

Improving Protected Area Trends Data in the PLI



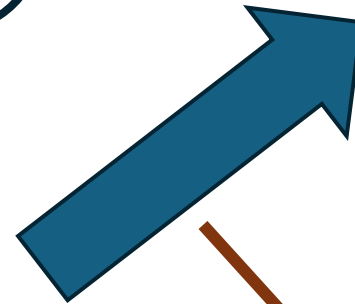
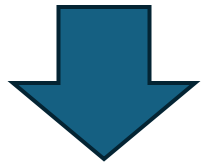
Presenter: Steve Storck
Storck Mapping

Project Overview



NFWF

Chesapeake WILD-PTA



Chesapeake Bay Program

Science. Restoration. Partnership.



**Storck
Mapping**

Objectives

Current Data Improvement

Improving PLI
Data Quality

90% DoE
Completeness

Usable Vector
Geodatabase

**Updating &
Systematizing
Date of
Protection Data
Collection**

Future-proofing

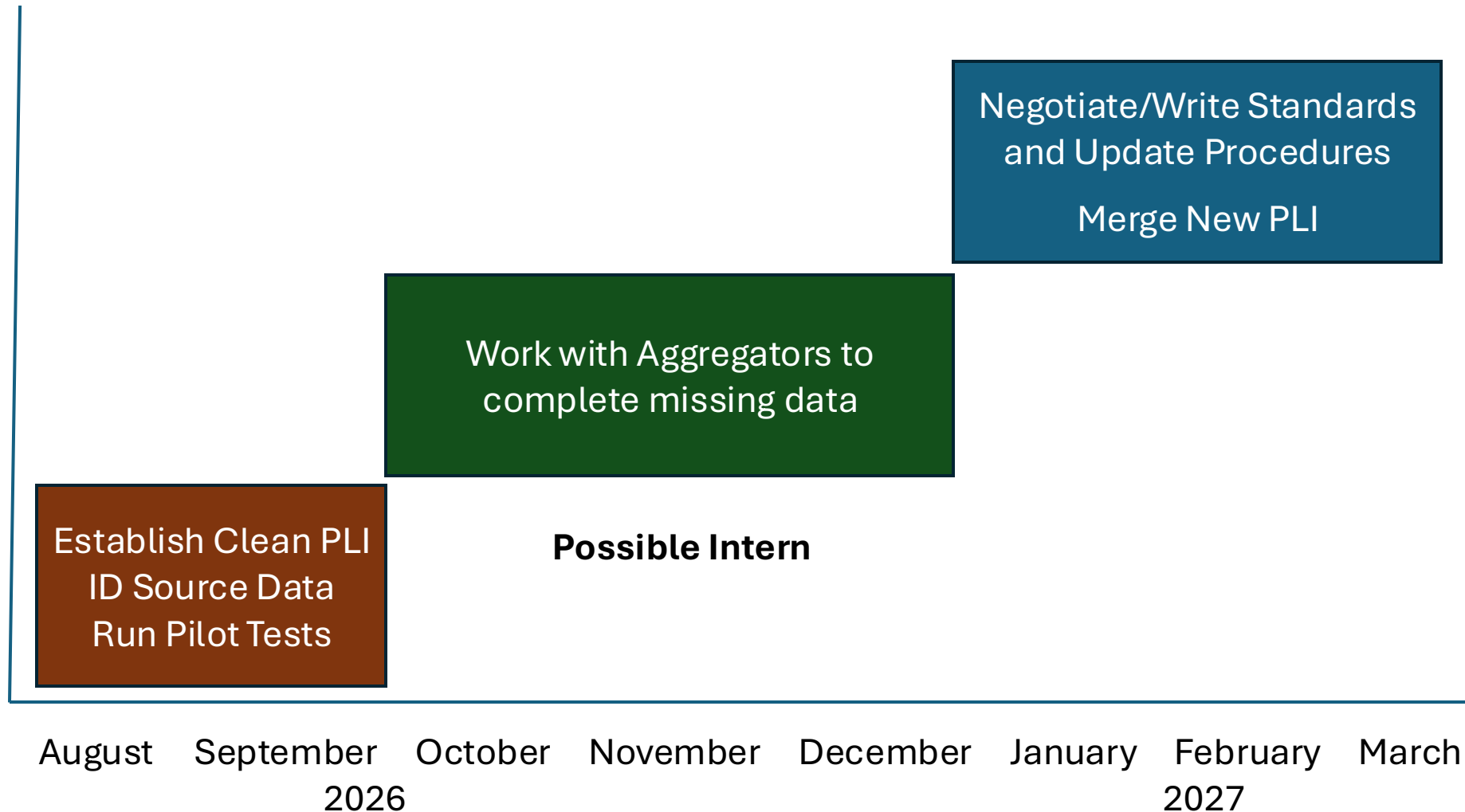
Standard Data
Accessioning

Manageable
Data Updates

Repeatable
Merge Process

Build on Source Datasets

Timeline



Date of Establishment **vs** Year of Protection

Date of Establishment (Date_Est/DoE)

The year (yyyy) the protected area was designated, decreed or otherwise established.

Source: PADUS/PLI

Year of Protection (Year_Prot/YoP)

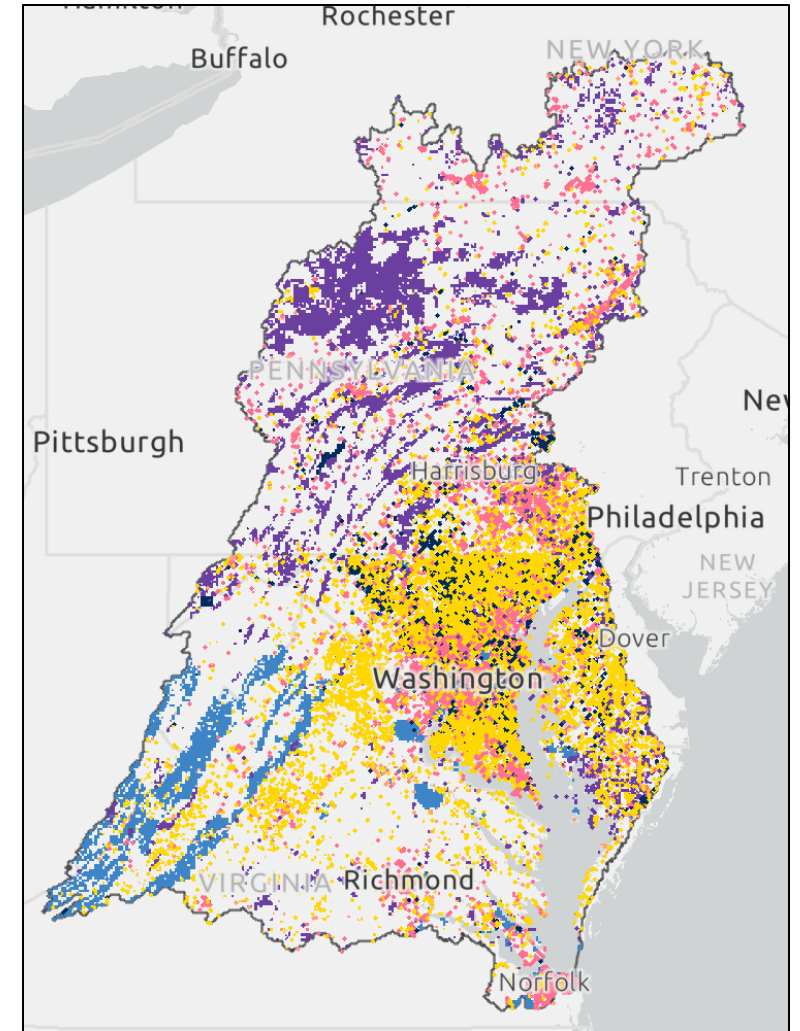
The year (yyyy) the property was legally protected via fee acquisition or enactment of a conservation easement.

