

# Precision Conservation at Scale: James River Water Quality Improvement Program

How FieldDoc connected strategic conservation targeting with verifiable on-the-ground implementation across Virginia's longest river

\$16M+

IN GRANTS  
AWARDED

657

CONSERVATION  
PRACTICES  
DEPLOYED

808.7K  
LBS/YR

NITROGEN  
REDUCED  
ANNUALLY

37.8M  
LBS/YR

SEDIMENT  
REDUCED  
ANNUALLY

95%

PRACTICES ON  
TOP 2 PRIORITY  
TIERS

## OVERVIEW

Working in partnership with the Virginia Environmental Endowment (VEE), The Commons developed the implementation tracking infrastructure for the James River Water Quality Improvement Program (JRWQIP) — a landmark \$15.595 million grant initiative designed to accelerate water quality restoration across the James River watershed. The FieldDoc platform provides practice-level tracking that captures each conservation intervention deployed by VEE grantees, from riparian buffers and agricultural best management practices to living shorelines and stream restorations, with precise spatial accuracy and automated pollutant load reduction modeling.

*"We are very pleased to showcase the improvements made thus far to the James River by our 13 grantees. Thanks to the Restoration Planner from the Chesapeake Conservancy and the FieldDoc tracking platform from The Commons, VEE and our grantees can now quickly determine the potential environmental impact of a proposed project, ensuring that we are investing our efforts and private funds in the most effective way."*

— Joseph H. Maroon, Executive Director, Virginia Environmental Endowment

## STRATEGIC ALIGNMENT: WHERE INVESTMENT LANDED

By overlaying FieldDoc practice data onto the Restoration Planner's tier-ranked parcels, VEE can now verify that grant-funded restoration is concentrated where the science says it matters most.

Tier 1 77% of all project implementation

Tier 1+2 95% combined project implementation

Tier 3-5 5% combined project implementation

**Closing the accountability loop:** The JRWQIP answers a question most grant programs cannot — *did we invest where the data told us to invest?* The answer: an overwhelming yes.

## ESTIMATED ANNUAL POLLUTANT REDUCTIONS

808.7K

LBS / YEAR  
Nitrogen  
reduced

71.8K

LBS / YEAR  
Phosphorus  
reduced

37.8M

LBS / YEAR  
Sediment  
reduced

## PROJECT IMPACTS

- First-of-its-kind integration linking precision conservation planning to practice-level implementation tracking
- Grantees autonomously report, map, and update practices — building lasting geospatial data capacity
- Spatial verification provides VEE's Board and stakeholders with empirical confidence in every investment
- Replicable model for watershed-scale funder accountability across conservation programs nationwide

## PLATFORMS & TOOLS

### FieldDoc

Practice-level conservation tracking, geospatial mapping, and automated nutrient & sediment load reduction modeling

### Restoration Planner

Chesapeake Conservancy's precision targeting tool ranking every parcel by restoration opportunity at 1-meter resolution

### ArcGIS StoryMap

Public-facing narrative visualization with embedded FieldDoc-powered dashboards for stakeholder engagement

## RESTORATION STRATEGIES

- ▶ Riparian buffer installation
- ▶ Agricultural BMPs + technical assistance
- ▶ Stormwater management
- ▶ Stream restoration & floodplain reconnection
- ▶ Living shoreline construction
- ▶ Jamestown-region targeted interventions

## CONTACT US

200 Massachusetts Avenue NW, STE 7, Washington, D.C. 20001

[support@ourcommoncode.org](mailto:support@ourcommoncode.org) | [ourcommoncode.org](http://ourcommoncode.org)