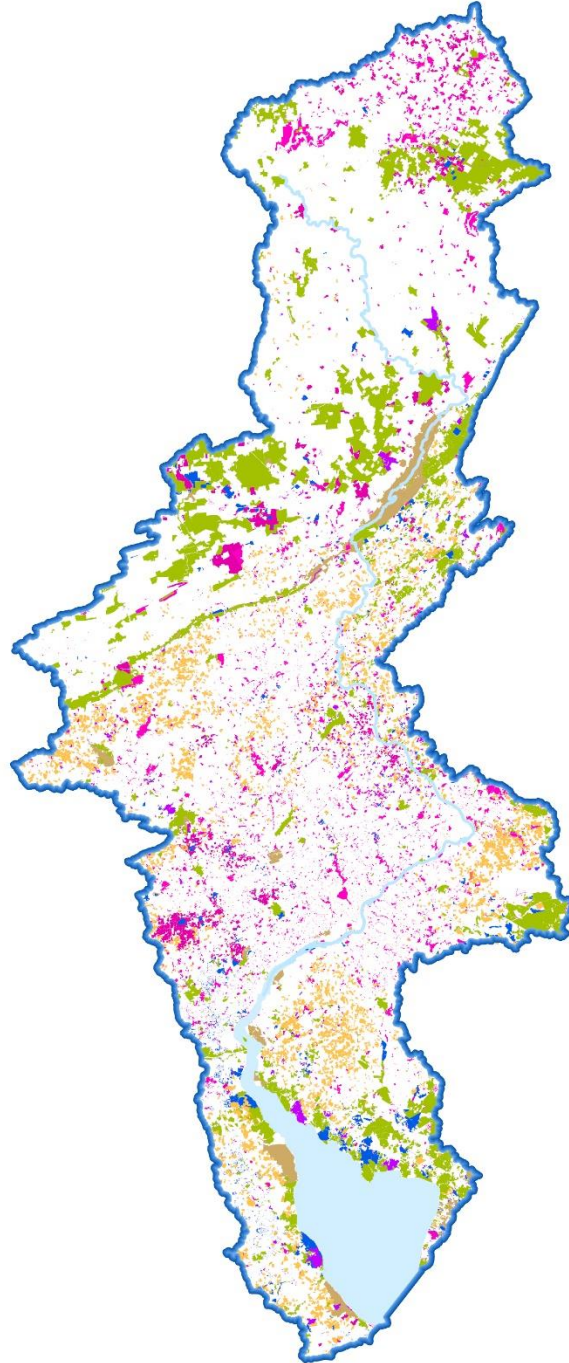


Delaware River Basin Protected Lands

2024 Summary



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Grant funded through the William Penn Foundation*

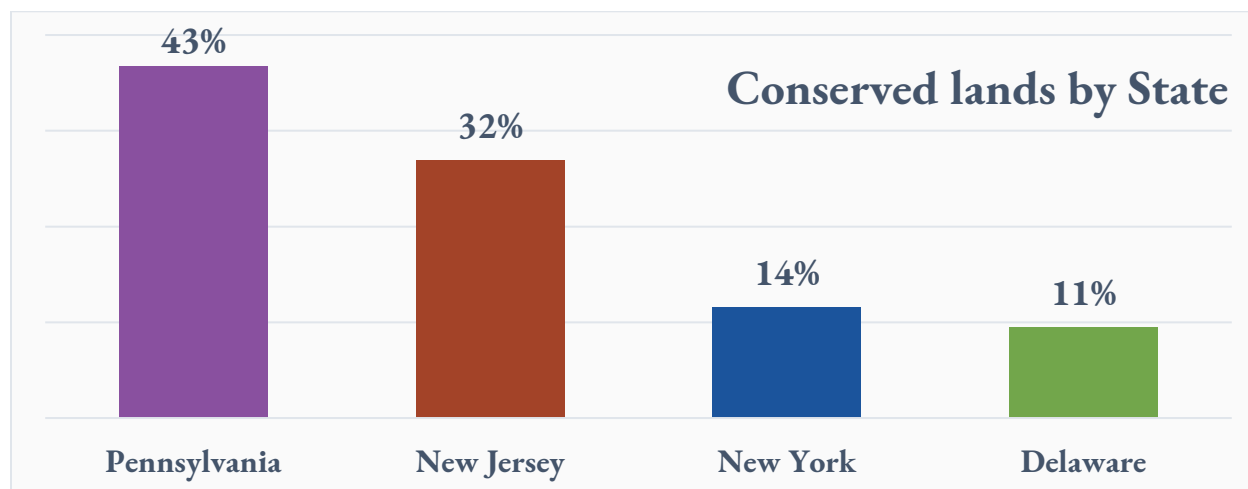


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Land Conservation Metrics and Statistics