Source: MD Ag Lands

Purpose: To allow tracking of land protection towards 2 mil acres by 2025

Initial Review of PLI

- Current PLI Raster – Ownership and Acreage Only
 - Acreage Trend not based on Protection Date
- Vector PLI
 - ~62% missing useable DoE/No YoP
 - Has considerable duplication
 - 10.6 mil acres vs 9.3 mil acres in raster
 - 52,000 of 81,000 records overlap
 - Has conflicting information
 - Same land units have different acreage
 - Conflicting owner/management data
 - Contains military lands (216,000 acres)

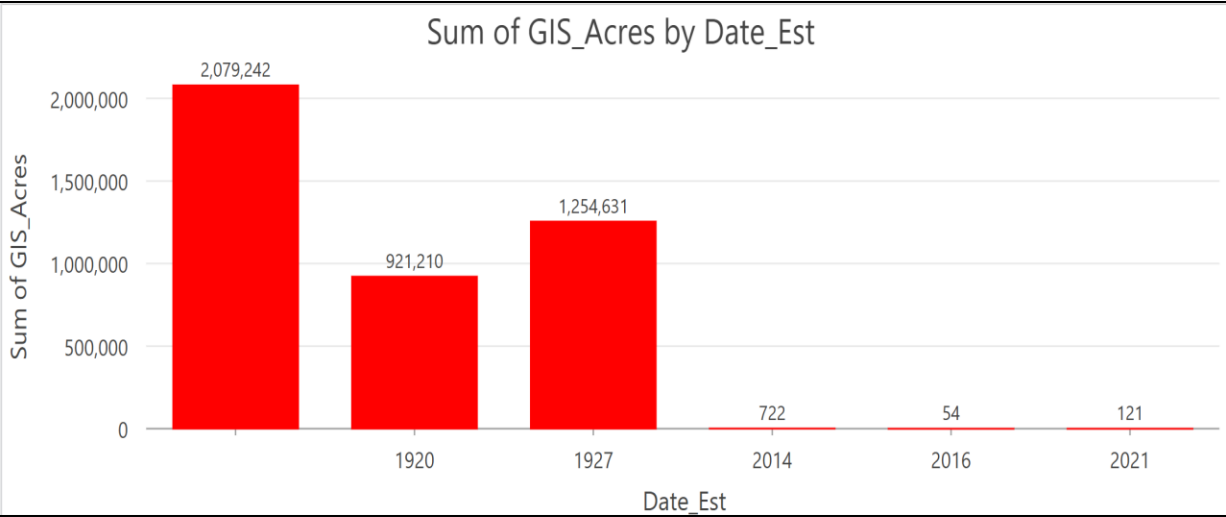


PLI Review: Duplication/Acreage Inflation

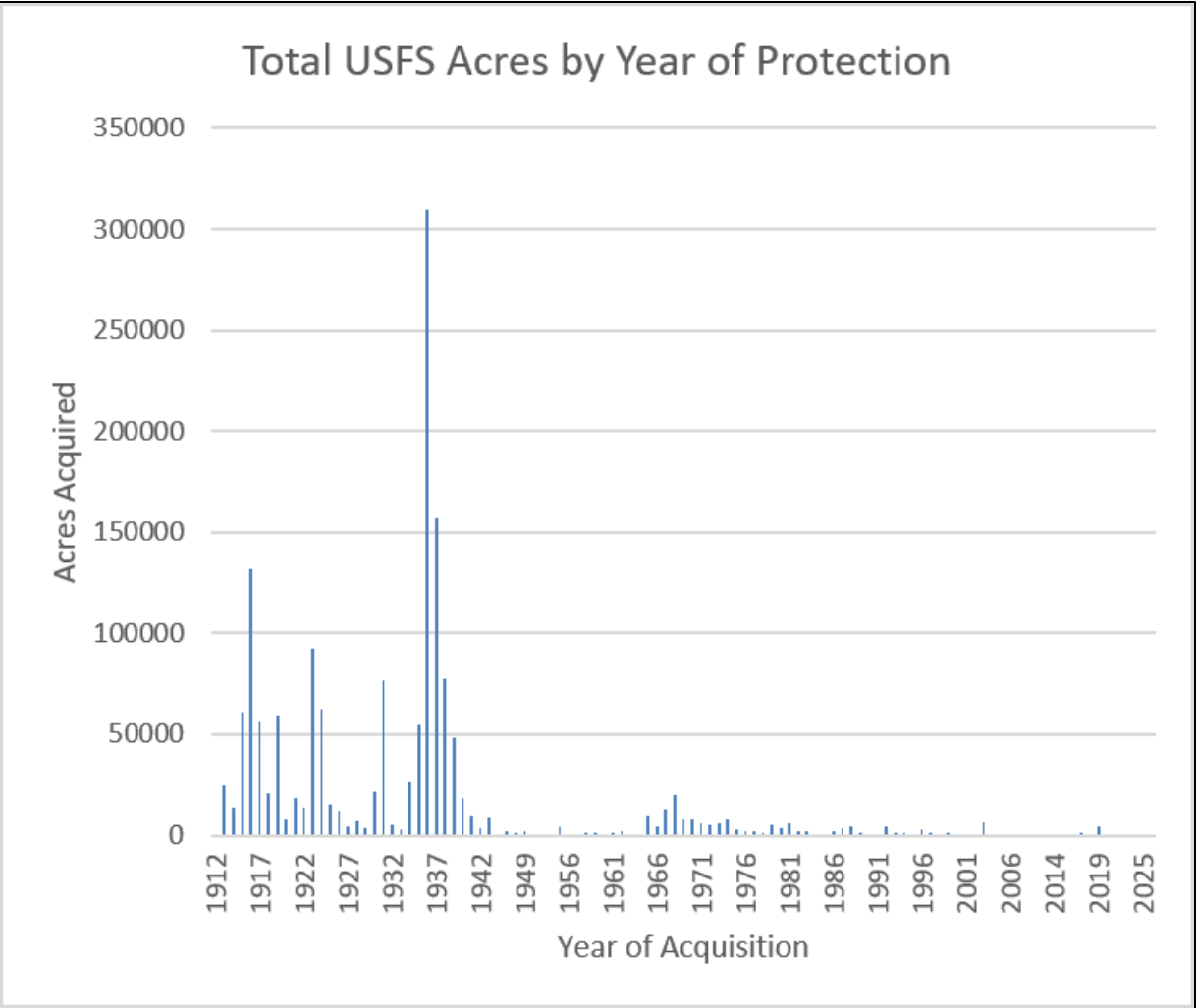
Jurisdiction	PLI 2024		
	2024	Poly Acres	Duplication
Delaware	131,105	131,795	690
District of Columbia*	8,400	8,522	122
Maryland*	1,700,342	1,888,254	187,912
New York	307,547	329,577	22,030
Pennsylvania*	3,688,818	4,067,713	378,895
Virginia*	3,120,421	3,738,421	618,000
West Virginia*	320,122	446,602	126,480
Watershed-Wide Progress Since Previous Tracking Year	167,475		
Watershed-Wide Cumulative Total Acres of Protected Land	9,276,754	10,610,884	1,334,130
Acres of Unprotected Land	31,468,446		
Total acres in watershed portion of state	40,745,200		
Percent Protected (Cumulative)	23%		
Ownership Type	PLI 2024		
	2024	Poly Acres	Duplication
Federal	2,101,599	3,109,167	1,007,568
Local Government	425,169	475,220	50,051
Non-Governmental Organization	91,523	92,958	1,435
Private	2,269,292	2,458,716	189,424
State	4,144,065	4,214,771	70,706
Joint Ownership	35,605	35,604	-1
Tribal	2,260	3,678	1,418
Other	207,240	219,066	11,826
Watershed-Wide Progress Since Previous Tracking Year	167,475		
Watershed-Wide Cumulative Total Acres Protected	9,276,754	10,609,180	1,332,426

Trend Example: US Forest Service Lands

Current PLI Vector Data



USFS Surface Ownership



Clean PLI Vector Dataset

Reduce number of records to the fewest needed with the most authoritative data

Review 2024 PLI

- Data consistent with “protected”
- Raster:Vector acreage comparison
- Duplicate records
- Topology check
- Date of Establishment completion

