

MD iMap

One Maryland, One Map

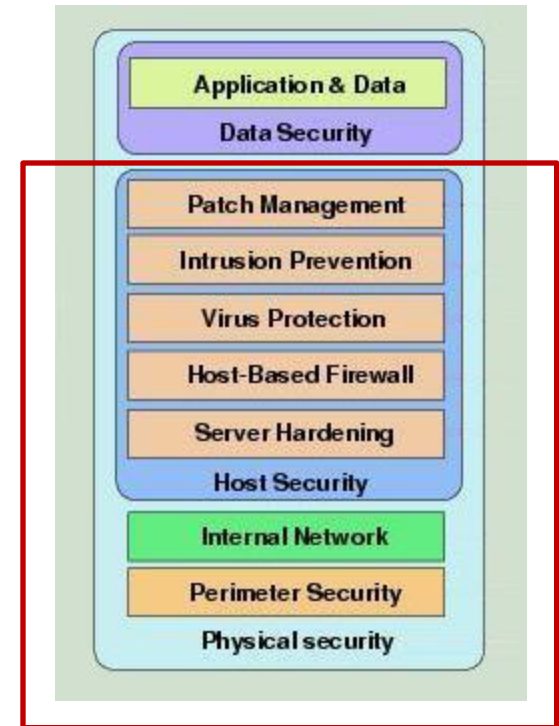


MD iMap Key Security Questions

- What Do We Have?
- What Do We Need?
- What Are the Benefits?
 - Use Case Scenario
- How Do We Administer & Manage?
- What Are the Costs?
 - Capital Costs
 - Operating Costs
- What Are the Next Steps?

What Do We Have?

- System-Level Security
 - Physical Infrastructure
 - Network Infrastructure
- ArcGIS Server Administrative Security



MD iMap is an open system –

All applications & data services are publicly accessible

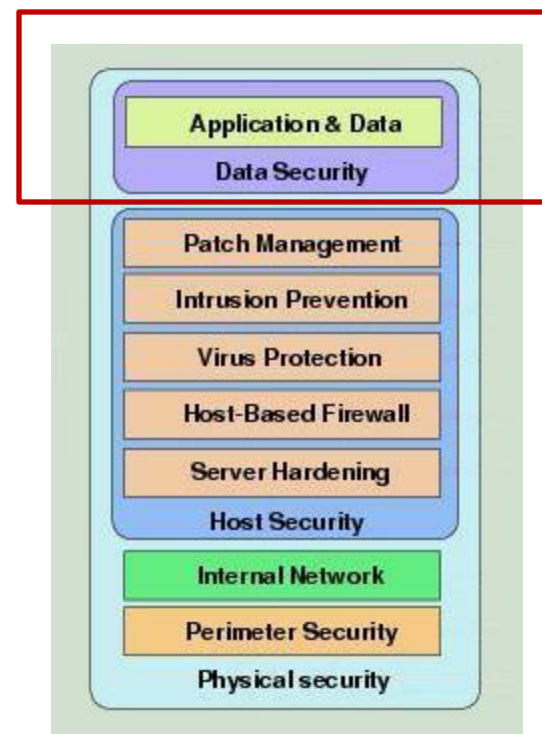
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What Do We Need?

- End User Security
 - Authentication
 - Authorization
 - Identity Management



What Do We Need?

- Users that can be segmented (Public vs. Government)
- Applications that can be access controlled
- Data that can be made available for enhanced analysis (more than view only)

What Are the Benefits?

- Secure applications and/or functions for hosted applications
- Allows for sensitive or use constrained data to be secured
- Allows for data downloading of appropriate datasets (imagery, centerlines, political boundaries)
- Restrict or allow system intensive processes
- Define user groups for access purposes

What Are the Benefits?: Use Case Scenario

Cover Crop Targeting:

