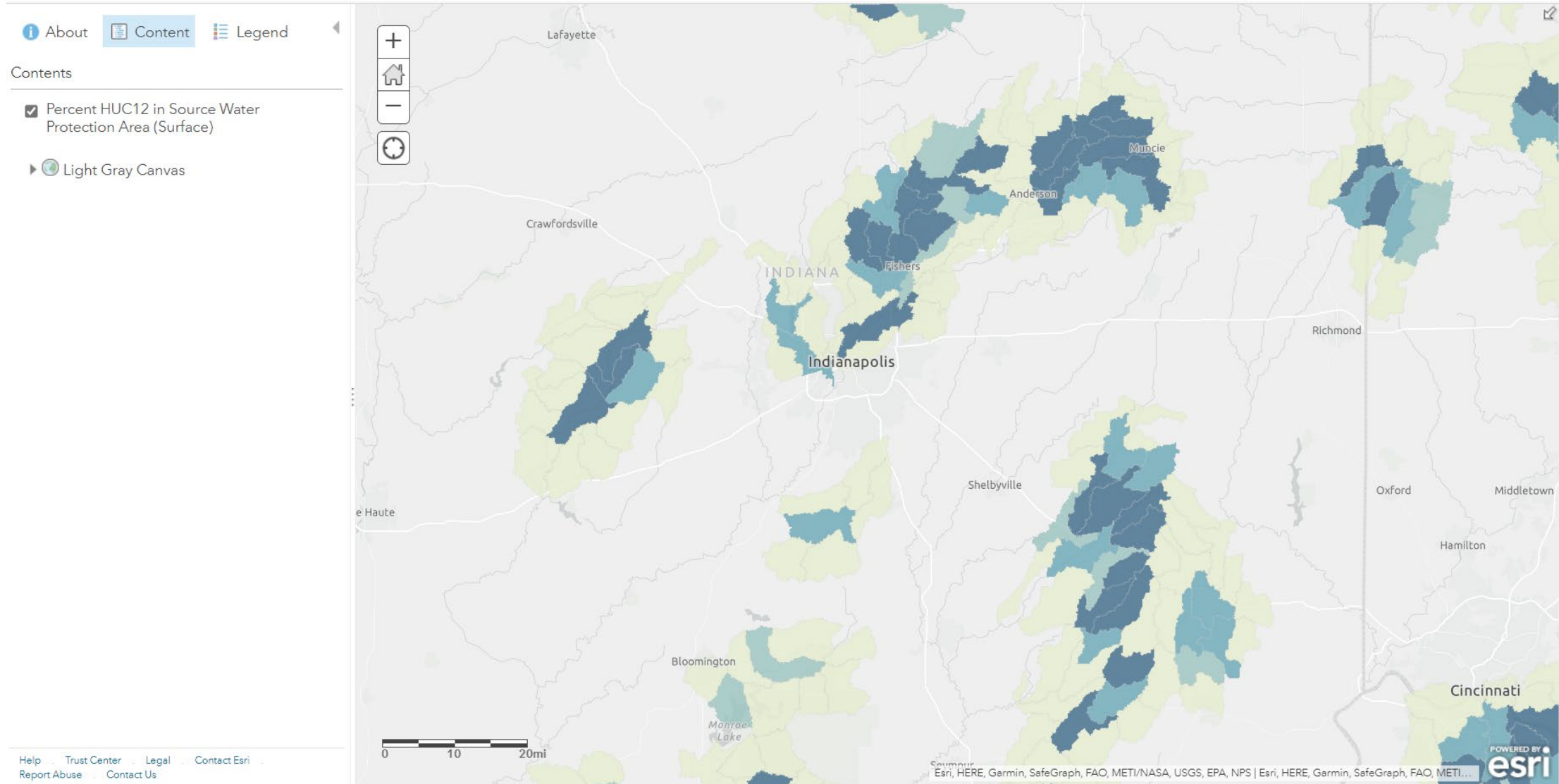


# US EPA SWPA HUC 12 Data – Wellheads