Figure 1. Percentage of Conserved Lands within the Delaware River Basin by State



The percentage of conserved lands within the Basin by state are as follows: 43% within Pennsylvania, 32% within New Jersey, 14% in New York, 11% in Delaware, and less than 1% in Maryland (Figure 1). Protected properties are categorized by jurisdiction level (federal, state, local, or land trust) and conservation type (fee owned or easement). The Delaware River Basin boasts over two million acres of conserved land of which 70% are fee owned lands and 30% have an easement on the property (1,449,800 acres and 633,200 acres, respectfully). Government owned or eased lands (including agricultural preservation) comprise 87% of land conservation while land trusts protected 13% (Figure 2, Table 1). Of the government-held or eased lands, 43% State-held, 21% are agricultural easements, 15% are county or municipal, 6% is federal, and 2% are other government conservation easements. Conservation easements account for 52% of land trust protection while fee acquisitions are 48%. Twenty-six percent (26%) of the Delaware Basin is under some kind of conservation protection (Figure 3).

Figure 2. Land ownership or easement holder organizations

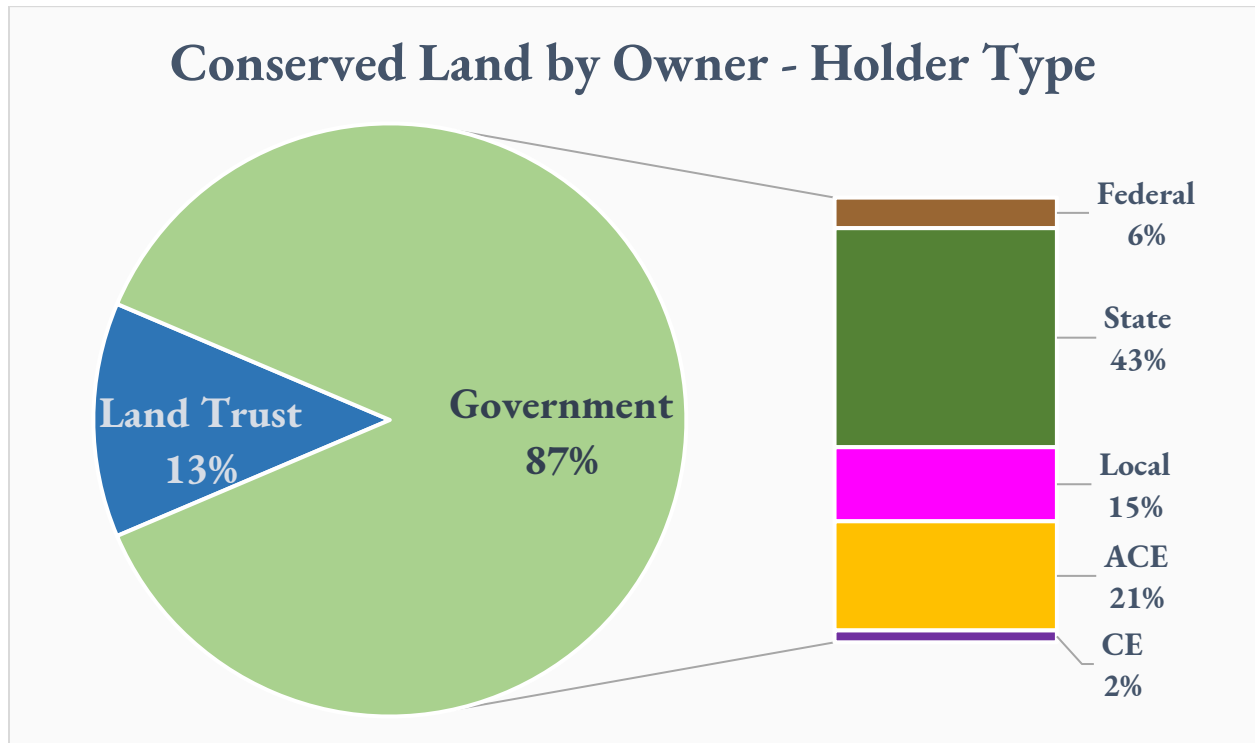


Table 1. Acres conserved per state by conservation category

Category	Pennsylvania	New York	Delaware	New Jersey	DRB
Federal	25,205		53,424	46,181	124,810
State	382,242	173,448	58,139	279,944	894,571
Local	141,573	72,073	13,212	76,368	303,226
Government Agricultural Easement	183,332		63,127	199,780	446,239
Government CE	28,883	5,844	5,947	14,336	55,035
Land Trust	37,019	4,765	36,719	49,221	127,723
Land Trust CE	119,093	32,718	4,881	6,136	162,827
Conserved Lands	917,346	288,848	235,449	671,965	2,114,430

