POLLUTANT REDUCTION PLAN

For:

SALISBURY TOWNSHIP

Lehigh County, Pennsylvania

June 20, 2018

Prepared By:

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POLLUTANT REDUCTION PLAN

NARRATIVE:

Salisbury Township is located in Lehigh County, Pennsylvania. The Township is mostly developed including residential, commercial and industrial areas with areas along the South Mountain that remain in its natural, wooded state. A majority of the Township is located within an urbanized area as defined by the 2010 U.S. Census Bureau. The Township has a Municipal Separate Storm Sewer System (MS4) permit (NPDES No. PAI132209).

The Township's urbanized areas and storm sewer outfalls drains to various streams and their tributaries. The following streams receive water from areas within the Township:

- Cedar Creek
- Little Lehigh Creek
- Trout Creek
- Lehigh River
- Saucon Creek
- Black River

With the exception of the Cedar Creek, the streams are all impaired for siltation. All the streams are located within the Delaware River basin. Below is an excerpt of the table from the Pennsylvania Department of Environmental Protection's (PADEP) MS4 Requirements Table:

SALISBURY TWP	PAI132209	Yes	SP, IP	Cedar Creek	Appendix B-Pathogens (5)	
				Little Lehigh Creek	Appendix B-Pathogens (5), Appendix E-Siltation (5)	
				Saucon Creek	Appendix E-Siltation (5)	
				Lehigh River	Appendix C-PCB (5), Appendix E-Organic Enrichment/Low D.O., Siltation, Suspended Solids (5)	
				Trout Creek	Appendix B-Pathogens (5), Appendix E-Siltation (5)	

Due to the aforementioned siltation impairment, the Township is required to develop a Pollutant Reduction Plan (PRP) for sediment removal. The requirements set forth in the PADEP's National Pollutant Discharge Elimination System (NPDES) Stormwater Discharges from Small Municipal Separate Storm Sewer Systems Pollutant Reduction Plan (PRP) Instructions requires a minimum 10% sediment reduction from current sediment loading volumes.

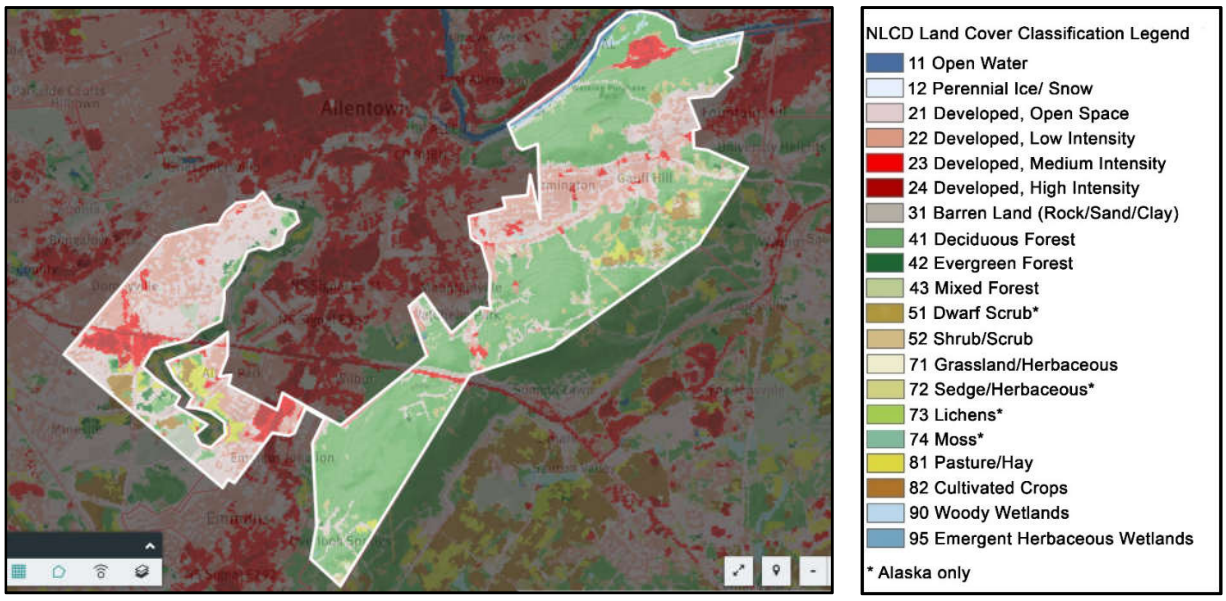
This plan outlines the existing loading within the Township's PRP areas, highlights proposed Best Management Practices (BMP's), and provides operation and maintenance schedules for short- and long-term maintenance of the proposed BMP's.

EXISTING SEDIMENT LOADING / METHODOLOGY:

The Township's existing storm sewer infrastructure have been mapped using GPS survey equipment. From the mapped storm sewer inlets, pipes, swales, and outfalls, storm sewer shed tributaries to each regulated outfall have been mapped using LIDAR two foot (2') contours.

Existing sediment loading was then calculated using the online-based Wiki Watershed program, as developed by the Stroud Water Research Center. The PRP planning areas are the areas within each storm sewer shed that are tributary to a regulated outfall. The rights-of-way within PennDOT roadways have been excluded, or parsed, from our PRP planning area. Areas of non-concentrated flow that sheet flow into a receiving stream and are not conveyed by a defined outfall have also been parsed from the PRP planning area. Also, non-urbanized areas that do not flow into an urbanized area are also not included in the planning areas.

The outputs from Wiki Watershed provide the land cover areas from within each PRP sewershed area. The land cover types defined in the Township are represented in the following map:



Calculations then convert these land cover areas from square meters to acres. Based on these areas, the following assumptions, in accordance with the 2011 National Land Cover Database (NLCD 2011), are made to calculate the amount of impervious and pervious areas within each study area:

Developed, Open Space: 19% Impervious
Developed, Low Intensity: 49% Impervious
Developed, Medium Intensity: 79% Impervious
Developed, High Intensity: 100% Impervious

For Lehigh County, per Attachment B (Developed Land Loading Rates for PA Counties) in the Pennsylvania Department of Environmental Protection's PRP Instructions, the Total Sediment (TSS) loading is calculated by multiplying the Developed Impervious rate by 1,839 lbs./acre/yr.; by multiplying the Developed Pervious rate by 264.96 lbs./acre/yr.; and by multiplying the Undeveloped rate by 234.6 lbs./acre/yr.

A total sediment loading, in lbs. per year, was calculated for each storm sewer shed. These totals were then added together to generate the existing sediment loading for the Township.

EXISTING BEST MANAGEMENT PRACTICES (BMP'S):

For conservative purposes, no existing water quality BMP's were credited as a reduction toward the existing sediment loading calculations.

PROPOSED SEDIMENT REDUCTION BEST MANAGEMENT PRACTICES (BMP'S):

To reduce the required sediment loading, a series of proposed BMP's are recommended to implement.

Proposed BMP Methodology:
Tributary areas to proposed BMP's were determined and were modeled in the Wiki Watershed Model My Watershed program. Storage and/or treatment volumes of proposed BMP's were then estimated. Using the Chesapeake Bay Program BMP Expert Panel guidance, the inches of impervious area is then calculated by dividing the storage/treatment volume by the total impervious area. Using the Sediment Reduction Curve, a percent sediment removal figure is then derived and used to factor the removed sediment from the sediment loading tributary to the BMP.

The requirements of the proposed BMP's and their anticipated operation and maintenance schedule is described as follows:

1. **Streambank Restoration:**

   General design considerations:

   - Areas of existing stream bank erosion should be evaluated and a strategy developed to stabilize and protect against further erosion.
   - Invasive plant species should be identified and a management plan developed to either remove or control the species.
   - Native herbaceous and shrub plantings are strongly encouraged to stabilize stream embankments.
   - Use of "hard armor" products should be kept to a minimum and only utilized whenever absolutely necessary.

Specific design considerations:

A. Streambank Restoration (Harry S. Truman Elementary School) (Sewershed 031)

Approximately 350 linear feet (highlighted below) of streambank within land owned by the Salisbury School District can be stabilized with vegetative means to stabilize eroded streambanks. Severely eroded embankments can be graded and stabilized with coir logs combined with deciduous plant material to prevent further streambank erosion.

Image taken from Google Street View (Existing site area for proposed stream restoration.)

Removal of invasive species, preservation of existing desirable trees, and introduction of native herbaceous and woody plants, particularly along the stream embankments, are strongly encouraged.

Additional site analysis, design, and permitting would be required to determine the exact extent of stream restoration as it relates to existing site conditions.

B. Streambank Restoration (Devonshire Park) (Sewershed 066)

Approximately 1,255 linear feet (highlighted below) of streambank within Devonshire Park can be regraded and improved to stabilize eroded streambanks and potentially creating a longer flow path and increased flood storage.

Photographs taken April 11, 2018 (Existing site area for proposed stream restoration.)

Removal of invasive species, preservation of existing desirable trees, and introduction of native herbaceous and woody plants, particularly along the stream embankments, are strongly encouraged.

Additional site analysis, design, and permitting would be required to determine the exact extent of stream restoration as it relates to existing site conditions.

2. Constructed Wetlands:

General design considerations:
Constructed wetlands should be constructed in accordance with the recommendations outlined in the December 30, 2006 Pennsylvania Stormwater Best Management Practices Manual. A summary of design considerations is as follows:

- The constructed wetland should be approximately 3%-5% of the contributing tributary.
- Existing soils in hydrologic soil groups 'C' and 'D' are generally suitable.
- The constructed wetland should be designed with a length to width ratio of at least 2 to 1 when possible.
- Slopes in and around the constructed wetland should be a maximum of 4:1 when possible.
- Constructed wetlands should be designed so that the 10-year water surface elevation does not exceed the normal water surface by more than 3 feet.
- A forebay should be constructed at major inflow points to capture course sediment, prevent excessive sediment accumulation in the remainder of the constructed wetland, and to minimize erosion by inflow. The forebay should be sized to accommodate 10%-15% of the total permanent pool volume.
- About half of the emergent vegetation zone should be high marsh (up to 6" deep of water impoundment) and half should be low march (6"-18" deep of water impoundment). An open water zone (approximately 35%-40% of the total surface area) should impound between 18" and 6' of water.
- An outlet control structure is recommended to allow the wetland to be completely drained.
- Any areas deeper than 4 feet should have two safety benches, each 4 to 6 feet wide. One should be situated about 1 to 1.5 feet above the normal water surface elevation and the other 2 to 2.5 feet below the normal water surface elevation.
- A permanent access to the forebay, outlet, and embankment areas should be provided to allow for maintenance.

Specific design considerations:

A. Constructed Wetlands (Laubach Park) (Sewershed 042)

Constructed wetlands are proposed to be incorporated into the existing Laubach Park landscape. By intercepting stormwater flows from Lehigh Avenue and the upstream tributary, graded wetlands can be constructed to various depths up to maximum four (4) foot depths, to filter sediment prior to discharging to the existing Laubach Park pond. A conceptual layout is proposed within the below shown area on the Constructed Wetland Conceptual Plan.

Additional site analysis, design, and permitting would be required to determine the exact configuration of the constructed wetlands as it relates to existing site conditions.

3. Detention Basin Retrofit:

General design considerations:

Detention basin retrofits should be utilize facets of Dry Extended Detention Basin design in accordance with the recommendations outlined in the December 30, 2006 Pennsylvania Stormwater Best Management Practices Manual. A summary of design considerations is as follows:

- A minimum length-to-flow width ratio of 2:1 is recommended to maximize sedimentation removal.
    - Baffles constructed of earthen berms or other materials can be incorporated into the existing basin to lengthen the stormwater path flow. Care should be taken to ensure the design storage capacity is provided after baffle installation.
- Sediment forebays should be constructed into the extended detention design.
    - Forebays should be vegetated to improve filtering of runoff, to reduce runoff velocity, and to stabilize soils against erosion. Forebays are typically constructed as shallow marsh areas and should adhere to the following design criteria.
        - It is recommended that forebays have a minimum length of 10 feet.
        - Storage should be provided to trap the anticipated sediment volume produced over a period of 2 years.
        - Forebays should be protected from the erosive force of the inflow to prevent resuspension of previously collected sediment during large storms.
- A diverse native planting mix could be utilized on the basin floor to reduce maintenance needs.
- Meadow grasses or other deeply rooted herbaceous vegetation is recommended on the interior slopes of the basin embankments.

Specific design considerations:

Conventional detention basins can be retrofitted to improve sediment capture. A proposed strategy includes constructing sediment forebays and baffles utilizing gabion baskets (similar to the below image) or earthern berms of 24" in height. Forebays will allow temporary impoundment of stormwater at pipe or swale inflows to settle and filter through the gabion baskets. A baffle system will increase the flow length of stormwater in a basin to allow settlement of sediment. Proposed basin retrofit areas are outlined in the proceeding pages.

Figure 3. A barrier of gabion baskets spreads stormwater runoff in the basin *(Photo Credit: Craig McGee, Camden County Soil Conservation District).*

Photo Credit: JOURNAL OF THE NACAA
ISSN 2158-9429
VOLUME 5, ISSUE 1 - MAY, 2012
Editor: Lee Stivers
IMPROVING DRY DETENTION BASINS IN NEW JERSEY TO SUPPORT GREEN INFRASTRUCTURE GOALS

Additional site analysis, design, and permitting would be required to determine the exact configuration of the detention basin retrofits as it relates to existing site conditions.

A. Detention Basin Retrofit #1 (Sewershed 054B)

A sediment forebay and baffle system can be utilized in this existing grass-lined basin along Lindberg Avenue.

B. Detention Basin Retrofit #2 (Sewershed 070)

A sediment forebay and baffle system can be utilized in this existing overgrown basin along Country Club Road. Any trees and/or shrubs in the basin should be removed to allow future access and sediment removal.

C. Detention Basin Retrofit #3 (Sewershed 071)

A sediment forebay and baffle system can be utilized in this existing overgrown basin between Box Elder Road and Devonshire Park. Any trees and/or shrubs in the basin should be removed to allow future access and sediment removal.

D. Detention Basin Retrofit #4 (Sewershed 064)

A sediment forebay and baffle system can be utilized in this existing overgrown basin adjacent to Devonshire Park. Any trees and/or shrubs in the basin should be removed to allow future access and sediment removal.

FUNDING MECHANISMS:

BMP's will be funded by the Township general fund. Additional resources that may be pursued include grant funding through sources such as PennVEST or DEP Growing Greener.

ANTICIPATED SCHEDULE OF COMPLETION:

The Township anticipates to begin construction on one of the detention basin retrofit projects during 2019. The remaining detention basin retrofits are anticipated to be done in each of the subsequent years starting in 2020.
Design and permitting of the streambank restoration projects will begin in 2019 and construction of those projects to follow in 2020 at the earliest with a completion by 2024.
Design of the constructed wetlands is anticipated to begin in 2019 with construction following in 2020.