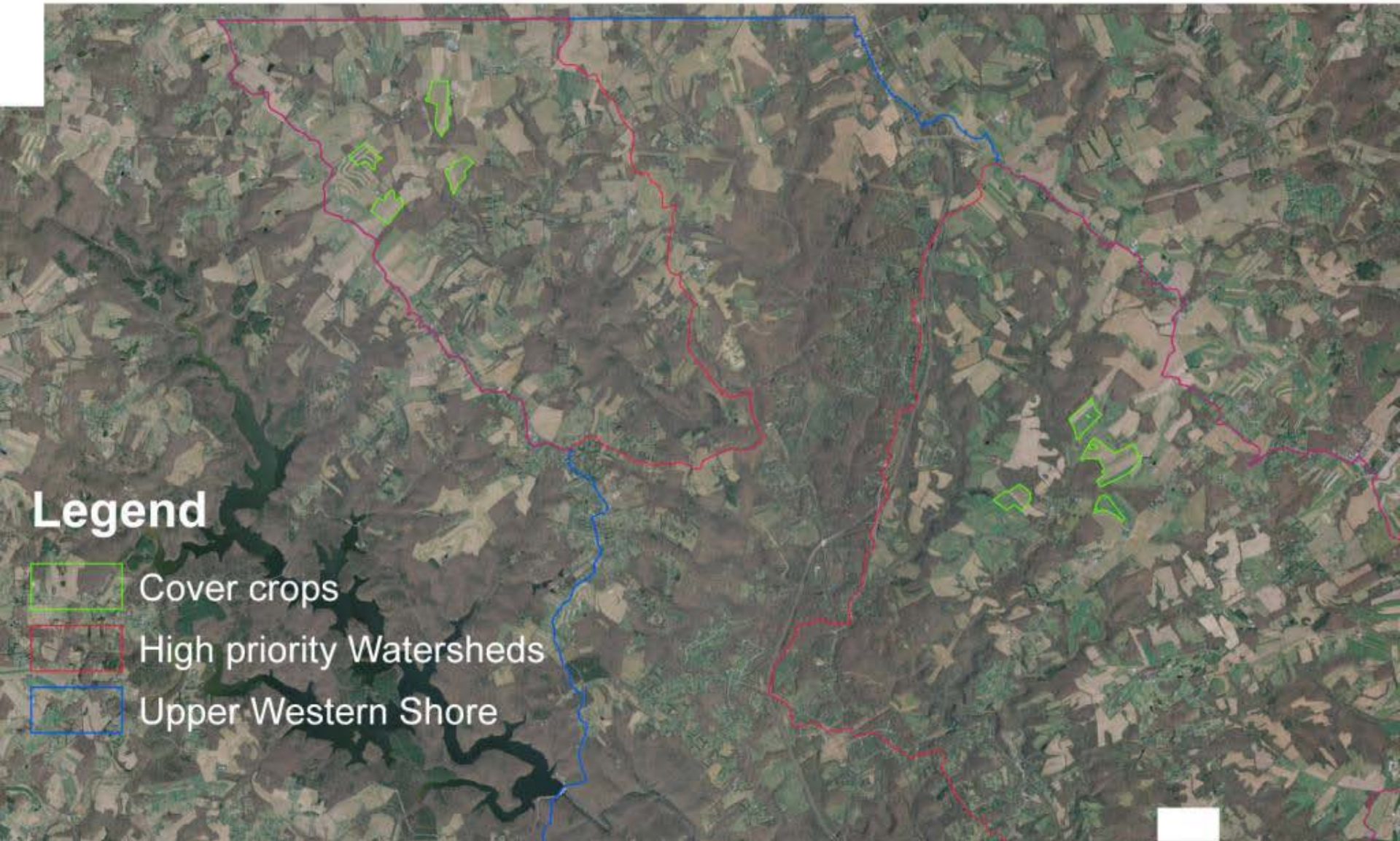
- Identify farmers willing to plant cover crops
- Identify fields to plant
- Track progress
 - Verify field is within priority watershed area

What Are the Benefits?: Controlled Application & Data Access

Web application views based upon roles:

- Farmers and MDA District Office (Private)
 - Farmers cover crop request form
- StateStat and MDA (Restricted Information)
 - State crop practices
- Public (Public Access)
 - Cover crop information is aggregated by watershed