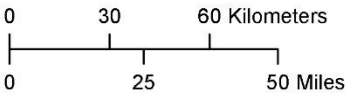
** Total conserved lands within the Delaware River Basin include 822 acres in Maryland, of which of 800 are State land and 22 acres are government easements.*

Figure 3. Map of Protected Lands in the Delaware River Basin

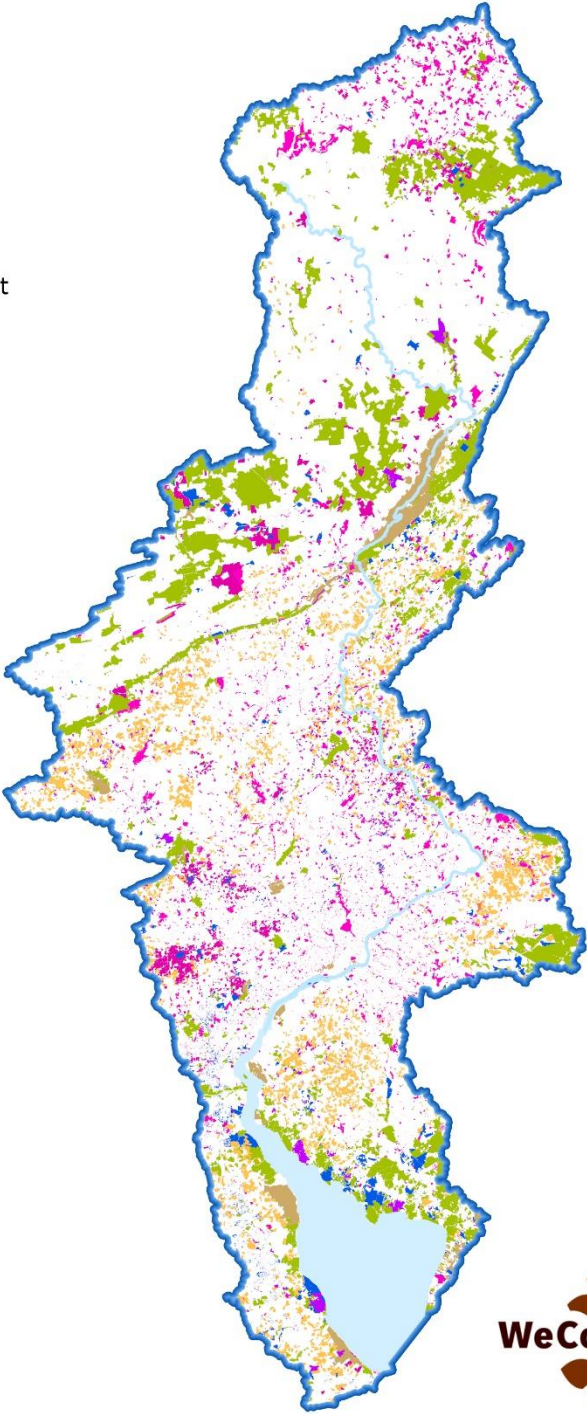
Protected Lands in the Delaware River Basin

Conservation Category

- Federal Land
- State Land
- Local Government Land
- Land Trust Land
- Government Agricultural Easement
- Government Conservation Easement
- Land Trust Conservation Easement



Disclaimer: Multiple data sources from four states and a multitude of land trusts were used for this comprehensive protected lands map.