RESPONSIBLE PARTIES FOR OPERATION AND MAINTENENACE (O&M) OF BMPS:

Salisbury Township will be responsible for the operation and maintenance of the proposed BMP's in accordance with the following schedule:

Inspection Activity	Frequency	Maintenance Action
Streambank Restoration		
Inspect vegetation during first growing season	Every 2-3 weeks	Water, remove invasive vegetation, re-mulch, and/or re-plant as necessary
Inspect vegetation during second and third growing season	Twice a year	Water, remove invasive vegetation, re-mulch, and/or re-plant as necessary
Inspect vegetation, signs of erosion, flow channelization, bank stability, inlet/outlet conditions, and sediment/debris accumulation during the first 2 years after construction	At least four (4) times per year and after every major rainfall event (>2 inches in 24 hours)	Correct and re-stabilize any eroded areas and re-plant as necessary. Remove sediment/debris accumulation and dispose of in accordance with all federal, state and local laws.
Inspect vegetation to ensure at least 85 percent vegetative cover	Twice a year and after every major rainfall event (>2 inches in 24 hours)	Water, remove invasive vegetation, re-mulch, and/or re-plant as necessary

Inspection Activity	Frequency	Maintenance Action
Constructed Wetland		
Inspect vegetation during first growing season	Every 2-3 weeks	Water, remove invasive vegetation, re-mulch, and/or re-plant as necessary
Inspect vegetation during second and third growing season	Twice a year	Water, remove invasive vegetation, re-mulch, and/or re-plant as necessary
Inspect vegetation, signs of erosion, flow channelization, bank stability, inlet/outlet conditions, and sediment/debris accumulation during the first 2 years after construction	At least four (4) times per year and after every major rainfall event (>2 inches in 24 hours)	Correct and re-stabilize any eroded areas and re-plant as necessary. Remove sediment/debris accumulation and dispose of in accordance with all federal, state and local laws.
Inspect vegetation to ensure at least 85 percent vegetative cover	Twice a year and after every major rainfall event (>2 inches in 24 hours)	Water, remove invasive vegetation, re-mulch, and/or re-plant as necessary

Inspection Activity	Frequency	Maintenance Action
Detention Basin Retrofit		
Inspect basin structures expected to receive and/or trap debris and sediment	At least four times a year as well as after every major rainfall event (>2 inches in 24 hours)	Sediment removal should be performed when the basin is dry. Sediment should be disposed of properly and once sediment is removed, disturbed areas need to be immediately stabilized and revegetated.
Inspect vegetation for erosion	Annually	Correct eroded area as necessary and immediately re-stabilize and revegetate.
Inspect vegetation for unwanted growth	Annually	Remove exotic/invasive species as necessary.
Inspect vegetative cover to ensure a minimum 95 percent coverage	Annually	Re-establish vegetation as necessary.

LOCATION MAP

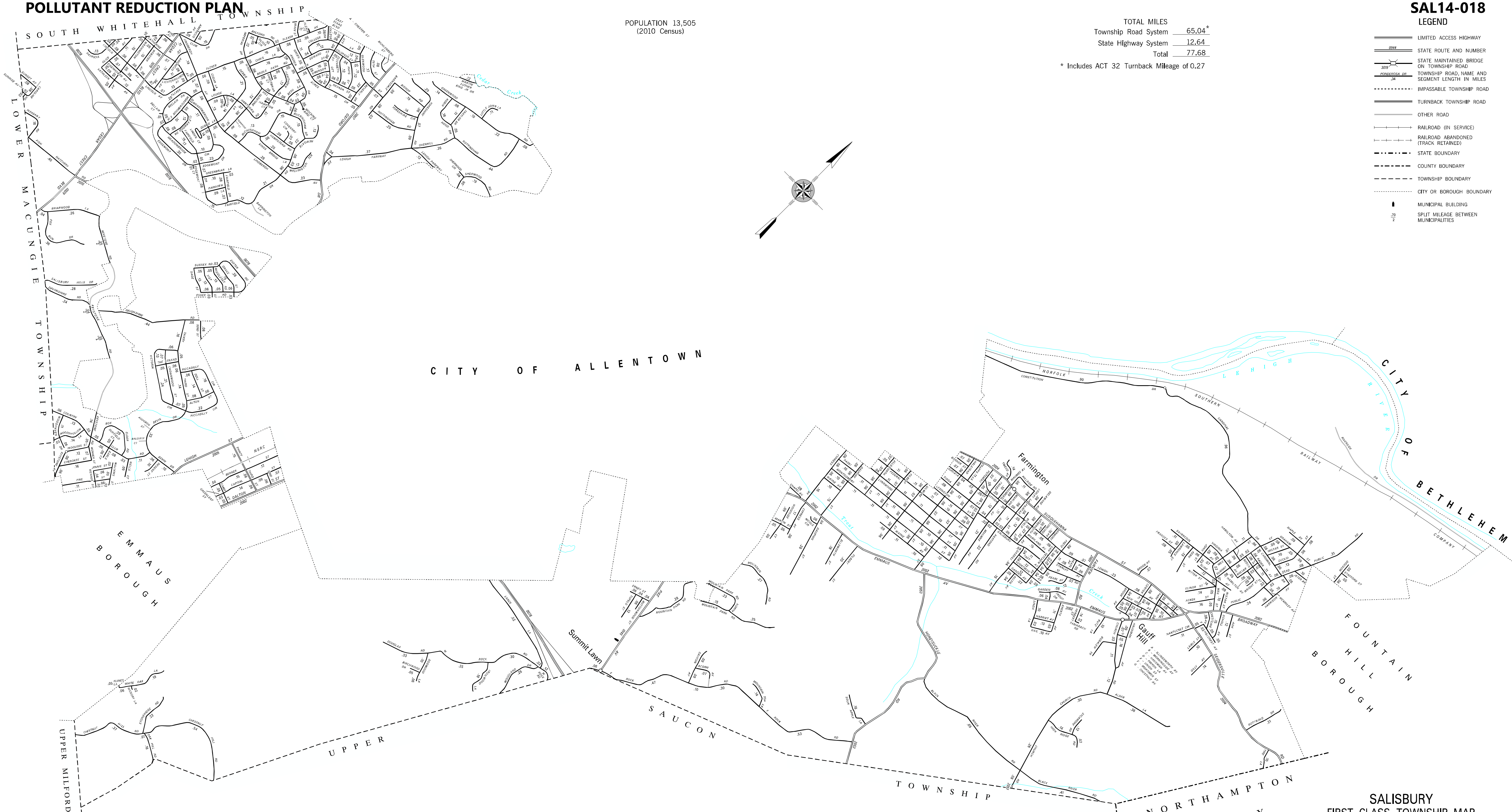
POLLUTANT REDUCTION PLAN

SAL14-018

POPULATION 13,505
(2010 Census)

TOTAL MILES
Township Road System 65.04*
State Highway System 12.64
Total 77.68

* Includes ACT 32 Turnback Mileage of 0.27



LEGEND

- LIMITED ACCESS HIGHWAY
- 0944 STATE ROUTE AND NUMBER
- 3019 STATE MAINTAINED BRIDGE ON TOWNSHIP ROAD
- PONDEROSA DR .34 TOWNSHIP ROAD, NAME AND SEGMENT LENGTH IN MILES
- IMPASSABLE TOWNSHIP ROAD
- TURNBACK TOWNSHIP ROAD
- OTHER ROAD
- RAILROAD (IN SERVICE)
- RAILROAD ABANDONED (TRACK RETAINED)
- STATE BOUNDARY
- COUNTY BOUNDARY
- TOWNSHIP BOUNDARY
- CITY OR BOROUGH BOUNDARY
- MUNICIPAL BUILDING
- .70/2 SPLIT MILEAGE BETWEEN MUNICIPALITIES

ACKER AV
ACORN AV
ALDER LA
ALLEN AV
ALTON ST
AMERICUS AV
ANDREA DR
ASH ST
BARNER ST
BARNSDALE RD
BEECH ST
BELFORD RD
BELLAIR CT
BELLAIR DR
BERGER ST
BETH LA
BEVERLY DR
BEVIN DR
BIRCHWOOD DR
BLACK RIVER RD
BOBALEW TR
BOX ELDER RD
BRIARWOOD LA
BRIDLEPATH RD
BROOK AV
BUCKINGHAM DR
BUTTONWOOD ST
BUTZ LA
BYFIELD ST
BYRD AV
CAMP ST
CAPITAL ST
CARDINAL DR
CAROLINE RD
CATHERINE AV
CEDAR LA
CENTER PL
CHAPEL AV
CHEROKEE ST
CHESTER ST
CHESTNUT AV
CHESTNUT HILL RD
CHRIS LA
CHURCH RD
CLEARWOOD DR
CLUB DR
COLLEGE DR
COLLEGE LA
COLORADO ST
CONCORD AV
CONSTITUTION DR
COUNTRY CLUB RD
COVENTRY CIR
CRESTLINE AV
CROWNWOOD ST
CYPRESS AV
DAUPHIN ST
DEBBIE LA
DELAWARE AV
DELL ST
DEVONSHIRE RD
DODSON ST
DOGWOOD LA
DOUGLAS RD
DUFFIELD CT
EARLS CT
EAST ROCK RD
EAST TEXAS BLVD
EDGEMONT CT
EDGEMONT DR
EDWARD ST
EHRETS LA
EISENHOWER AV
ELINOR ST
ELIZABETH RD
ELLSWORTH ST
EMERSON ST
ERNEY ST
ESSEX RD
EUCLID ST
EXETER RD
FAIRFAX ST
FAIRFIELD DR
FEDERAL ST
FILBERT ST
FIRE LA
FISH HATCHERY RD
FLEXER AV
FLEXER CT
FOX RUN DR
FRANCIS ST
FRETZ AV
GAIL AV
GARDEN AV
GASKILL AV
GILLY AV
GILMORE ST
GLENWOOD ST
GLICK AV
GOTTWALD DR
GRACE ST
GRAHAM ST
GREEN ACRES DR
GREENBRIAR LA
GREENWOOD RD
HALSTEAD ST
HAMILTON AV
HAMPSTEAD RD
HAMPTON CT
HARRIET AV
HARRISON AV
HAUSMAN AV
HAWTHORN RD
HAYS ST
HERBERT ST
HICKORY LA
HIGH RIDGE RD
HILLCREST AV
HILLSIDE RD
ILLINGSWORTH AV
IMPERIAL DR
IRONWOOD LA
IROQUOIS ST
JENNIE ST
JETER AV
JOHN ST
JUNIATA ST
KATHLEEN AV
KERN ST
KEYSTONE AV
KEYSTONE RD
KINGSBRIDGE LA
KLINE AV
KLINES LA
LAIBLE ST
LANZE LA
LAWRENCE ST
LEHIGH AV
LEHIGH PARKWAY
LEXINGTON ST
LICHTENWALNER AV
LINCOLN AV
LINDA LA
LINDBERGH AV
LINDEN CT
LITTLE JOHN LA
LOUISE CIR
LOUISE LA
LOXLEY LA
LYNNWOOD ST
MAIN ST
MAPLE AV
MARLOW ST
MARTIN LUTHER KING JR DR
MARTIN ST
MARYLAND AV
MAUMEE AV
MCKINLEY ST
MEADOWBROOK CIR
MIDDLESEX RD
MILLER ST
MOCKING BIRD CT
MORNINGSIDE AV
MONTGOMERY ST
MORTIMER ST
MOUNTAIN PARK RD
MOUNTAIN PARK RD N
MOUNTAIN RD
MOUNTAIN TOP LA
MUHLENBERG ST
NEVADA ST
NEW YORK AV
NEWGATE DR
NICOLE CIR
NOTTINGHAM RD
OAK HILL RD
OLDSTONE RD
OLIVIA CIR
OTT ST
OVERHILL RD
PAOLI ST
PARK AV
PARKVIEW LA
PATRICIA DR
PAXFORD RD
PEARL AV
PICCADILLY CIR
PINE ST
PINYON LA
PLEASANT RD
POTOMAC ST
PUBLIC RD
RADER AV
REGENT CT
RITTER ST
ROBINHOOD DR
SAGE ST
SALISBURY HILLS DR
SALISBURY RD
SAUCON AV
SAVERCOOL AV
SCHOLL AV
SHERWOOD CIR
SHERWOOD RD
SOUR APPLE LA
STAFFORD ST
STANLEY AV
STONERIDGE RD
SUMMIT ST
SUNRISE AV
SUNSET AV
SUSSEX RD
SWEETBRIAR CT
SYCAMORE RD
TAFT AV
TAMARACH RD
THE STRAND
THIRTY FIRST ST
THIRTY SECOND ST
THIRTY THIRD ST
TIOGA ST
TRAPPS LA
TRAYLOR DR
TROUT DR
TUPELO ST
TWENTY FIFTH ST
TWEED AV
UEBERROTH AV
UNION ST
VAN VETCHEN AV
VERMONT AV
VICTORIA CIR
VIRGINIA AV
VOORTMAN AV
WASHINGTON AV
WAYNE AV
WEBSTER AV
WEIL ST
WELLINGTON TER
WELLS CT
WENNER ST
WEST ROCK RD
WHITE OAK LA
WILLIAMS ST
WINDY HILL RD
WISTAR ST
WOODHAVEN DR
WOODLAND DR
WOODS HOLLOW LA
WOODSIDE CT
WRIGHT ST
YORKSHIRE RD

COPIES OF THIS MAP ARE AVAILABLE AT NOMINAL COST
CONTACT:

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SALISBURY
FIRST CLASS TOWNSHIP MAP
LEHIGH COUNTY

PREPARED BY THE
PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING AND RESEARCH
GEOGRAPHIC INFORMATION DIVISION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

MUNICIPAL CODE 39 101

THIS MAP IS PUBLISHED AS A SUPPLEMENTAL DOCUMENTATION OF LIQUID FUELS TAX FUND MILEAGES

REVISED PER FORM 990 DATED 8-2-13

SCALE
0 1000 2000 3000 FEET
0 250 500 750 1000 METERS

6/20/18
(CREATED BY: PFK 08-10-10) (REVISED: 5-1-18)

EXISTING SEDIMENT LOAD CALCULATIONS

SALISBURY TOWNSHIP - REQUIRED SEDIMENT LOAD CALCULATIONS		
EXISTING SEDIMENT LOAD	**1983546.15**	**LBS/YR**
EXISTING BEST MANAGEMENT PRACTICE (BMP) REDUCTIONS:		
EXISTING SEDIMENT LOAD WITH EXISTING BMP BENEFITS:	**1983546.15**	**LBS/YR**
(EXISTING SEDIMENT LOAD - EXISTING BEST MANAGEMENT PRACTICE REDUCTIONS)		
REQUIRED SEDIMENT LOAD REDUCTION:	**198354.61**	**LBS/YR**
(10% OF EXISTING SEDIMENT LOAD WITH EXISTING BMP BENEFITS)		

SALISBURY TOWNSHIP - EXISTING SEDIMENT LOADING (LEHIGH RIVER WATERSHED)