Crop Cover Targeting: Farmers & MDA District Office View



Legend

-  Cover crops
-  High priority Watersheds
-  Upper Western Shore

MD iMap

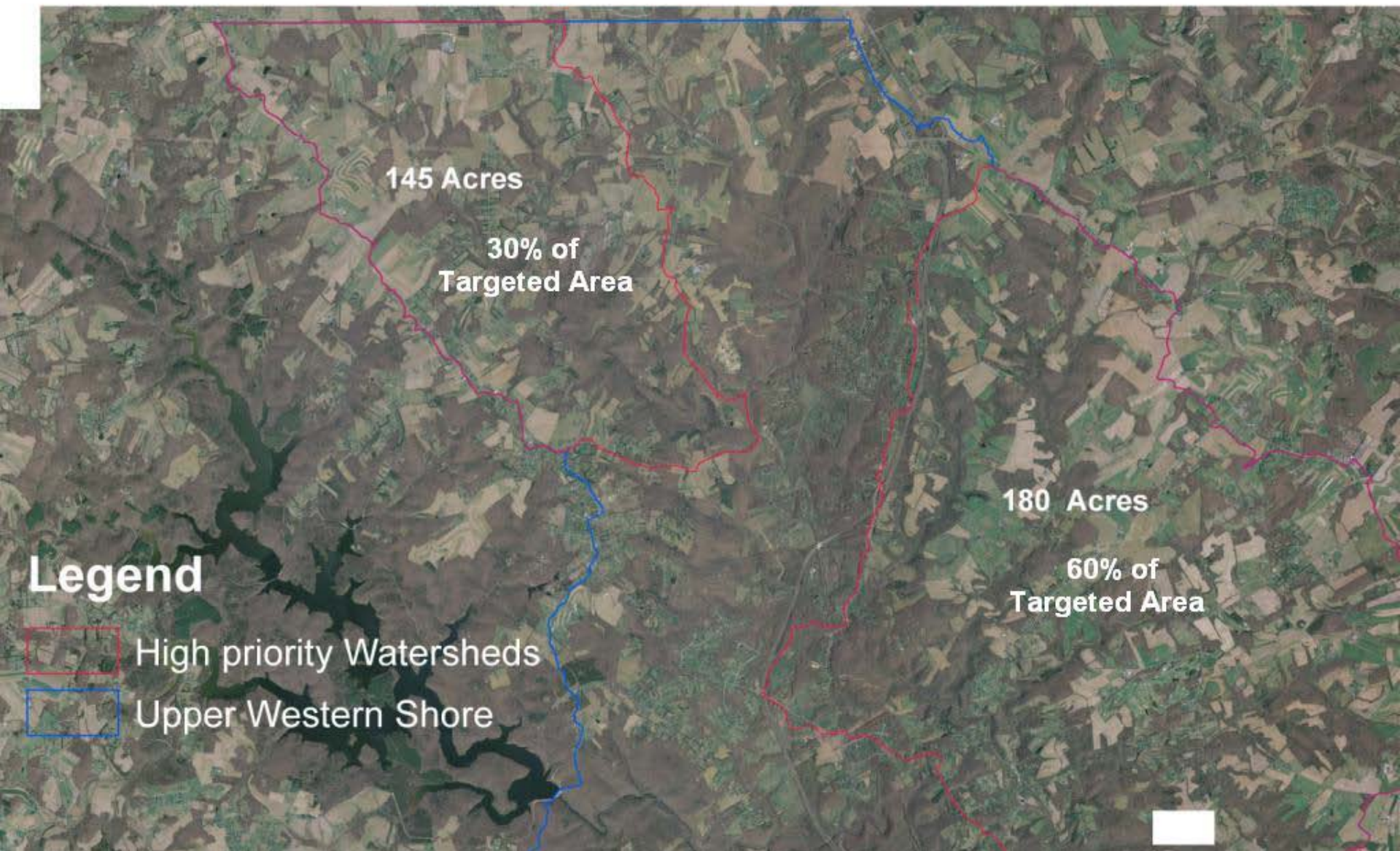
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Crop Cover Targeting: StateStat & MDA View



Cover Crop Targeting: Public View



How Do We Administer & Manage?

Credential Administration (Username/Password):

1. End user self-enrollment/password reset
2. Agency MD iMap Credential Coordinators
 - Approves or rejects based on employment/contract status
 - Follow rules for group enrollment
 - Remove employees no longer employed/under contract
3. Dedicated Security Help Desk (Support Agency Coordinators)
 - DoIT Help Desk, CGIS Help Desk, Other?
4. MD iMap Security Administrator (Support Agency Coordinators and Help Desk)
 - CGIS administrators maintain and support security infrastructure
 - Provide 4th layer in end-user support triage

How Do We Administer & Manage?

MD iMap Security Policy, Procedure and Oversight:

- MD iMap Security Subcommittee (Access Management Team)
 - Team members from MD iMap community – Appointed by GIO
 - Report to the MD iMap Technical Committee
 - Develop Security Policies
 - Monthly Audit Reports to GIO

What Are the Costs?

- Capital Costs
 - Software Security Framework
 - Software
 - Implementation Support
- Operating Costs
 - Software Maintenance
 - Annual Cost
 - Systems security administrator
 - 1/2 FTE
- Schedule
 - Rolling production deployment as delegated administrators come online (8-10 month window)

What Are the Next Steps?

- Agreement to Proceed with Enhanced Security Solution
 - Approval in concept from MD iMap Executive Committee
 - Procurement Approach
 - Allocate Budget
 - Implement
 - Rollout