DRWI Cluster Groups

Eight sub-watershed regions of the Delaware River Basin create collaboration clusters amongst land trusts and watershed associations which directly affect priority restoration and conservation areas

(**Error! Reference source not found.**). Together, these clusters account for nearly 25% of the basin yet contain 54% of DRB conserved land, which is crucial to improving water quality that will uplift

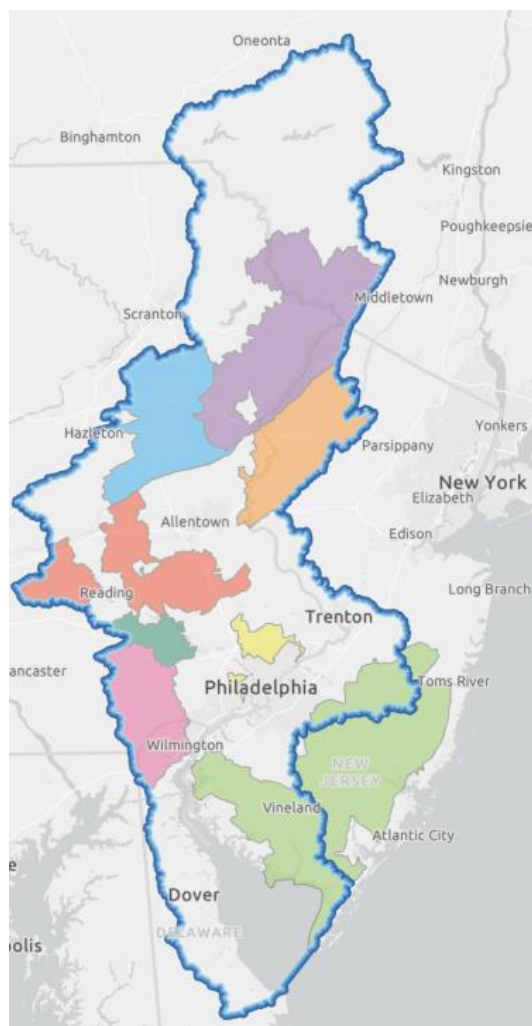


Figure 4. DRWI Clusters



sensitive ecological regions. Upper Lehigh has over 200,000 acres (41%) protected within its boundaries. The Poconos and Kittatinny, Schuylkill Highlands, and New Jersey Highlands all have 30% of their respective regions protected (Figure 5, Table 2). State lands account for 47% of protected lands within these clusters. Table 3 shows protected acres by government-held land, land trust land, and combined easements (agricultural, land trust and government-held conservation easements).

Table 2. Conserved land within DRWI clusters

Cluster	Conserved Land	Acres	% of Cluster
Upper Lehigh		200,504	41%
Poconos and Kittatinny		275,179	33%
Schuylkill Highlands		35,480	32%
New Jersey Highlands		132,142	30%
Brandywine and Christina		99,186	28%
Middle Schuylkill		131,791	26%
Kirkwood Cohansey Aquifer		249,565	18%
Upstream Suburban Philadelphia		8,009	9%
<i>Outside clusters</i>		982,575	

Table 3. Conserved land by category within clusters

Cluster	Government*	Land Trust	Easements**	DRB
Brandywine and Christina	30,098	12,874	56,213	99,186
Kirkwood Cohansey Aquifer	157,934	27,949	63,683	249,565
Middle Schuylkill	38,414	636	92,741	131,791
New Jersey Highlands	73,141	8,650	50,350	132,142
Poconos and Kittatinny	236,386	6,337	32,455	275,179
Schuylkill Highlands	15,519	1,850	18,111	35,480
Upper Lehigh	171,596	11,362	17,545	200,504
Upstream Suburban Philadelphia	4,843	2,017	1,148	8,009
Cluster Total	727,932	71,676	332,248	1,131,855

**Government land includes Federal, State, County, and Municipal*

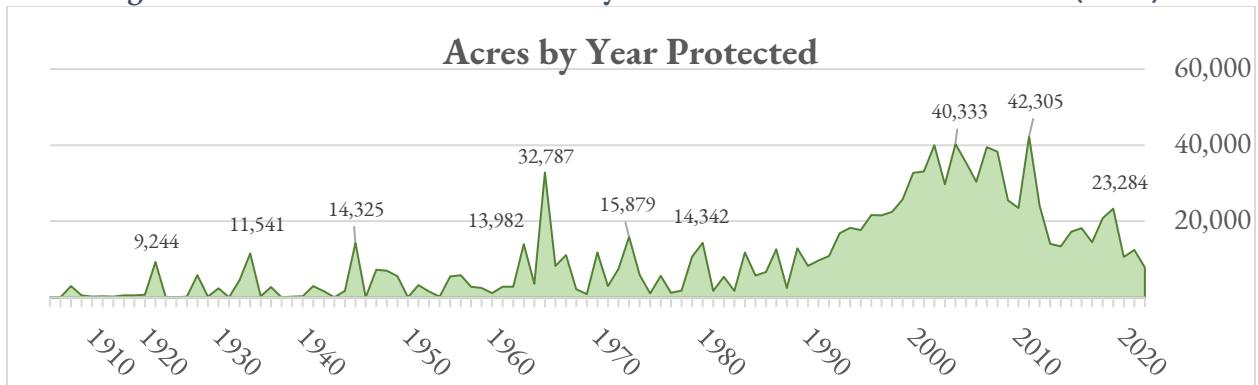
***Easements include county agricultural, governmental conservation, and land trust conservation*