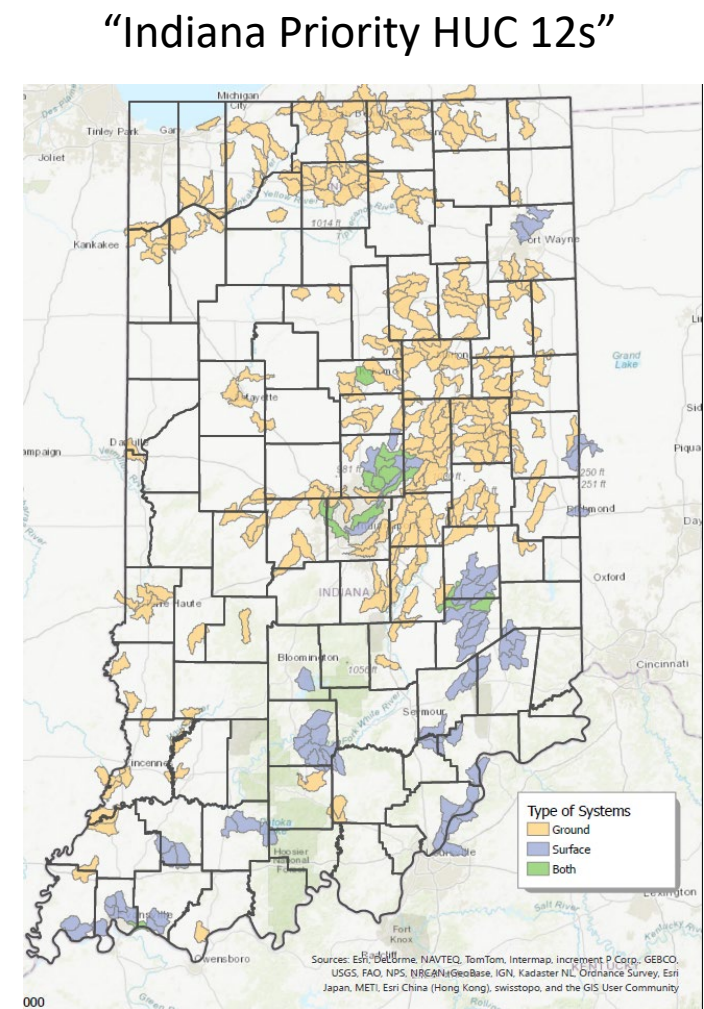
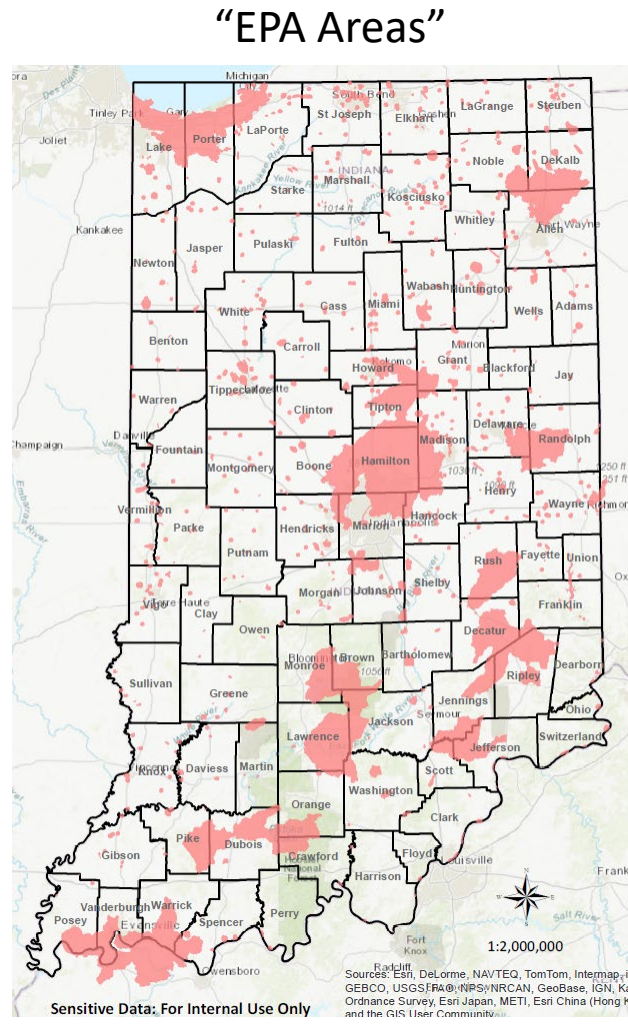