STORM SEWER SHED NUMBER	DEVELOPED, OPEN SPACE (SQ. METERS)	DEVELOPED, OPEN SPACE (ACRES)	DEVELOPED, OPEN SPACE (IMPERVIOUS SURFACES) (19% OF TOTAL AREA) (A)	DEVELOPED, OPEN SPACE (PERVIOUS SURFACES) (81% OF TOTAL AREA) (B)	DEVELOPED, OPEN SPACE (IMPERVIOUS SURFACE - SEDIMENT LOADING)(A*1893 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, OPEN SPACE (PERVIOUS SURFACE - SEDIMENT LOADING) (B*264.96 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, LOW INTENSITY (SQ. METERS)	DEVELOPED, LOW INTENSITY (ACRES)	DEVELOPED, LOW INTENSITY (IMPERVIOUS SURFACES) (49% OF TOTAL AREA) (C)	DEVELOPED, LOW INTENSITY (PERVIOUS SURFACES) (51% OF TOTAL AREA) (D)	DEVELOPED, LOW INTENSITY (IMPERVIOUS SURFACE - SEDIMENT LOADING) (C*1893 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, LOW INTENSITY (PERVIOUS SURFACE - SEDIMENT LOADING) (D*264.96 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, MEDIUM INTENSITY (SQ. METERS)	DEVELOPED, MEDIUM INTENSITY (ACRES)	DEVELOPED, MEDIUM INTENSITY (IMPERVIOUS SURFACES) (79% OF TOTAL AREA) (E)	DEVELOPED, MEDIUM INTENSITY (PERVIOUS SURFACES) (21% OF TOTAL AREA) (F)	DEVELOPED, MEDIUM INTENSITY (IMPERVIOUS SURFACE - SEDIMENT LOADING) (E*1893 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, MEDIUM INTENSITY (PERVIOUS SURFACE - SEDIMENT LOADING) (F*264.96 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, HIGH INTENSITY (SQ. METERS)	DEVELOPED, HIGH INTENSITY (ACRES)	DEVELOPED, HIGH INTENSITY (IMPERVIOUS SURFACES) (100% OF TOTAL AREA) (G)	DEVELOPED, HIGH INTENSITY (IMPERVIOUS SURFACE - SEDIMENT LOADING) (G*1893 LBS/ACRE/YR) (LBS/YR)	UNDEVELOPED LANDS (SQ. METERS)	UNDEVELOPED LANDS (ACRES) (H)	UNDEVELOPED LANDS - SEDIMENT LOADING (H*234.6 LBS/ACRE/YR) (LBS/YR)	TOTAL SEDIMENT LOADING (LBS/YR)	TOTAL STORM SEWERSHED AREA (ACRES)
001	7177.32	1.77	0.34	1.44	619.70	380.63	1794.33	0.44	0.22	0.23	399.54	59.91		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	4485.83	1.11	260.05	**1719.83**	**3.33**
002	26017.79	6.43	1.22	5.21	2246.40	1379.80	11663.15	2.88	1.41	1.47	2597.01	389.45		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	8074.49	2.00	468.08	**7080.74**	**11.31**
003	10765.98	2.66	0.51	2.15	929.54	570.95	16148.98	3.99	1.96	2.04	3595.86	539.23		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**5635.59**	**6.65**
004	39475.28	9.75	1.85	7.90	3408.33	2093.49	36783.79	9.09	4.45	4.64	8190.58	1228.25	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00		0.00	0.00	**15255.07**	**19.07**
005	94202.44	23.28	4.42	18.86	8133.51	4995.83	66390.29	16.41	8.04	8.37	14783.01	2216.85	2691.50	0.67	0.53	0.14	966.24	37.01		0.00	0.00	0.00	7177.33	1.77	416.07	**31548.52**	**42.12**
006	5383.00	1.33	0.25	1.08	464.77	285.48	12560.33	3.10	1.52	1.58	2796.79	419.40	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00	8971.66	2.22	520.09	**4820.95**	**6.87**
007	3588.67	0.89	0.17	0.72	309.85	190.32	8971.66	2.22	1.09	1.13	1997.70	299.57	1794.33	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00		0.00	0.00	**3466.27**	**3.55**
008		0.00	0.00	0.00	0.00	0.00	13457.49	3.33	1.63	1.70	2996.56	449.36		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**3445.92**	**3.33**
009		0.00	0.00	0.00	0.00	0.00	8971.66	2.22	1.09	1.13	1997.70	299.57	2691.50	0.67	0.53	0.14	966.24	37.01		0.00	0.00	0.00		0.00	0.00	**3300.52**	**2.88**
A	74464.68	18.40	3.50	14.90	6429.34	3949.08	2691.49	0.67	0.33	0.34	599.31	89.87		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	85230.67	21.06	4940.88	**16008.48**	**40.13**
B	4485.83	1.11	0.21	0.90	387.31	237.90	897.17	0.22	0.11	0.11	199.77	29.96		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**854.94**	**1.33**
C	4485.83	1.11	0.21	0.90	387.31	237.90	1794.33	0.44	0.22	0.23	399.54	59.91	1794.33	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00		0.00	0.00	**1753.49**	**2.00**
D	132780.54	32.81	6.23	26.58	11464.37	7041.74	51138.45	12.64	6.19	6.44	11386.91	1707.57	5382.99	1.33	1.05	0.28	1932.47	74.01		0.00	0.00	0.00		0.00	0.00	**33607.08**	**46.78**
E-1	18840.50	4.66	0.88	3.77	1626.70	999.17	26915.00	6.65	3.26	3.39	5993.12	898.72	8971.67	2.22	1.75	0.47	3220.79	123.35		0.00	0.00	0.00	173153.14	42.79	10037.81	**22899.66**	**56.31**
E-2	6280.17	1.55	0.29	1.26	542.23	333.06	897.17	0.22	0.11	0.11	199.77	29.96		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	64596.02	15.96	3744.68	**4849.70**	**17.74**
F		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	4485.83	1.11	260.05	**260.05**	**1.11**
																											264.48

TOTAL EXISTING SEDIMENT LOAD 156506.78

SALISBURY TOWNSHIP - EXISTING SEDIMENT LOADING (TROUT CREEK WATERSHED)

STORM SEWER SHED NUMBER	DEVELOPED, OPEN SPACE (SQ. METERS)	DEVELOPED, OPEN SPACE (ACRES)	DEVELOPED, OPEN SPACE (IMPERVIOUS SURFACES) (19% OF TOTAL AREA) (A)	DEVELOPED, OPEN SPACE (PERVIOUS SURFACES) (81% OF TOTAL AREA) (B)	DEVELOPED, OPEN SPACE (IMPERVIOUS SURFACE - SEDIMENT LOADING)(A*1893 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, OPEN SPACE (PERVIOUS SURFACE - SEDIMENT LOADING) (B*264.96 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, LOW INTENSITY (SQ. METERS)	DEVELOPED, LOW INTENSITY (ACRES)	DEVELOPED, LOW INTENSITY (IMPERVIOUS SURFACES) (49% OF TOTAL AREA) (C)	DEVELOPED, LOW INTENSITY (PERVIOUS SURFACES) (51% OF TOTAL AREA) (D)	DEVELOPED, LOW INTENSITY (IMPERVIOUS SURFACE - SEDIMENT LOADING) (C*1893 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, LOW INTENSITY (PERVIOUS SURFACE - SEDIMENT LOADING) (D*264.96 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, MEDIUM INTENSITY (SQ. METERS)	DEVELOPED, MEDIUM INTENSITY (ACRES)	DEVELOPED, MEDIUM INTENSITY (IMPERVIOUS SURFACES) (79% OF TOTAL AREA) (E)	DEVELOPED, MEDIUM INTENSITY (PERVIOUS SURFACES) (21% OF TOTAL AREA) (F)	DEVELOPED, MEDIUM INTENSITY (IMPERVIOUS SURFACE - SEDIMENT LOADING) (E*1893 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, MEDIUM INTENSITY (PERVIOUS SURFACE - SEDIMENT LOADING) (F*264.96 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, HIGH INTENSITY (SQ. METERS)	DEVELOPED, HIGH INTENSITY (ACRES)	DEVELOPED, HIGH INTENSITY (IMPERVIOUS SURFACES) (100% OF TOTAL AREA) (G)	DEVELOPED, HIGH INTENSITY (IMPERVIOUS SURFACE - SEDIMENT LOADING) (G*1893 LBS/ACRE/YR) (LBS/YR)	UNDEVELOPED LANDS (SQ. METERS)	UNDEVELOPED LANDS (ACRES) (H)	UNDEVELOPED LANDS - SEDIMENT LOADING (H*234.6 LBS/ACRE/YR) (LBS/YR)	TOTAL SEDIMENT LOADING (LBS/YR)	TOTAL STORM SEWERSHED AREA (ACRES)
11A	5383.01	1.33	0.25	1.08	464.77	285.48	897.17	0.22	0.11	0.11	199.77	29.96	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00		0.00	0.00	**1314.39**	**1.77**
11B	17943.38	4.43	0.84	3.59	1549.24	951.59	51138.63	12.64	6.19	6.44	11386.95	1707.58	9868.86	2.44	1.93	0.51	3542.88	135.69	1794.34	0.44	0.44	815.39	57418.81	14.19	3328.61	**23417.93**	**34.14**
12	2691.50	0.67	0.13	0.54	232.39	142.74	8074.51	2.00	0.98	1.02	1797.94	269.62	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00		0.00	0.00	**2777.09**	**2.88**
13	19737.70	4.88	0.93	3.95	1704.17	1046.75	39475.39	9.75	4.78	4.97	8789.92	1318.13	1794.34	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00		0.00	0.00	**13527.79**	**15.08**
14A	1794.34	0.44	0.08	0.36	154.92	95.16		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**250.08**	**0.44**
14B	180331.05	44.56	8.47	36.09	15569.92	9563.49	47549.98	11.75	5.76	5.99	10587.87	1587.75	9868.86	2.44	1.93	0.51	3542.88	135.69		0.00	0.00	0.00	893580.73	220.81	51801.49	**92789.08**	**279.56**
15	539.52	0.13	0.03	0.11	46.58	28.61		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**75.19**	**0.13**
16	35886.71	8.87	1.68	7.18	3098.49	1903.18	86128.11	21.28	10.43	10.85	19177.99	2875.91	4485.84	1.11	0.88	0.23	1610.40	61.68		0.00	0.00	0.00		0.00	0.00	**28727.65**	**31.26**
17	35886.74	8.87	1.68	7.18	3098.49	1903.18	36783.91	9.09	4.45	4.64	8190.61	1228.26	2691.51	0.67	0.53	0.14	966.24	37.01		0.00	0.00	0.00	144444.14	35.69	8373.53	**23797.31**	**54.32**
18A	897.17	0.22	0.04	0.18	77.46	47.58		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**125.04**	**0.22**
18B	20634.88	5.10	0.97	4.13	1781.63	1094.33	15251.87	3.77	1.85	1.92	3396.11	509.28		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	5383.01	1.33	312.06	**7093.40**	**10.20**
19A		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	83.35	0.02	4.83	**4.83**	**0.02**
19B	9868.85	2.44	0.46	1.98	852.08	523.37	1794.34	0.44	0.22	0.23	399.54	59.92	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00	82539.50	20.40	4784.87	**6954.20**	**23.50**
20	17046.19	4.21	0.80	3.41	1471.78	904.01	26017.86	6.43	3.15	3.28	5793.35	868.77		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**9037.91**	**10.64**
21A		0.00	0.00	0.00	0.00	0.00	897.17	0.22	0.11	0.11	199.77	29.96		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**229.73**	**0.22**
21B	8074.52	2.00	0.38	1.62	697.16	428.22	1794.34	0.44	0.22	0.23	399.54	59.92		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	71773.47	17.74	4160.76	**5745.59**	**20.17**
22	22429.19	5.54	1.05	4.49	1936.55	1189.49	46652.72	11.53	5.65	5.88	10388.08	1557.79	1794.34	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00		0.00	0.00	**15740.74**	**17.51**
23A	897.17	0.22	0.04	0.18	77.46	47.58		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**125.04**	**0.22**
23B	4485.84	1.11	0.21	0.90	387.31	237.90	8074.52	2.00	0.98	1.02	1797.94	269.62		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	70876.31	17.51	4108.75	**6801.51**	**20.62**
24	30503.69	7.54	1.43	6.11	2633.71	1617.70	52035.71	12.86	6.30	6.56	11586.70	1737.53	4485.84	1.11	0.88	0.23	1610.40	61.68		0.00	0.00	0.00		0.00	0.00	**19247.72**	**21.50**
25A	897.17	0.22	0.04	0.18	77.46	47.58		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**125.04**	**0.22**
25B	897.17	0.22	0.04	0.18	77.46	47.58	2691.50	0.67	0.33	0.34	599.31	89.87	4485.84	1.11	0.88	0.23	1610.40	61.68		0.00	0.00	0.00		0.00	0.00	**2486.30**	**2.00**
26	2691.50	0.67	0.13	0.54	232.39	142.74	897.17	0.22	0.11	0.11	199.77	29.96	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00	3588.67	0.89	208.04	**1147.31**	**2.00**
27	30503.71	7.54	1.43	6.11	2633.71	1617.70	3588.67	0.89	0.43	0.45	799.08	119.83		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	77156.44	19.07	4472.81	**9643.14**	**27.49**
28A	17046.18	4.21	0.80	3.41	1471.78	904.01	61904.54	15.30	7.50	7.80	13784.17	2067.06	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00		0.00	0.00	**18561.44**	**19.73**
28B	2691.50	0.67	0.13	0.54	232.39	142.74	897.17	0.22	0.11	0.11	199.77	29.96		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	16149.00	3.99	936.17	**1541.02**	**4.88**
29A	8074.50	2.00	0.38	1.62	697.16	428.21	52035.70	12.86	6.30	6.56	11586.70	1737.53	3588.67	0.89	0.70	0.19	1288.32	49.34		0.00	0.00	0.00	20634.83	5.10	1196.22	**16983.48**	**20.84**
29B	6280.17	1.55	0.29	1.26	542.23	333.06	2691.50	0.67	0.33	0.34	599.31	89.87		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**1564.47**	**2.22**
30A	12560.34	3.10	0.59	2.51	1084.47	666.11	62801.70	15.52	7.60	7.91	13983.94	2097.02	20634.84	5.10	4.03	1.07	7407.82	283.71	1794.33	0.44	0.44	815.39		0.00	0.00	**26338.47**	**24.16**
30B	12560.33	3.10	0.59	2.51	1084.47	666.11	3588.67	0.89	0.43	0.45	799.08	119.83	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00	27812.16	6.87	1612.29	**4616.20**	**11.08**
31	12560.34	3.10	0.59	2.51	1084.47	666.11	50241.36	12.41	6.08	6.33	11187.16	1677.62	4485.84	1.11	0.88	0.23	1610.40	61.68		0.00	0.00	0.00		0.00	0.00	**16287.43**	**16.63**
32A	1794.34	0.44	0.08	0.36	154.92	95.16	1794.34	0.44	0.22	0.23	399.54	59.92		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**709.54**	**0.89**
32B	8074.51	2.00	0.38	1.62	697.16	428.22	4485.84	1.11	0.54	0.57	998.85	149.79		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	81642.27	20.17	4732.86	**7006.87**	**23.28**
33	2691.50	0.67	0.13	0.54	232.39	142.74	6280.17	1.55	0.76	0.79	1398.39	209.70		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**1983.22**	**2.22**
34A	711.62	0.18	0.03	0.14	61.44	37.74		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**99.18**	**0.18**
34B	897.17	0.22	0.04	0.18	77.46	47.58	4485.84	1.11	0.54	0.57	998.85	149.79		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	44858.38	11.08	2600.47	**3874.15**	**12.41**
35A	46652.68	11.53	2.19	9.34	4028.03	2474.13	102277.03	25.27	12.38	12.89	22773.85	3415.14	19737.67	4.88	3.85	1.02	7085.74	271.38		0.00	0.00	0.00		0.00	0.00	**40048.27**	**41.68**
35B	12560.33	3.10	0.59	2.51	1084.47	666.11	4485.83	1.11	0.54	0.57	998.85	149.79		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	143546.65	35.47	8321.50	**11220.72**	**39.68**
36A	2691.50	0.67	0.13	0.54	232.39	142.74	1794.33	0.44	0.22	0.23	399.54	59.91		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**834.58**	**1.11**
37A		0.00	0.00	0.00	0.00	0.00	4485.84	1.11	0.54	0.57	998.85	149.79	1794.33	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00		0.00	0.00	**1817.47**	**1.55**
37B	6280.17	1.55	0.29	1.26	542.23	333.06	3588.67	0.89	0.43	0.45	799.08	119.83		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**1794.20**	**2.44**
38		0.00	0.00	0.00	0.00	0.00	10766.01	2.66	1.30	1.36	2397.25	359.49		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**2756.74**	**2.66**
39A		0.00	0.00	0.00	0.00	0.00	8971.67	2.22	1.09	1.13	1997.71	299.57	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00		0.00	0.00	**2631.70**	**2.44**
39B	1794.33	0.44	0.08	0.36	154.92	95.16	4485.84	1.11	0.54	0.57	998.85	149.79	1794.33	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00		0.00	0.00	**2067.55**	**2.00**
40A	897.17	0.22	0.04	0.18	77.46	47.58	1794.33	0.44	0.22	0.23	399.54	59.91		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**584.50**	**0.67**
40B	47549.87	11.75	2.23	9.52	4105.49	2521.71	42166.87	10.42	5.11	5.31	9389.22	1408.00	6280.17	1.55	1.23	0.33	2254.55	86.35		0.00	0.00	0.00	77156.39	19.07	4472.81	**24238.13**	**42.79**
41	5383.00	1.33	0.25	1.08	464.77	285.48	1794.33	0.44	0.22	0.23	399.54	59.91		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**1209.70**	**1.77**
42A	42166.84	10.42	1.98	8.44	3640.72	2236.23	32298.00	7.98	3.91	4.07	7191.74	1078.47	3588.67	0.89	0.70	0.19	1288.32	49.34		0.00	0.00	0.00	3588.67	0.89	208.04	**15692.85**	**20.17**
42B	50241.31	12.41	2.36	10.06	4337.87	2664.44	13457.49	3.33	1.63	1.70	2996.56	449.36	4485.83	1.11	0.88	0.23	1610.39	61.68		0.00	0.00	0.00	240440.56	59.41	13938.51	**26058.81**	**76.26**
43A	28709.33	7.09	1.35	5.75	2478.78	1522.54	70876.17	17.51	8.58	8.93	15781.87	2366.63	5383.00	1.33	1.05	0.28	1932.47	74.01		0.00	0.00	0.00		0.00	0.00	**24156.32**	**25.94**
43B	41269.65	10.20	1.94	8.26	3563.25	2188.65	6280.16	1.55	0.76	0.79	1398.39	209.70	3588.67	0.89	0.70	0.19	1288.32	49.34		0.00	0.00	0.00	20634.83	5.10	1196.22	**9893.87**	**17.74**
43C	18840.50	4.66	0.88	3.77	1626.70	999.17	10766.00	2.66	1.30	1.36	2397.25	359.49	8971.67	2.22	1.75	0.47	3220.79	123.35	897.17	0.22	0.22	407.70	54727.16	13.52	3172.57	**12307.02**	**23.28**
43D	105865.71	26.16	4.97	21.19	9140.52	5614.37	69081.86	17.07	8.36	8.71	15382.34	2306.72	4485.84	1.11	0.88	0.23	1610.40	61.68		0.00	0.00	0.00	561626.53	138.78	32557.88	**66673.90**	**183.12**
43E	84333.75	20.84	3.96	16.88	7281.44	4472.47	43961.21	10.86	5.32	5.54	9788.77	1467.91	5383.01	1.33	1.05	0.28	1932.48	74.01		0.00	0.00	0.00	427948.93	105.75	24808.50	**49825.57**	**138.78**
G-1	183022.79	45.23	8.59	36.63	15802.32	9706.24	36783.99	9.09	4.45	4.64	8190.63	1228.26	9868.88	2.44	1.93	0.51	3542.89	135.69	897.17	0.22	0.22	407.70	550862.70	136.12	31933.89	**70947.61**	**193.10**
G-2	105866.27	26.16	4.97	21.19	9140.57	5614.40	6280.20	1.55	0.76	0.79	1398.40	209.70	26017.98	6.43	5.08	1.35	9340.34	357.73	3588.69	0.89	0.89	1630.79	908835.04	224.58	52685.79	**80377.74**	**259.60**
H	90614.18	22.39	4.25	18.14	7823.70	4805.54	26915.10	6.65	3.26	3.39	5993.14	898.73	25120.76	6.21	4.90	1.30	9018.25	345.39	2691.51	0.67	0.67	1223.09	322084.07	79.59	18671.44	**48779.26**	**115.50**
I	7177.34	1.77	0.34	1.44	619.70	380.64	21532.03	5.32	2.61	2.71	4794.50	718.98	13457.52	3.33	2.63	0.70	4831.19	185.03		0.00	0.00	0.00		0.00	0.00	**11530.03**	**10.42**
J	26915.02	6.65	1.26	5.39	2323.86	1427.38	104968.58	25.94	12.71	13.23	23373.17	3505.02	6280.17	1.55	1.23	0.33	2254.55	86.35		0.00	0.00	0.00		0.00	0.00	**32970.34**	**34.14**
K	10766.00	2.66	0.51	2.15	929.54	570.95	897.17	0.22	0.11	0.11	199.77	29.96		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	29606.49	7.32	1716.31	**3446.53**	**10.20**
																											1961.66