Land Conserved by Year

A general trend in land conservation throughout the watershed is shown in Figure 5 and a cumulative land protection graph is shown in Figure 6. Protection years for acquisitions are based on sale or deed date from tax parcel data where available. Acquisition years were also determined by reported deed recording dates and self-reported acquisition years. Fifty percent of the data have dates. Easements dates were primarily self-reported, but in some cases were available via tax parcel easement records (specifically Chester County).

Figure 5 highlights large annual acquisition peaks in the data. These primarily occur due to large land acquisitions by or transfers to the State. In 2004, protected land within the DRW increased by 41,751 acres of which 21,200 acres were part of a state or county agricultural easement program; and 10,600 acres were land trust conservation easements. In 2011, land trust conservation easements added an additional 27,730 acres or 67% of the year's total (41,680 acres). The 1965 spike came from a large Federal land acquisition by the National Park Service in the form of the Delaware Water Gap National Recreation Area. During land protection spikes, agricultural conservation easements were the most frequent method of protection: 42% when agricultural easements were present, then 22% State acquisitions, and 20% land trust conservation easements.

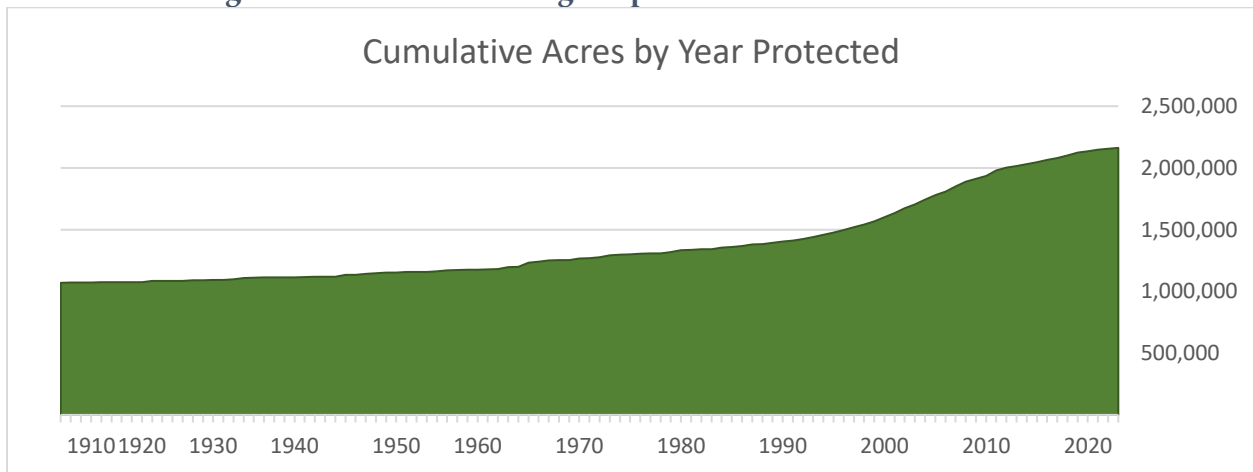
Figure 5. Protected land effort activity within the Delaware River Basin (DRB)



**for those lands with year of deed acquisition or easement recording date*

Figure 6 shows the trend in land conservation from 1900 to today. Half of this data has an unknown preservation year; it is included in this chart as a base value of 1,070,000 acres. Since this time, the rate in land protection has increased from 18,000 acres per decade in 1930 to 90,000 acres per decade in 1970 to 200,000 acres per decade in 2020.