Strategy Development 2024 PLI

- What are the sources of data inflation?
 - Jurisdictions
 - PADUS/Fed
 - Merge Process
- Where best to create sustainable solutions?
- Review merge processes to eliminate/reduce
- ID Authoritative ranking of data sources

Action thru Partnership

- Clean base feature layers with data aggregators
- Establish and conduct jurisdiction merge procedures
- Conduct new baywide PLI data merge

Phase 2: Complete YoP Data Acquisition

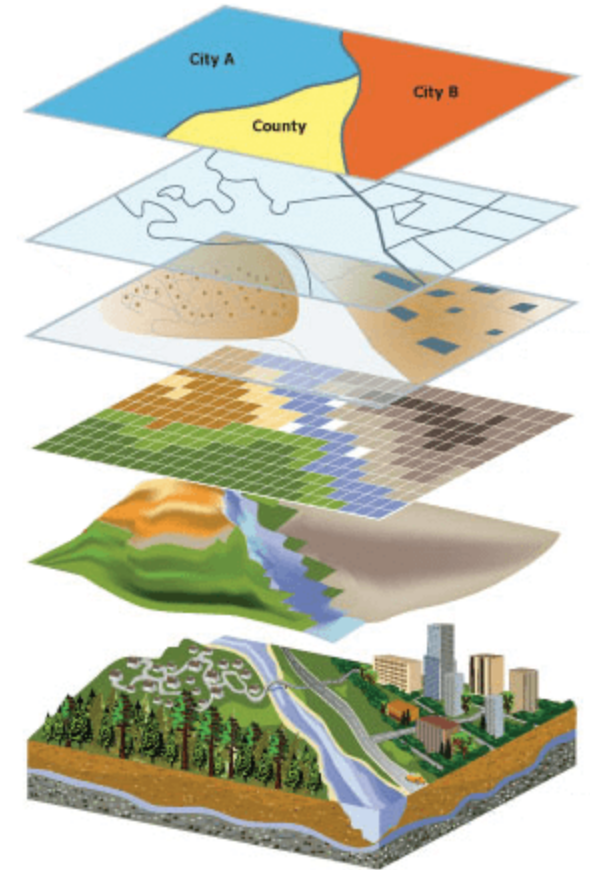
- Assist jurisdictions with Year of Protection data acquisition
- Target: Secure YoP for at least 90% of PLI records

Priority 1 – merge date from other GIS data sources

Priority 2 – merge date from other non-GIS sources with relational field

Priority 3 – research missing date through online land records

Priority 4 – research missing date through paper records



Questionnaire Worksheet Review

1. Name, Jurisdiction, Agency
2. How does your jurisdiction/agency define Protected Lands?
3. Does your jurisdiction/agency have a definition for “Date of Establishment”? *If yes, please provide the definition.*
4. Do you maintain a data field for Date or Year of Protection? *If yes, please provide the field definition and any relevant attributes.*
5. Is “Date of Establishment” used interchangeably with “Date of Protection” in your datasets?
6. Does your jurisdiction or agency have an online data access portal for parcel and deed records? *If yes, please provide the link and any access instructions.*

Questionnaire Worksheet Review

7. Are there areas where data is missing or difficult to obtain that you would like this project to focus on first?
8. Do you maintain a surface ownership or purchase history dataset for large, multi-parcel state lands?
9. Are you aware of any Federal lands datasets (NPS, FWS, BLM, FS, USACE, NOAA) that include surface ownership records? *If so, please share the data source and/or a contact person.*
10. Are you aware of any upcoming or ongoing projects that may affect large numbers of records in your PLI submission datasets? *If so, please provide any significant dates or deadlines so we can ensure ongoing work is not overwritten by changes to base datasets.*
11. Please provide your most up-to-date source datasets for the PLI.
12. Are there any other contacts we should include in this project?

Questions/Discussion

- Please return Worksheet to Sophie by September 4th
- Contact:
Steve Storck
storckmapping@gmail.com
301-616-0307
- Thank you for your partnership on completing this project.