TOTAL EXISTING SEDIMENT LOAD 912612.90

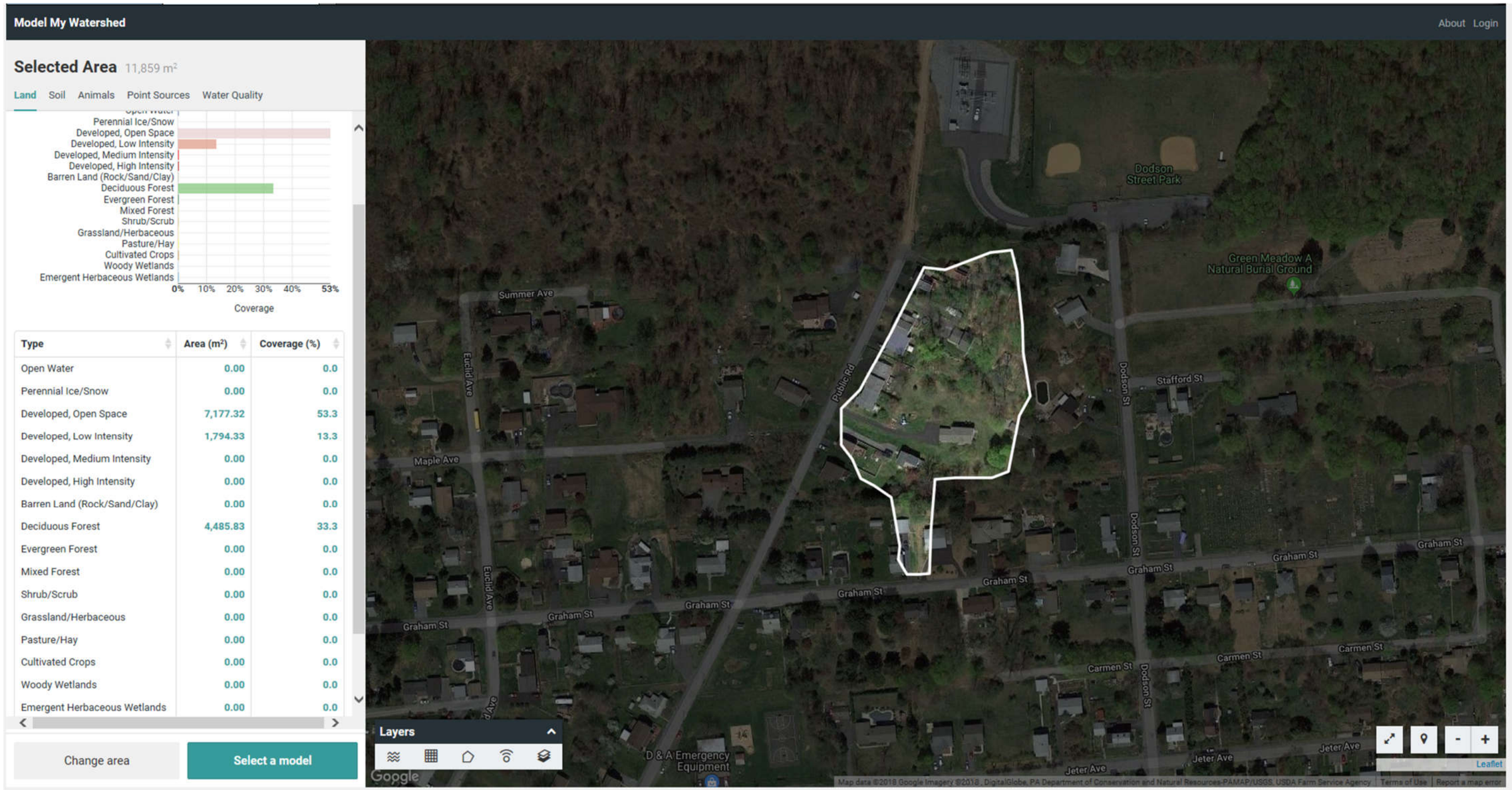
SALISBURY TOWNSHIP - EXISTING SEDIMENT LOADING (LITTLE LEHIGH RIVER WATERSHED)

STORM SEWER SHED NUMBER	DEVELOPED, OPEN SPACE (SQ. METERS)	DEVELOPED, OPEN SPACE (ACRES)	DEVELOPED, OPEN SPACE (IMPERVIOUS SURFACES) (19% OF TOTAL AREA) (A)	DEVELOPED, OPEN SPACE (PERVIOUS SURFACES) (81% OF TOTAL AREA) (B)	DEVELOPED, OPEN SPACE (IMPERVIOUS SURFACE - SEDIMENT LOADING)(A*1893 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, OPEN SPACE (PERVIOUS SURFACE - SEDIMENT LOADING) (B*264.96 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, LOW INTENSITY (SQ. METERS)	DEVELOPED, LOW INTENSITY (ACRES)	DEVELOPED, LOW INTENSITY (IMPERVIOUS SURFACES) (49% OF TOTAL AREA) (C)	DEVELOPED, LOW INTENSITY (PERVIOUS SURFACES) (51% OF TOTAL AREA) (D)	DEVELOPED, LOW INTENSITY (IMPERVIOUS SURFACE - SEDIMENT LOADING) (C*1893 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, LOW INTENSITY (PERVIOUS SURFACE - SEDIMENT LOADING) (D*264.96 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, MEDIUM INTENSITY (SQ. METERS)	DEVELOPED, MEDIUM INTENSITY (ACRES)	DEVELOPED, MEDIUM INTENSITY (IMPERVIOUS SURFACES) (79% OF TOTAL AREA) (E)	DEVELOPED, MEDIUM INTENSITY (PERVIOUS SURFACES) (21% OF TOTAL AREA) (F)	DEVELOPED, MEDIUM INTENSITY (IMPERVIOUS SURFACE - SEDIMENT LOADING) (E*1893 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, MEDIUM INTENSITY (PERVIOUS SURFACE - SEDIMENT LOADING) (F*264.96 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, HIGH INTENSITY (SQ. METERS)	DEVELOPED, HIGH INTENSITY (ACRES)	DEVELOPED, HIGH INTENSITY (IMPERVIOUS SURFACES) (100% OF TOTAL AREA) (G)	DEVELOPED, HIGH INTENSITY (IMPERVIOUS SURFACE - SEDIMENT LOADING) (G*1893 LBS/ACRE/YR) (LBS/YR)	UNDEVELOPED LANDS (SQ. METERS)	UNDEVELOPED LANDS (ACRES) (H)	UNDEVELOPED LANDS - SEDIMENT LOADING (H*234.6 LBS/ACRE/YR) (LBS/YR)	TOTAL SEDIMENT LOADING (LBS/YR)	TOTAL STORM SEWERSHED AREA (ACRES)
051	73567.75	18.18	3.45	14.72	6351.89	3901.51	18840.52	4.66	2.28	2.37	4195.19	629.11	1794.34	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00	3588.67	0.89	208.04	**15954.57**	**24.16**
052	73567.79	18.18	3.45	14.72	6351.90	3901.52	11663.19	2.88	1.41	1.47	2597.02	389.45		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	3588.67	0.89	208.04	**13447.92**	**21.95**
053	78053.64	19.29	3.66	15.62	6739.21	4139.41	13457.52	3.33	1.63	1.70	2996.56	449.36		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	897.17	0.22	52.01	**14376.56**	**22.83**
054A	34989.59	8.65	1.64	7.00	3021.03	1855.60	5383.01	1.33	0.65	0.68	1198.63	179.74		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	10766.03	2.66	624.11	**6879.11**	**12.64**
054B	296963.04	73.38	13.94	59.44	25640.01	15748.83	144444.26	35.69	17.49	18.20	32163.15	4823.16	8074.52	2.00	1.58	0.42	2898.72	111.02		0.00	0.00	0.00		0.00	0.00	**81384.88**	**111.07**
055	17046.23	4.21	0.80	3.41	1471.78	904.01	17943.40	4.43	2.17	2.26	3995.43	599.15	1794.34	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00	3588.68	0.89	208.04	**7847.24**	**9.98**
056	27812.27	6.87	1.31	5.57	2401.33	1474.97	13457.55	3.33	1.63	1.70	2996.57	449.36		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	897.17	0.22	52.01	**7374.24**	**10.42**
057	47550.05	11.75	2.23	9.52	4105.51	2521.72	84334.05	20.84	10.21	10.63	18778.51	2816.01	16149.07	3.99	3.15	0.84	5797.45	222.04	2691.51	0.67	0.67	1223.09	106763.31	26.38	6189.14	**41653.47**	**63.63**
058		0.00	0.00	0.00	0.00	0.00	11663.21	2.88	1.41	1.47	2597.03	389.45	16149.07	3.99	3.15	0.84	5797.45	222.04		0.00	0.00	0.00		0.00	0.00	**9005.96**	**6.87**
059		0.00	0.00	0.00	0.00	0.00	3588.68	0.89	0.43	0.45	799.09	119.83	75362.32	18.62	14.71	3.91	27054.75	1036.18	25120.77	6.21	6.21	11415.51		0.00	0.00	**40425.35**	**25.72**
060A	122015.29	30.15	5.73	24.42	10534.89	6470.83	10766.05	2.66	1.30	1.36	2397.26	359.49		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	173154.05	42.79	10037.86	**29800.33**	**75.60**
060B	42167.03	10.42	1.98	8.44	3640.73	2236.24	23326.44	5.76	2.82	2.94	5194.06	778.90	21532.10	5.32	4.20	1.12	7729.93	296.05	8971.71	2.22	2.22	4076.97	120220.90	29.71	6969.29	**30922.17**	**53.43**
061	48447.28	11.97	2.27	9.70	4182.97	2569.30	3588.69	0.89	0.43	0.45	799.09	119.83		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	44858.59	11.08	2600.48	**10271.68**	**23.94**
062A		0.00	0.00	0.00	0.00	0.00	897.17	0.22	0.11	0.11	199.77	29.96		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**229.73**	**0.22**
062B	5383.03	1.33	0.25	1.08	464.77	285.48	8971.71	2.22	1.09	1.13	1997.71	299.58	1794.34	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00	11663.23	2.88	676.13	**4392.50**	**6.87**
063	14354.75	3.55	0.67	2.87	1239.40	761.27	6280.20	1.55	0.76	0.79	1398.40	209.70	2691.51	0.67	0.53	0.14	966.24	37.01		0.00	0.00	0.00	7177.37	1.77	416.08	**5028.10**	**7.54**
064	132781.40	32.81	6.23	26.58	11464.45	7041.79	170462.60	42.12	20.64	21.48	37956.61	5691.94	2691.51	0.67	0.53	0.14	966.24	37.01		0.00	0.00	0.00	17046.26	4.21	988.18	**64146.21**	**79.81**
065		0.00	0.00	0.00	0.00	0.00	10766.07	2.66	1.30	1.36	2397.26	359.49	1794.34	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00		0.00	0.00	**3425.58**	**3.10**
066	897.17	0.22	0.04	0.18	77.46	47.58	897.17	0.22	0.11	0.11	199.77	29.96		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**354.77**	**0.44**
067	897.17	0.22	0.04	0.18	77.46	47.58	2691.52	0.67	0.33	0.34	599.32	89.87		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**814.23**	**0.89**
068	13457.58	3.33	0.63	2.69	1161.94	713.70	6280.20	1.55	0.76	0.79	1398.40	209.70	9868.89	2.44	1.93	0.51	3542.89	135.69	12560.41	3.10	3.10	5707.76		0.00	0.00	**12870.08**	**10.42**
069A	5383.03	1.33	0.25	1.08	464.77	285.48	5383.03	1.33	0.65	0.68	1198.63	179.75	22429.30	5.54	4.38	1.16	8052.02	308.39	81642.64	20.17	20.17	37100.45		0.00	0.00	**47589.49**	**28.38**
069B	17943.44	4.43	0.84	3.59	1549.25	951.59	87025.68	21.50	10.54	10.97	19377.85	2905.88	78951.13	19.51	15.41	4.10	28343.12	1085.52	67287.90	16.63	16.63	30577.30		0.00	0.00	**84790.53**	**62.07**
070	139958.94	34.58	6.57	28.01	12084.16	7422.44	38578.43	9.53	4.67	4.86	8590.19	1288.18	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00	10766.07	2.66	624.12	**30343.50**	**47.00**
071	44858.63	11.08	2.11	8.98	3873.13	2378.99	64596.43	15.96	7.82	8.14	14383.57	2156.95	1794.35	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00	6280.21	1.55	364.07	**23825.54**	**29.04**
072		0.00	0.00	0.00	0.00	0.00	4485.86	1.11	0.54	0.57	998.86	149.79		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**1148.65**	**1.11**
073		0.00	0.00	0.00	0.00	0.00	4485.86	1.11	0.54	0.57	998.86	149.79		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	**1148.65**	**1.11**
074A	10766.07	2.66	0.51	2.15	929.55	570.96	17943.45	4.43	2.17	2.26	3995.44	599.15	30503.86	7.54	5.95	1.58	10950.76	419.41	6280.21	1.55	1.55	2853.88		0.00	0.00	**20319.14**	**16.18**
074B		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	1794.34	0.44	0.35	0.09	644.16	24.67	2691.52	0.67	0.67	1223.09		0.00	0.00	**1891.93**	**1.11**
075	13457.59	3.33	0.63	2.69	1161.94	713.70	8074.55	2.00	0.98	1.02	1797.95	269.62	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00		0.00	0.00	**4277.61**	**5.54**
076	11663.24	2.88	0.55	2.33	1007.01	618.54	8971.73	2.22	1.09	1.13	1997.72	299.58	1794.35	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00		0.00	0.00	**4591.68**	**5.54**
L	69979.23	17.29	3.29	14.01	6042.06	3711.21	1794.34	0.44	0.22	0.23	399.54	59.92		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	8074.53	2.00	468.09	**10680.81**	**19.73**
M	175845.30	43.45	8.26	35.20	15182.61	9325.60	35886.80	8.87	4.35	4.52	7990.85	1198.30	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00	2691.51	0.67	156.03	**34187.80**	**53.21**
N	13457.55	3.33	0.63	2.69	1161.93	713.69	5383.02	1.33	0.65	0.68	1198.63	179.75	8074.53	2.00	1.58	0.42	2898.72	111.02		0.00	0.00	0.00		0.00	0.00	**6263.74**	**6.65**
O	16149.07	3.99	0.76	3.23	1394.32	856.43	5383.02	1.33	0.65	0.68	1198.63	179.75	1794.34	0.44	0.35	0.09	644.16	24.67		0.00	0.00	0.00		0.00	0.00	**4297.96**	**5.76**
P		0.00	0.00	0.00	0.00	0.00	3588.68	0.89	0.43	0.45	799.09	119.83	11663.22	2.88	2.28	0.61	4187.05	160.36		0.00	0.00	0.00		0.00	0.00	**5266.32**	**3.77**
Q	11663.22	2.88	0.55	2.33	1007.01	618.53		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	26017.96	6.43	1508.28	**3133.83**	**9.31**
R	140000.00	34.59	6.57	28.02	12087.70	7424.61	10000.00	2.47	1.21	1.26	2226.68	333.91		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	2410000.00	595.52	139709.36	**161782.28**	**632.59**
S	8971.75	2.22	0.42	1.80	774.63	475.80		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	173154.73	42.79	10037.90	**11288.33**	**45.00**
																											1544.64