Figure 6. Cumulative acreage of protected lands within the DRB

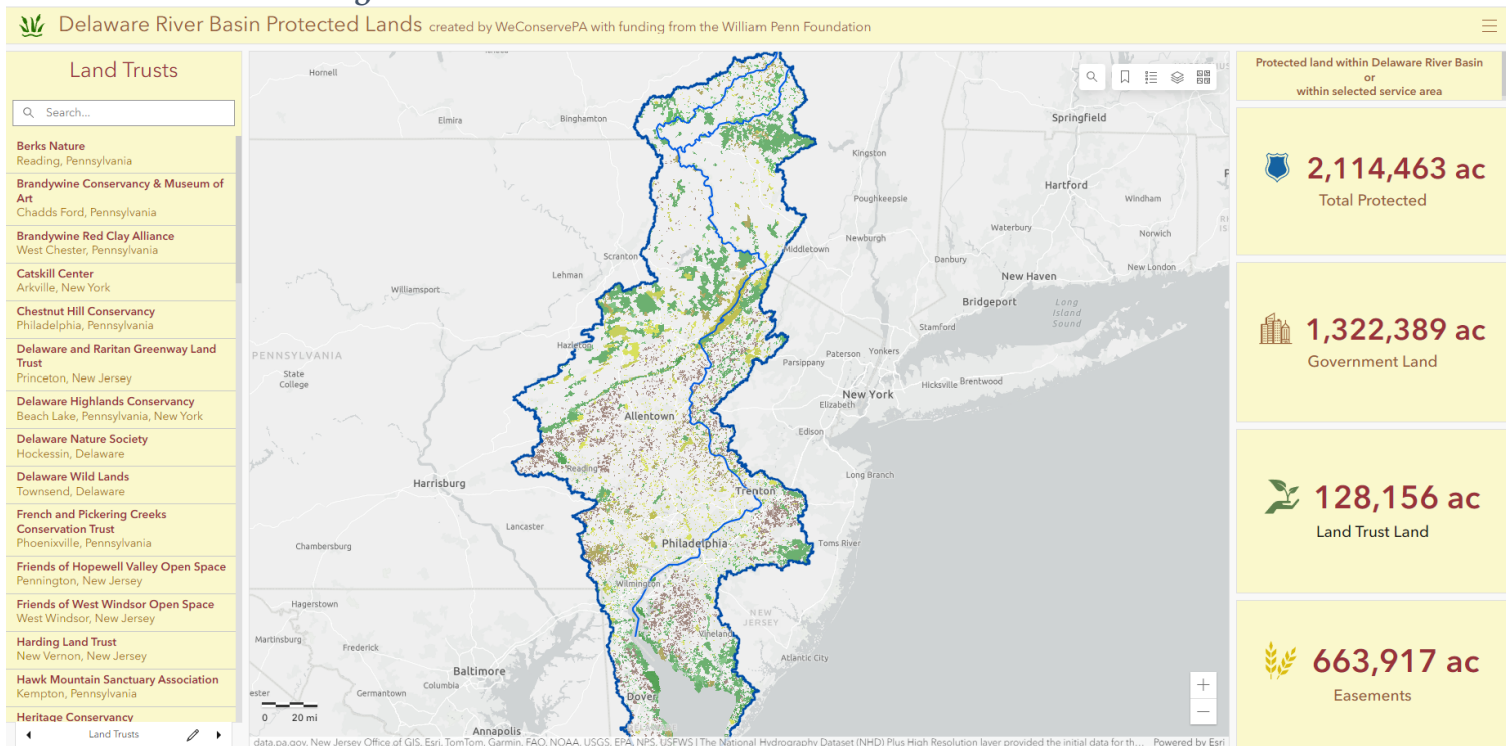


ArcGIS Dashboard

A public-facing final product of the data is the DRB Protected Lands Dashboard¹. The left panel lists Land Trusts, Watershed Associations, and DRWI Cluster groups within the mapped area (Figure 7). Clicking on one will focus the map on the selected area and return conserved lands within the boundary. The right panel will update to display the conserved acres by category in the map window as well as the total area throughout the Basin.

Data is available for download² or as a REST service layer on Pennsylvania's Spatial Data Access (PASDA) website. PASDA is Pennsylvania's official public access open geospatial data portal hosted by Pennsylvania State University. Relevant layers for this project include: 1) Protected Lands, 2) Land Trust Associations, 3) Watershed Associations, 4) Environmental Advisory Councils, and 5) Clusters.

Figure 7. Delaware River Basin Protected Lands Dashboard



¹ <https://www.arcgis.com/apps/dashboards/3b01dbbd5cfc4156be24b44d1ed2c826>

² <https://www.pasda.psu.edu/uci/SearchResults.aspx?originator=WeConservePA>