# US EPA SWPA HUC 12 Data – Surface Waters



# Indiana Historical Obligations in Source Water Protection Areas

FY20			
	SWPA Ob	Total Ob	%
EPA	\$9,797,382	\$34,232,127	29%
IN priority	\$5,629,633	\$34,232,127	16%
FY21			
	SWPA Ob	Total Ob	%
EPA	\$8,206,456	\$36,168,570	23%
IN priority	\$5,277,519	\$36,168,570	15%
FY22			
	SWPA Ob	Total Ob	%
EPA	\$9,804,122	\$41,492,228	24%
IN priority	\$6,531,683	\$41,492,228	16%
TOTALS			
	SWPA Ob	Total Ob	%
EPA	\$27,807,960	\$111,892,925	25%
IN priority	\$17,438,835	\$111,892,925	16%



Indiana Acres = 23,308,821 Acres  
 20% = 4,661,764 Acres

# Indiana SWPA High Priority Practices

## “Increased Incentives...” Indiana NRCS SWPAs

- Providing increased incentives for practices that relate to water quality and quantity and protect drinking water sources while also benefitting producers.

**75% Payment Rate -> 90%**

**328 Conservation Crop Rotation**

**605 Denitrifying Bioreactor**

**554 Drainage Water Management**

**447 Irrigation and Drainage Tailwater Recovery**

**582 Open Channel = 2-Stage Ditch**

**782 Phosphorus Removal System**

**587 Structure for Water Control**

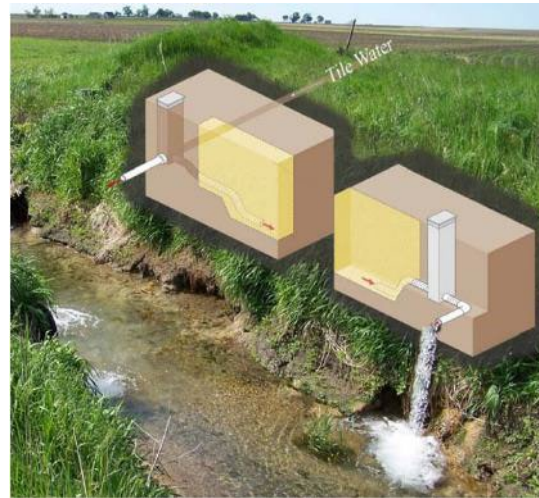
**620 Underground Outlet – Blind Inlet for Water Quality**

**351 Well Decommissioning**

# “Increased Incentives...” Indiana NRCS SWPAs

## Indiana High Priority Practices

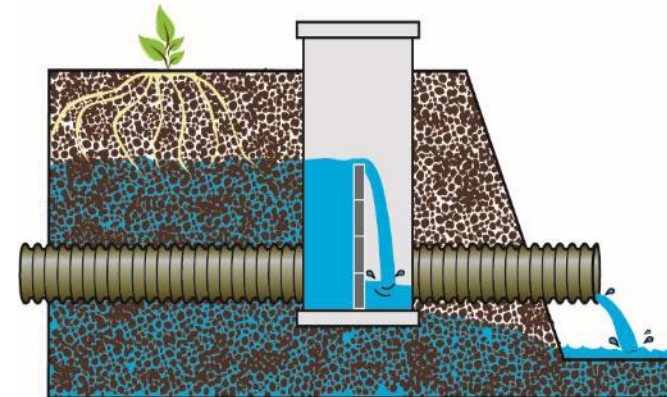
Denitrifying Bioreactors



Blind Inlets



Drainage Water Management



2-stage Ditch