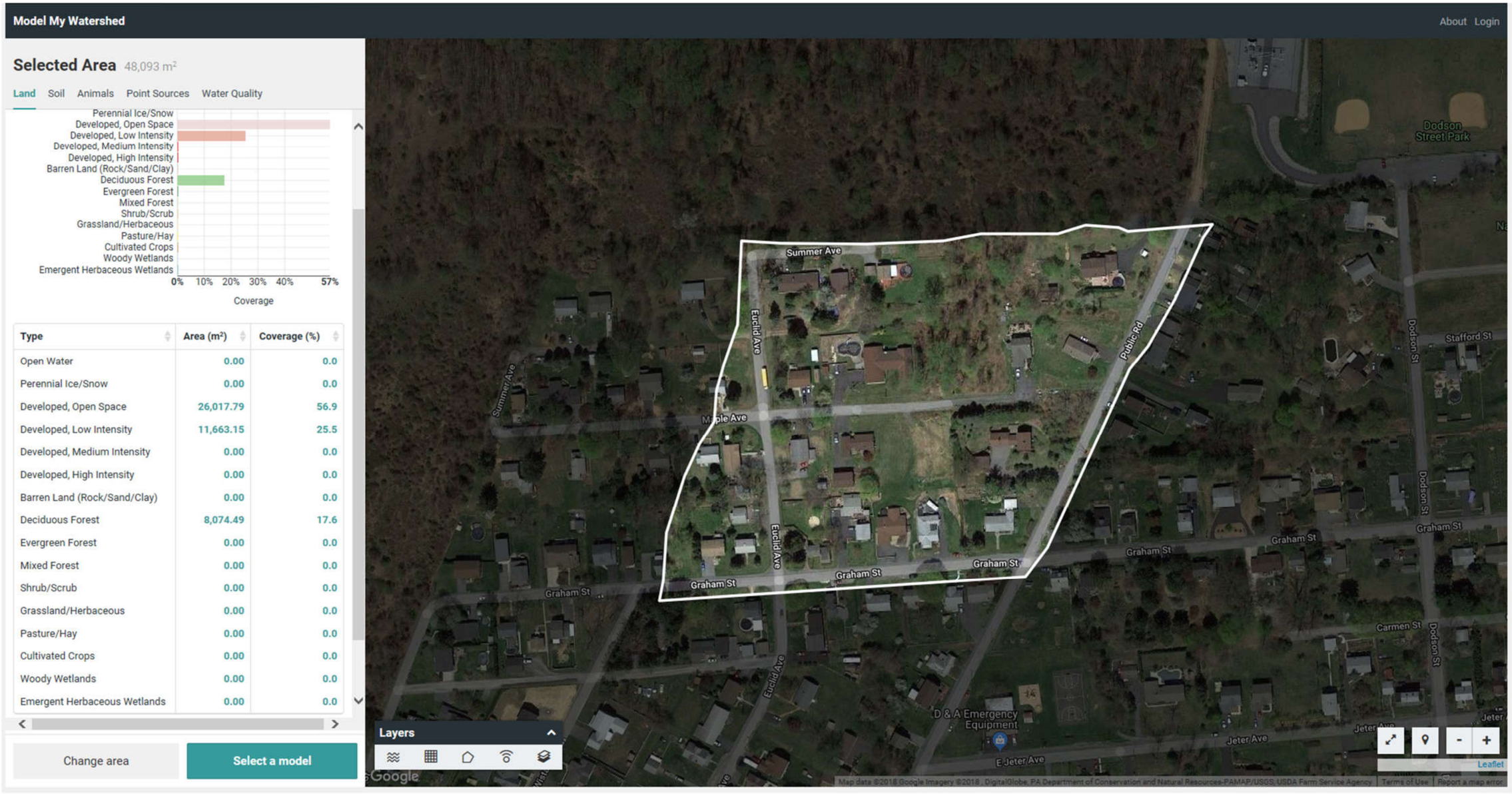
TOTAL EXISTING SEDIMENT LOAD 857432.45

SALISBURY TOWNSHIP - EXISTING SEDIMENT LOADING (SAUCON CREEK / BLACK RIVER WATERSHEDS)																											
STORM SEWER SHED NUMBER	DEVELOPED, OPEN SPACE (SQ. METERS)	DEVELOPED, OPEN SPACE (ACRES)	DEVELOPED, OPEN SPACE (IMPERVIOUS SURFACES) (19% OF TOTAL AREA) (A)	DEVELOPED, OPEN SPACE (PERVIOUS SURFACES) (81% OF TOTAL AREA) (B)	DEVELOPED, OPEN SPACE (IMPERVIOUS SURFACE - SEDIMENT LOADING)(A*1893 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, OPEN SPACE (PERVIOUS SURFACE - SEDIMENT LOADING) (B*264.96 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, LOW INTENSITY (SQ. METERS)	DEVELOPED, LOW INTENSITY (ACRES)	DEVELOPED, LOW INTENSITY (IMPERVIOUS SURFACES) (49% OF TOTAL AREA) (C)	DEVELOPED, LOW INTENSITY (PERVIOUS SURFACES) (51% OF TOTAL AREA) (D)	DEVELOPED, LOW INTENSITY (IMPERVIOUS SURFACE - SEDIMENT LOADING) (C*1893 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, LOW INTENSITY (PERVIOUS SURFACE - SEDIMENT LOADING) (D*264.96 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, MEDIUM INTENSITY (SQ. METERS)	DEVELOPED, MEDIUM INTENSITY (ACRES)	DEVELOPED, MEDIUM INTENSITY (IMPERVIOUS SURFACES) (79% OF TOTAL AREA) (E)	DEVELOPED, MEDIUM INTENSITY (PERVIOUS SURFACES) (21% OF TOTAL AREA) (F)	DEVELOPED, MEDIUM INTENSITY (IMPERVIOUS SURFACE - SEDIMENT LOADING) (E*1893 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, MEDIUM INTENSITY (PERVIOUS SURFACE - SEDIMENT LOADING) (F*264.96 LBS/ACRE/YR) (LBS/YR)	DEVELOPED, HIGH INTENSITY (SQ. METERS)	DEVELOPED, HIGH INTENSITY (ACRES)	DEVELOPED, HIGH INTENSITY (IMPERVIOUS SURFACES) (100% OF TOTAL AREA) (G)	DEVELOPED, HIGH INTENSITY (IMPERVIOUS SURFACE - SEDIMENT LOADING) (G*1893 LBS/ACRE/YR) (LBS/YR)	UNDEVELOPED LANDS (SQ. METERS)	UNDEVELOPED LANDS (ACRES) (H)	UNDEVELOPED LANDS - SEDIMENT LOADING (H*234.6 LBS/ACRE/YR) (LBS/YR)	TOTAL SEDIMENT LOADING (LBS/YR)	TOTAL STORM SEWERSHED AREA (ACRES)
77	14354.70	3.55	0.67	2.87	1239.40	761.27		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	42166.93	10.42	2444.45	**4445.11**	**13.97**
78	12560.36	3.10	0.59	2.51	1084.47	666.11		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	59213.13	14.63	3432.63	**5183.21**	**17.74**
79	20634.88	5.10	0.97	4.13	1781.63	1094.33		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	327466.58	80.92	18983.46	**21859.42**	**86.02**
T	5383.02	1.33	0.25	1.08	464.77	285.48	897.17	0.22	0.11	0.11	199.77	29.96		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	2691.51	0.67	156.03	**1136.01**	**2.22**
U	22429.25	5.54	1.05	4.49	1936.56	1189.49	2691.51	0.67	0.33	0.34	599.31	89.87		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	134575.47	33.25	7801.43	**11616.67**	**39.46**
V	20634.93	5.10	0.97	4.13	1781.64	1094.33	5383.03	1.33	0.65	0.68	1198.63	179.75		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	40372.69	9.98	2340.43	**6594.77**	**16.41**
W	7177.37	1.77	0.34	1.44	619.70	380.64	8074.54	2.00	0.98	1.02	1797.94	269.62	897.17	0.22	0.18	0.05	322.08	12.34		0.00	0.00	0.00	47550.09	11.75	2756.51	**6158.83**	**15.74**
																											191.54
																							TOTAL EXISTING SEDIMENT LOAD			**56994.02**	

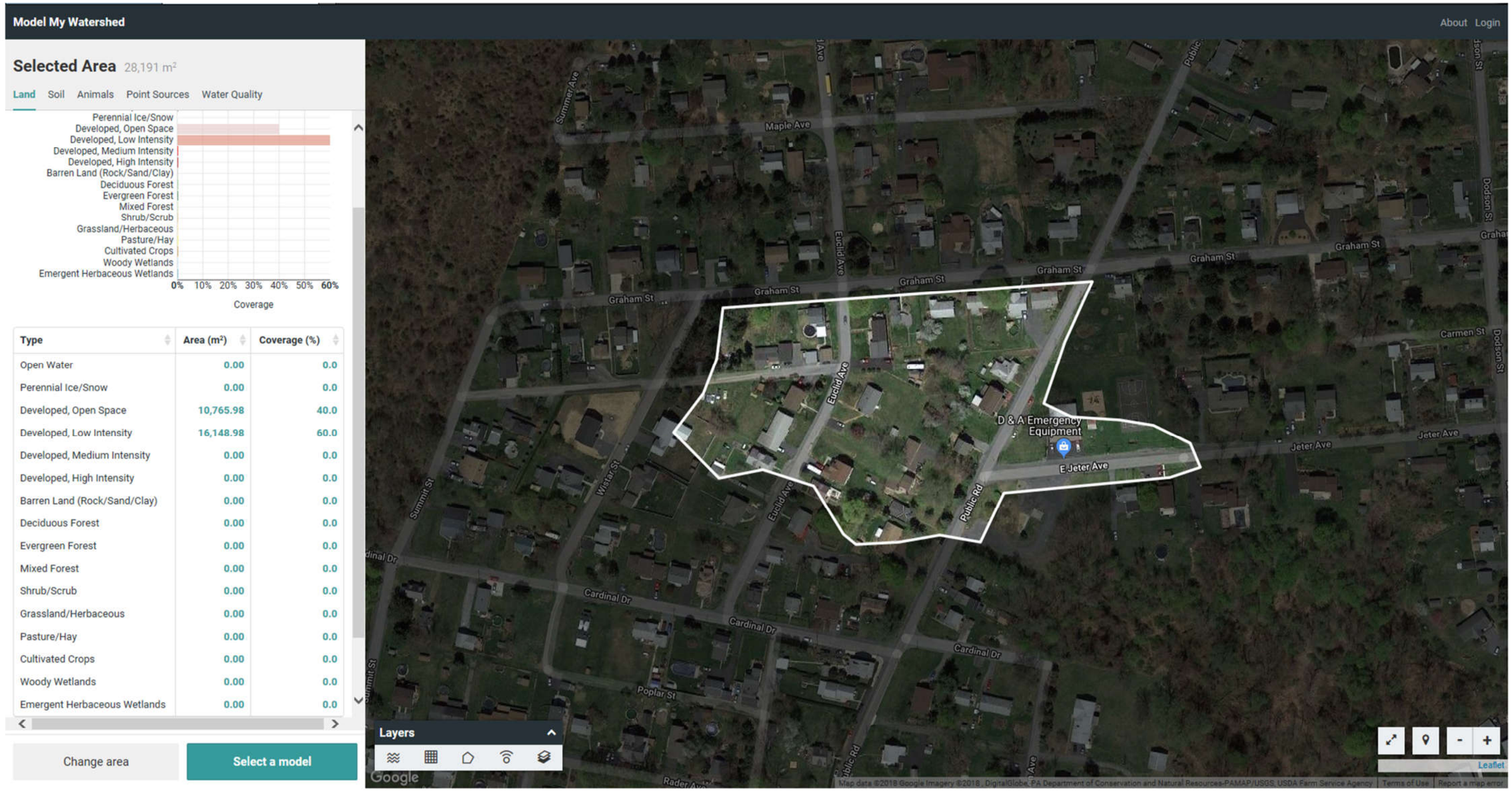
OBSERVATION POINT #001- LEHIGH RIVER WATERSHED:



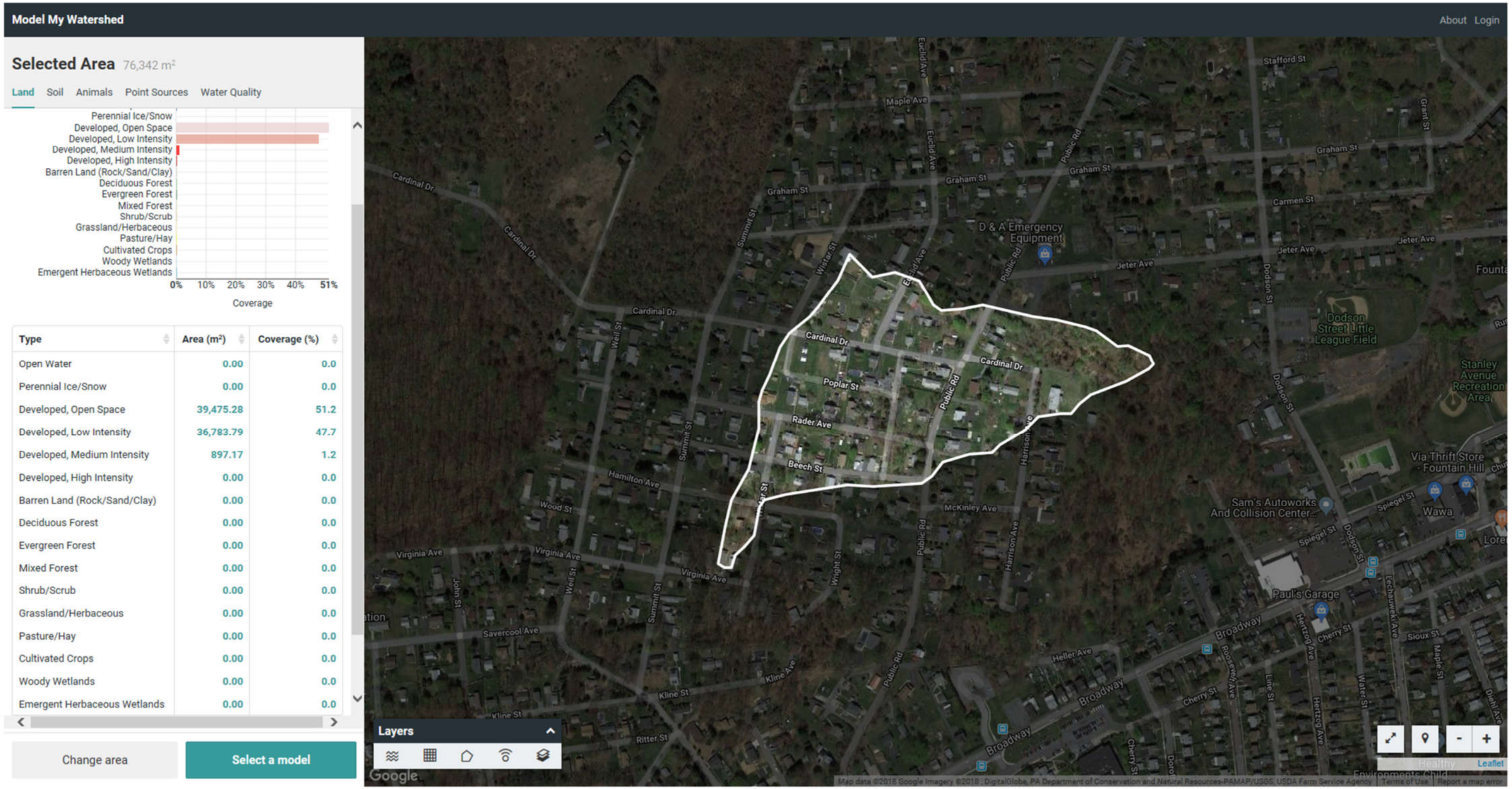
OBSERVATION POINT #002 - LEHIGH RIVER WATERSHED:



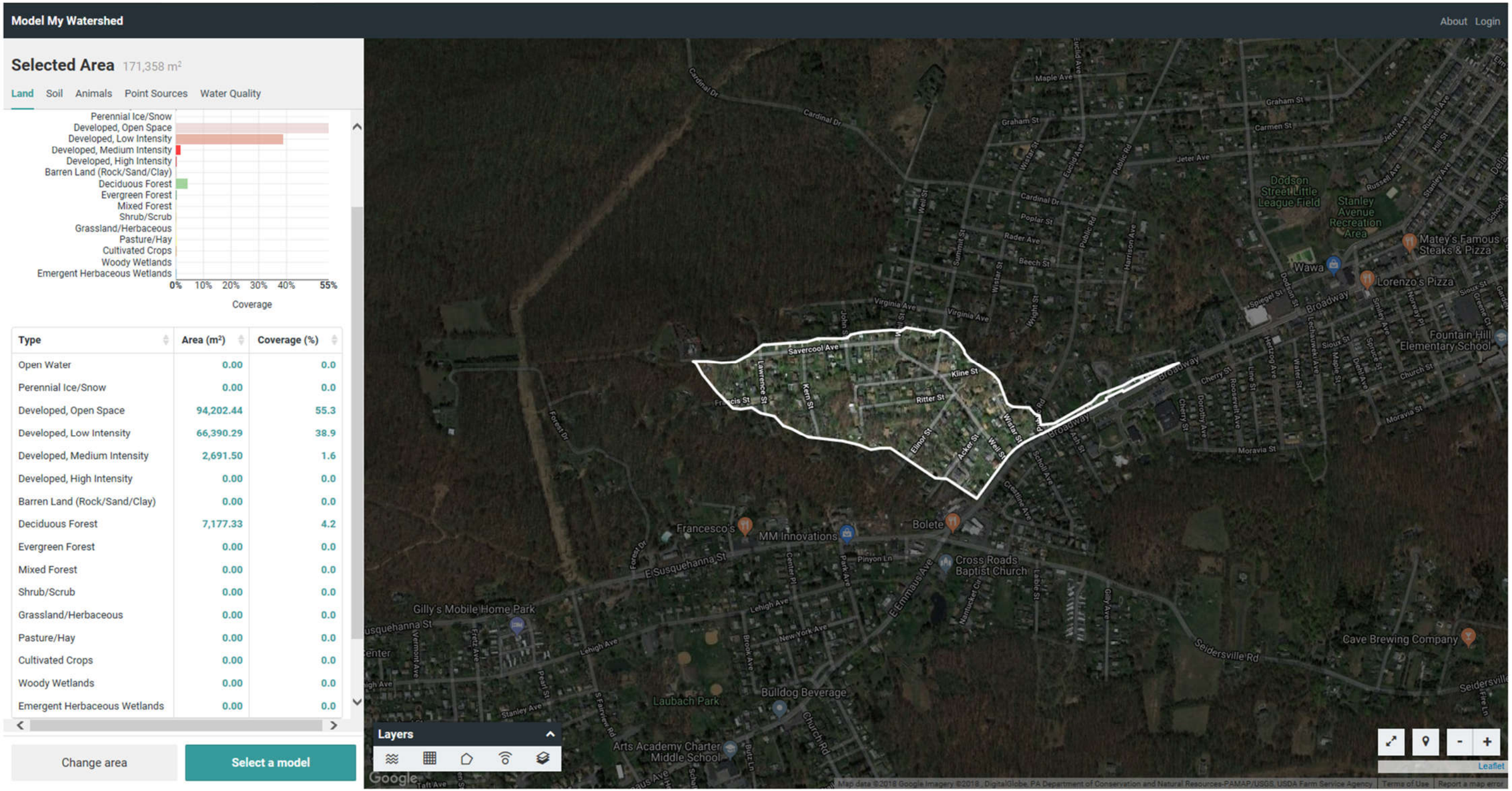
OBSERVATION POINT #003 - LEHIGH RIVER WATERSHED:



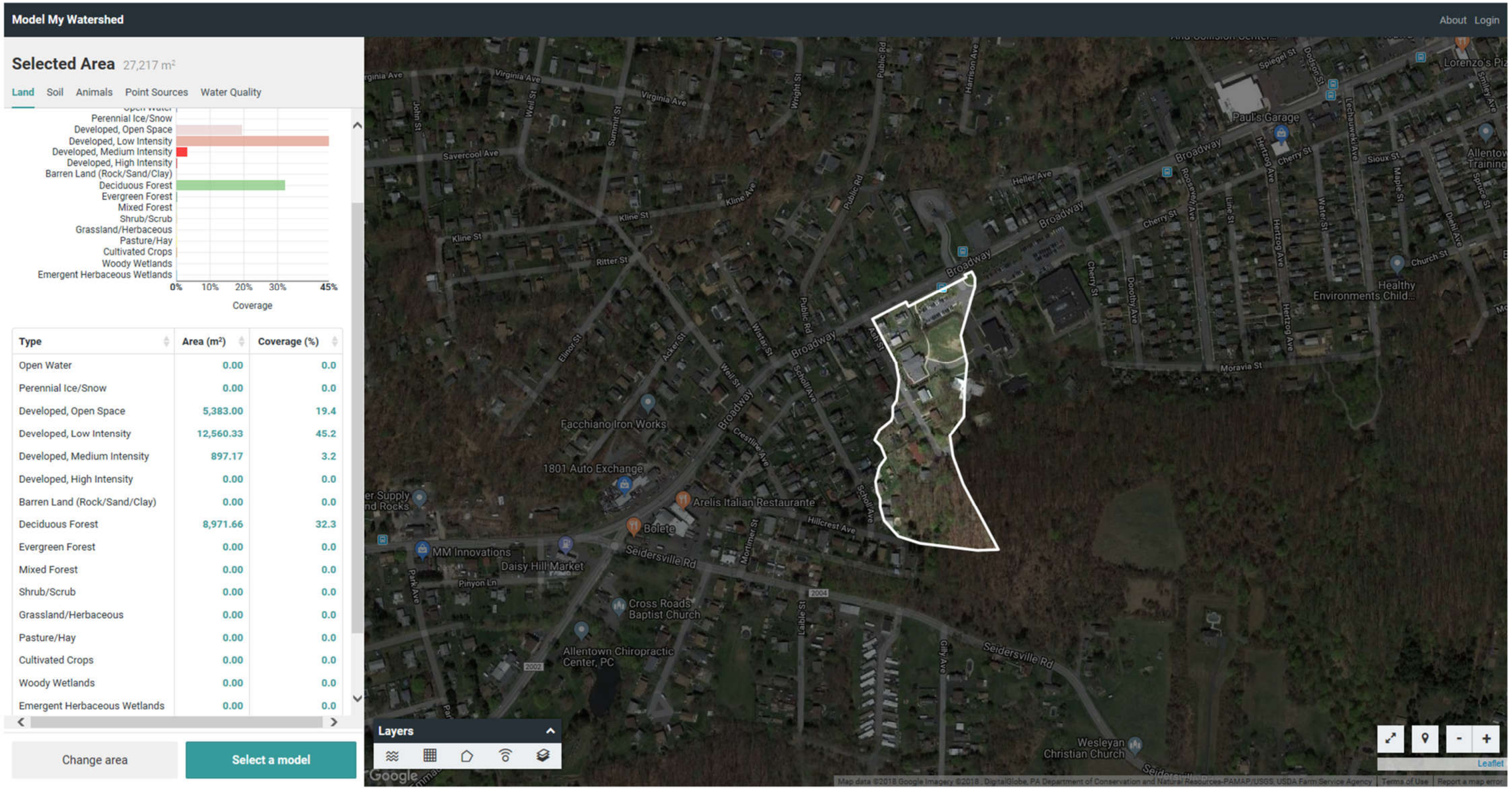
OBSERVATION POINT #004 - LEHIGH RIVER WATERSHED:



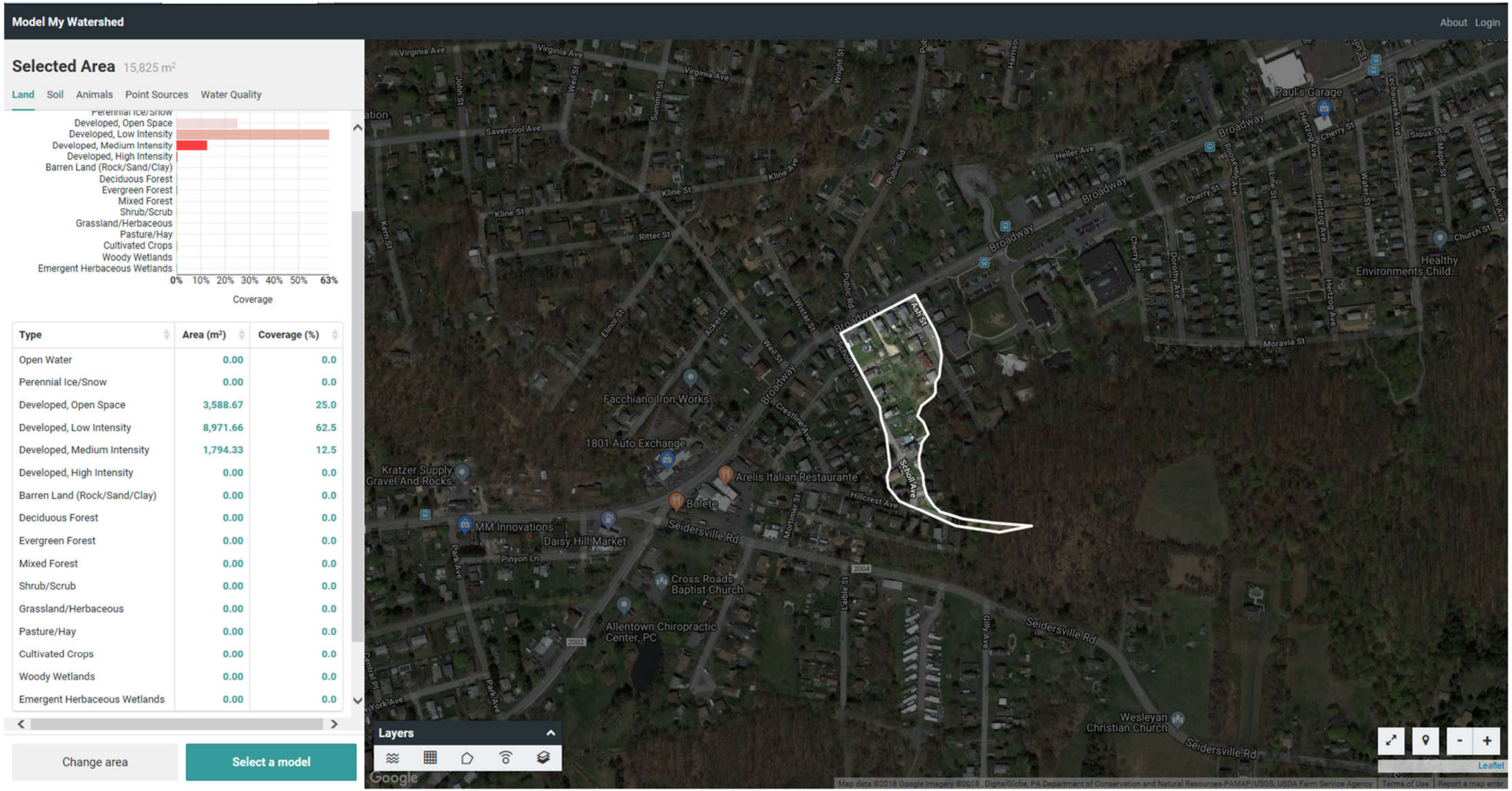
OBSERVATION POINT #005 - LEHIGH RIVER WATERSHED:



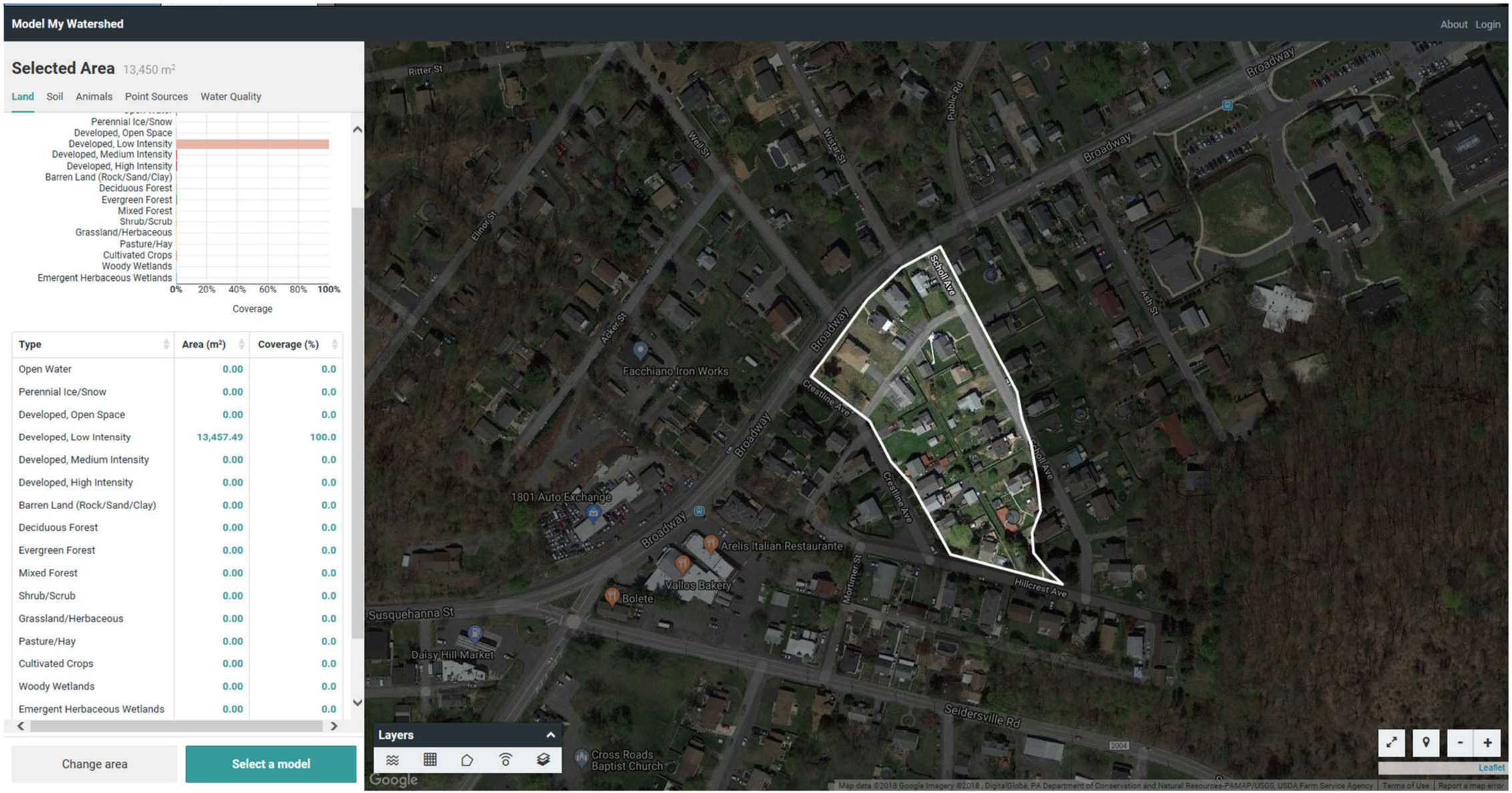
OBSERVATION POINT #006 - LEHIGH RIVER WATERSHED:



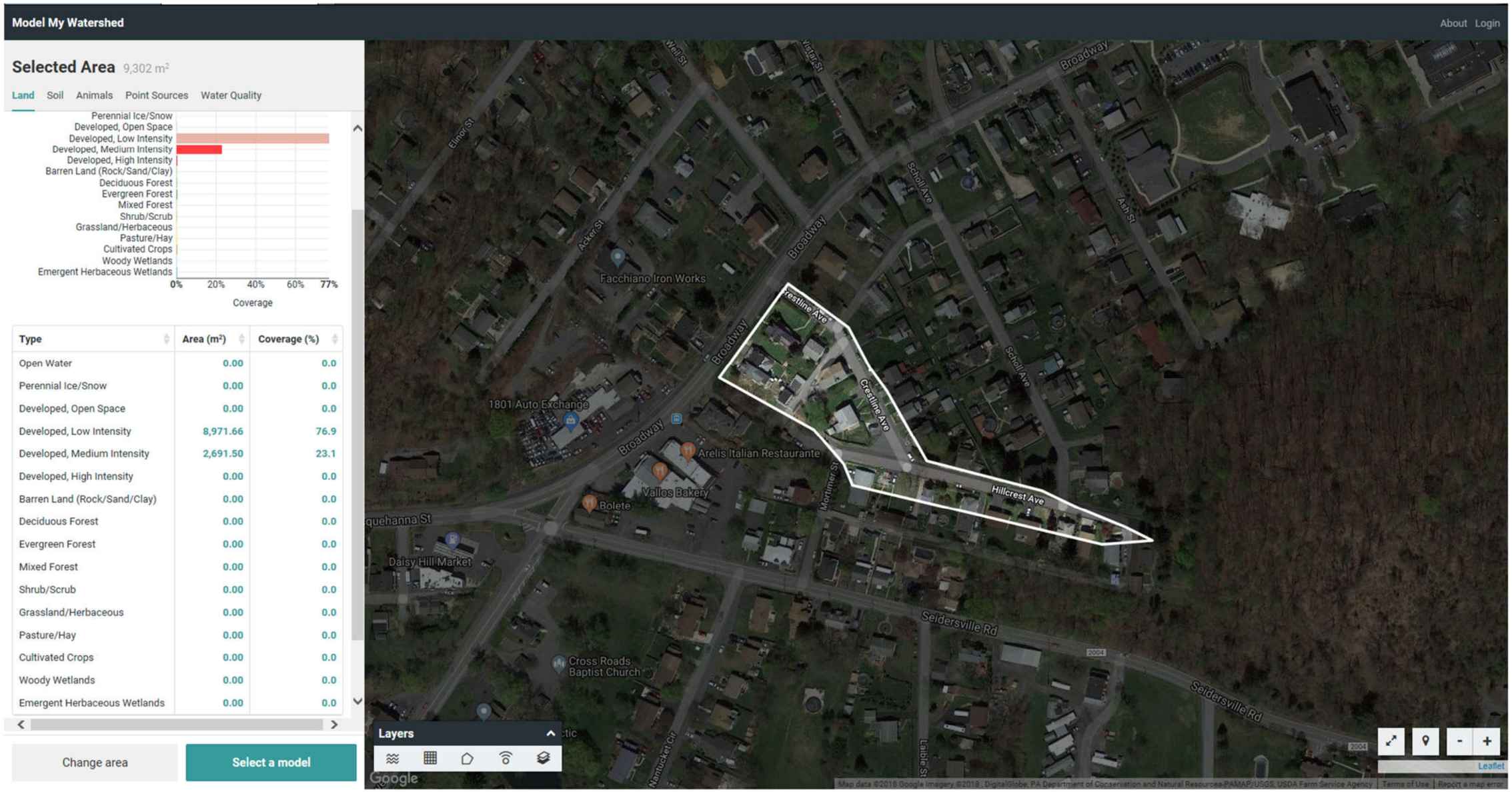
OBSERVATION POINT #007 - LEHIGH RIVER WATERSHED:



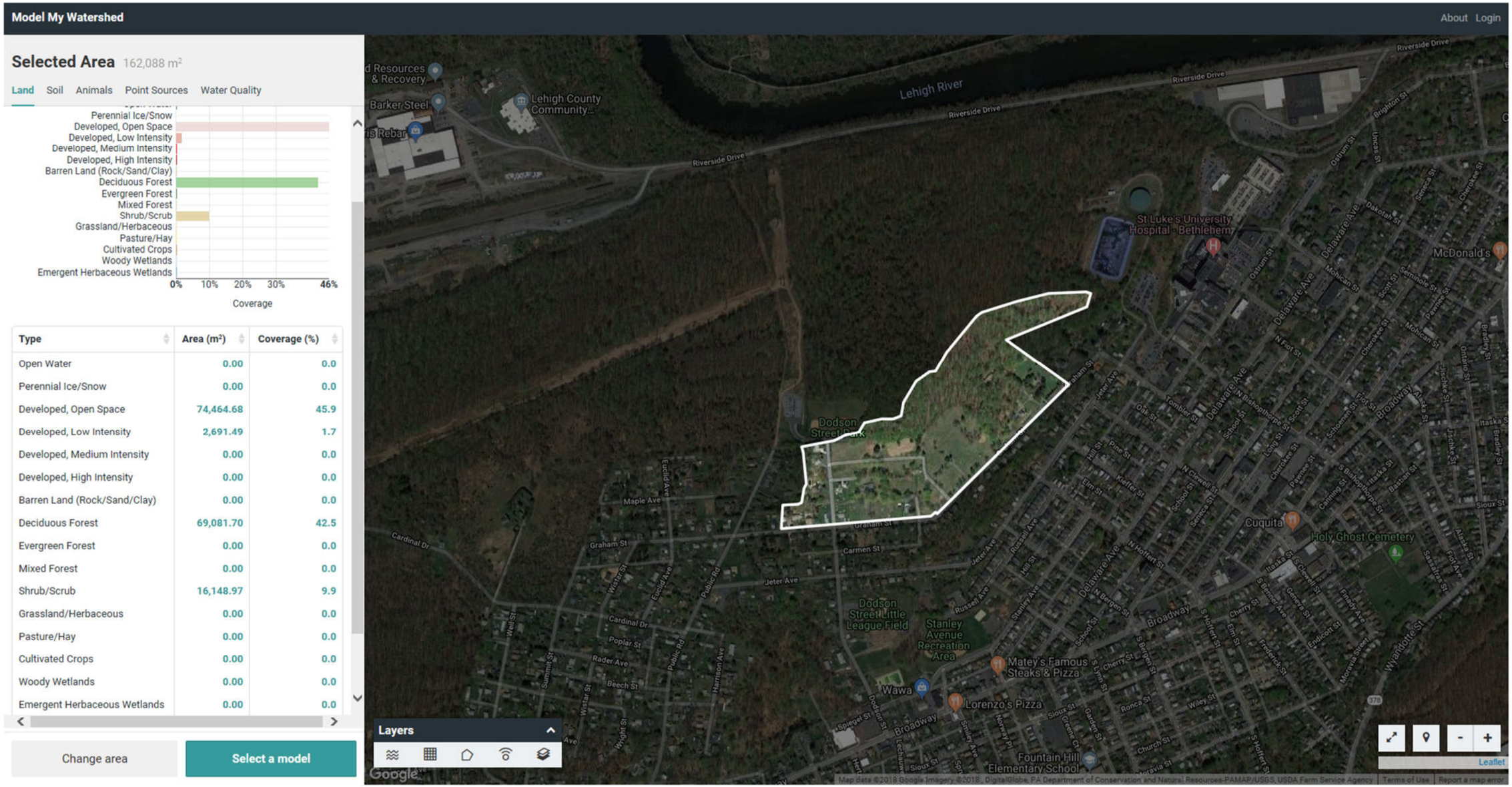
OBSERVATION POINT #008 - LEHIGH RIVER WATERSHED:



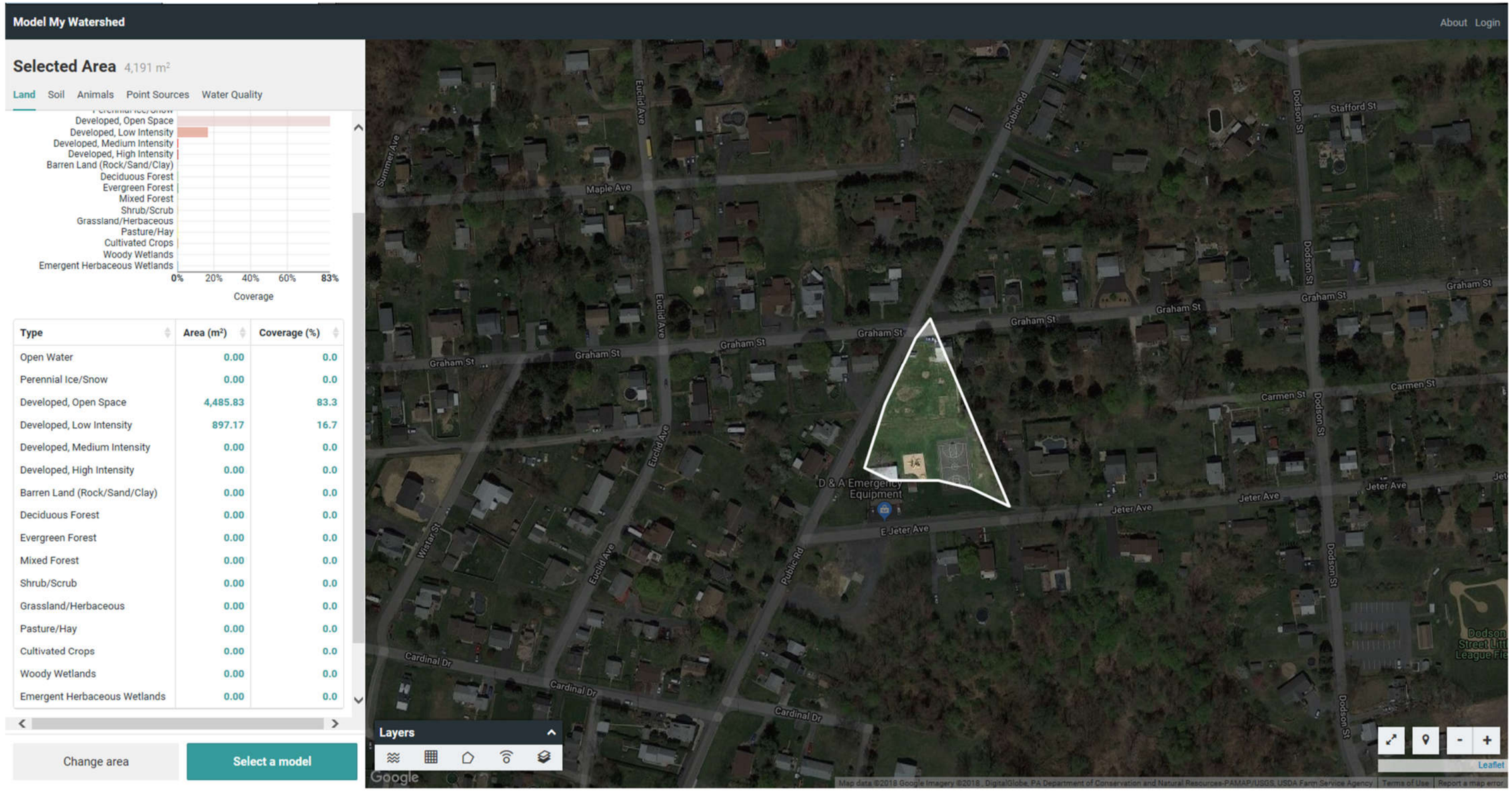
OBSERVATION POINT #009 - LEHIGH RIVER WATERSHED:



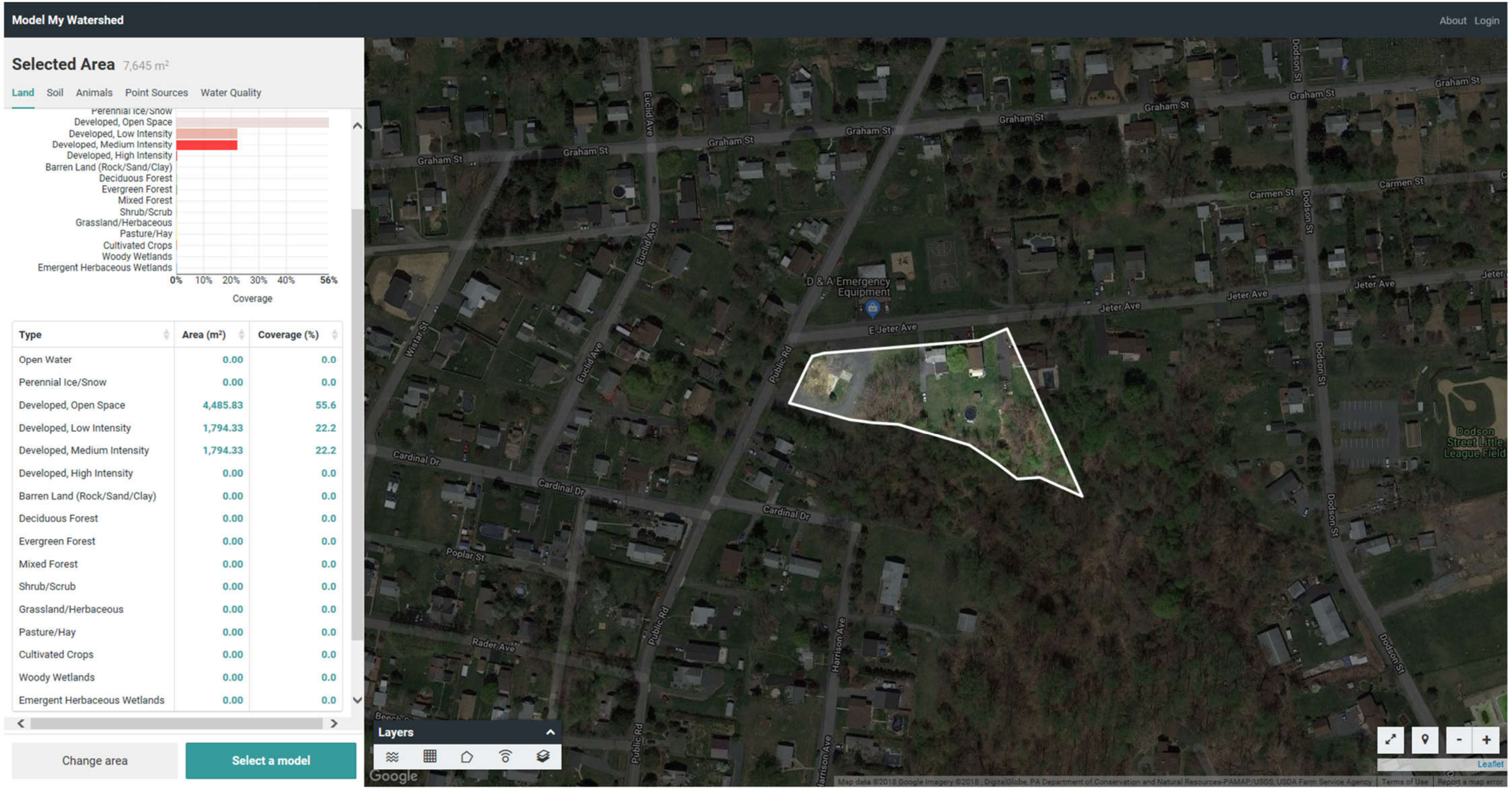
CONTRIBUTING AREA A - LEHIGH RIVER WATERSHED:



CONTRIBUTING AREA B - LEHIGH RIVER WATERSHED:



CONTRIBUTING AREA C - LEHIGH RIVER WATERSHED:



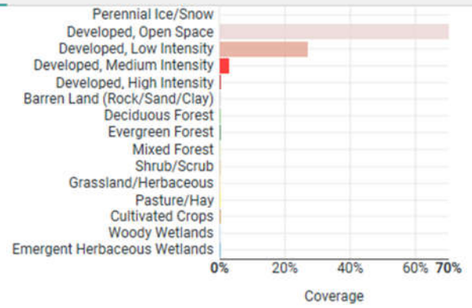
CONTRIBUTING AREA D - LEHIGH RIVER WATERSHED:

Model My Watershed

About Login

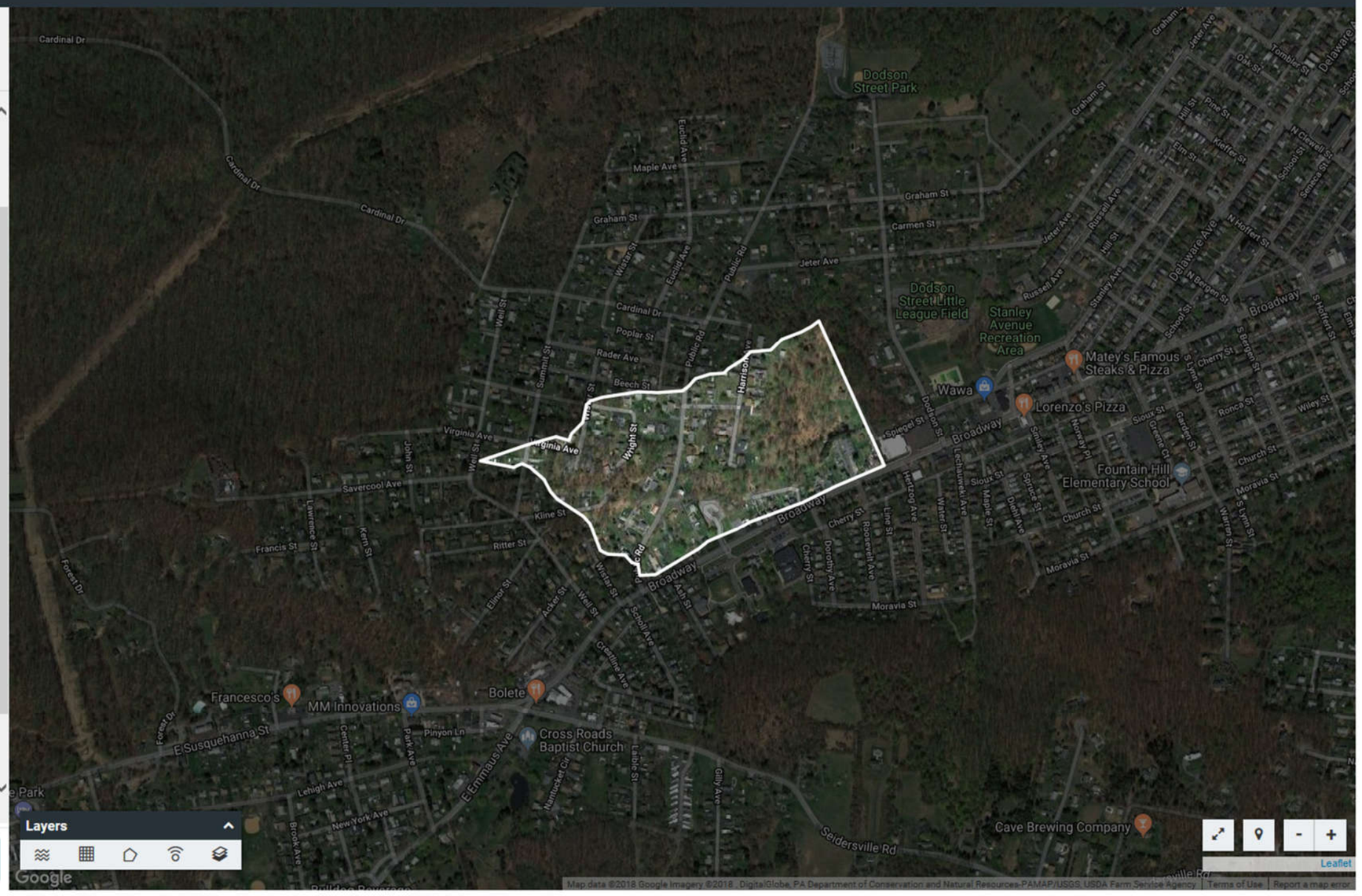
Selected Area 187,104 m²

Land Soil Animals Point Sources Water Quality

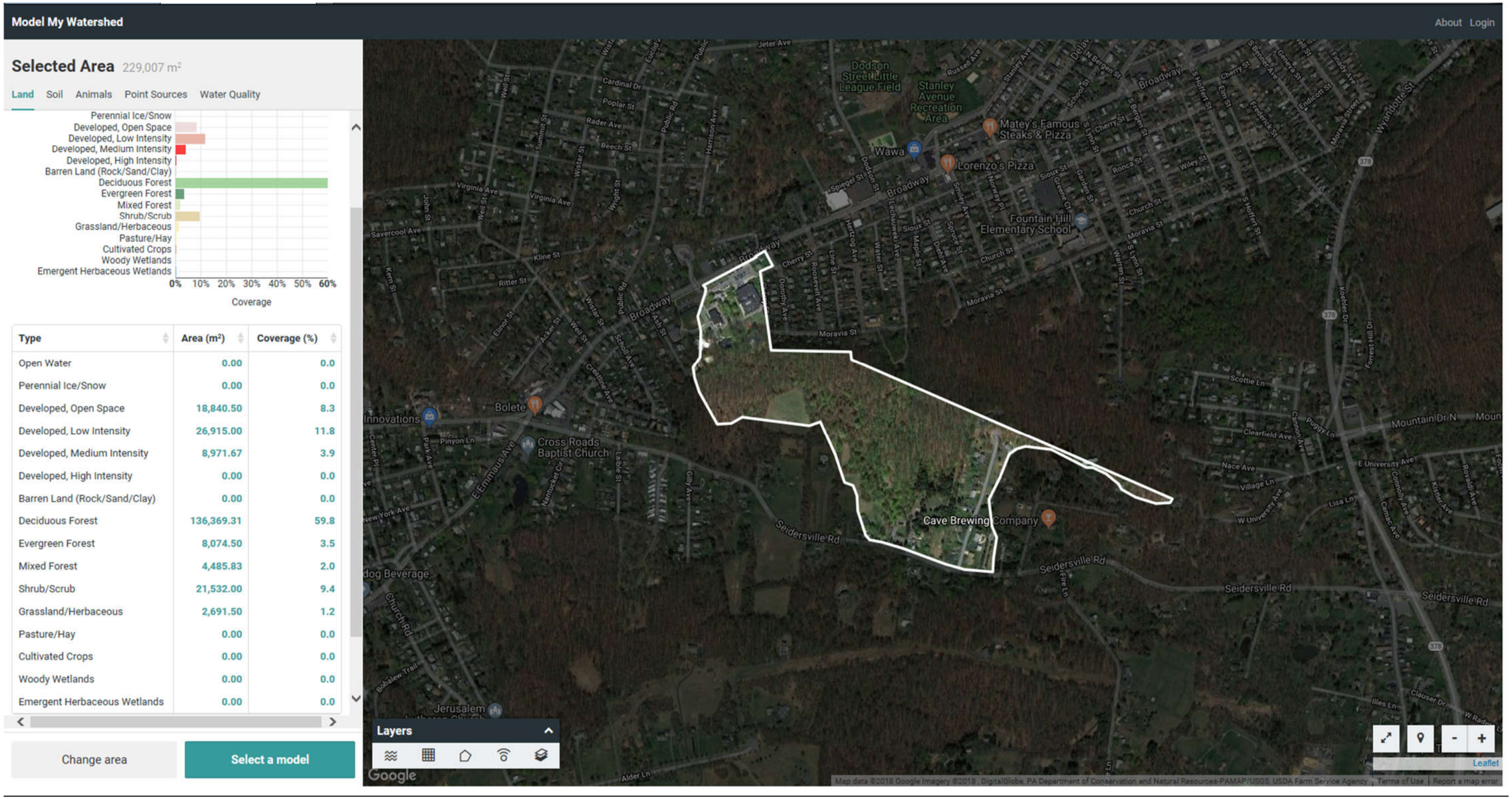


Type	Area (m²)	Coverage (%)
Open Water	0.00	0.0
Perennial Ice/Snow	0.00	0.0
Developed, Open Space	132,780.54	70.1
Developed, Low Intensity	51,138.45	27.0
Developed, Medium Intensity	5,382.99	2.8
Developed, High Intensity	0.00	0.0
Barren Land (Rock/Sand/Clay)	0.00	0.0
Deciduous Forest	0.00	0.0
Evergreen Forest	0.00	0.0
Mixed Forest	0.00	0.0
Shrub/Scrub	0.00	0.0
Grassland/Herbaceous	0.00	0.0
Pasture/Hay	0.00	0.0
Cultivated Crops	0.00	0.0
Woody Wetlands	0.00	0.0
Emergent Herbaceous Wetlands	0.00	0.0

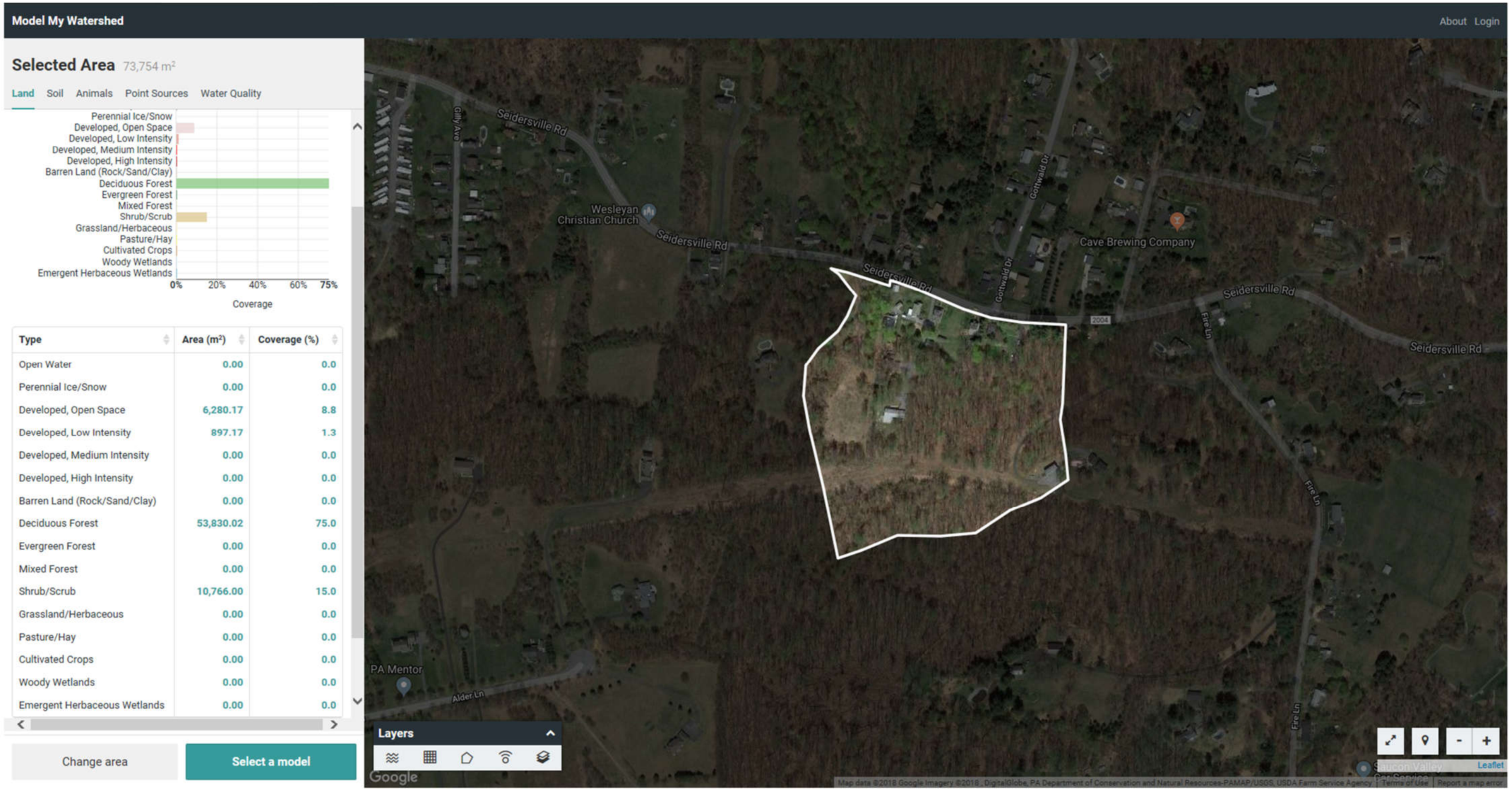
Change area | Select a model



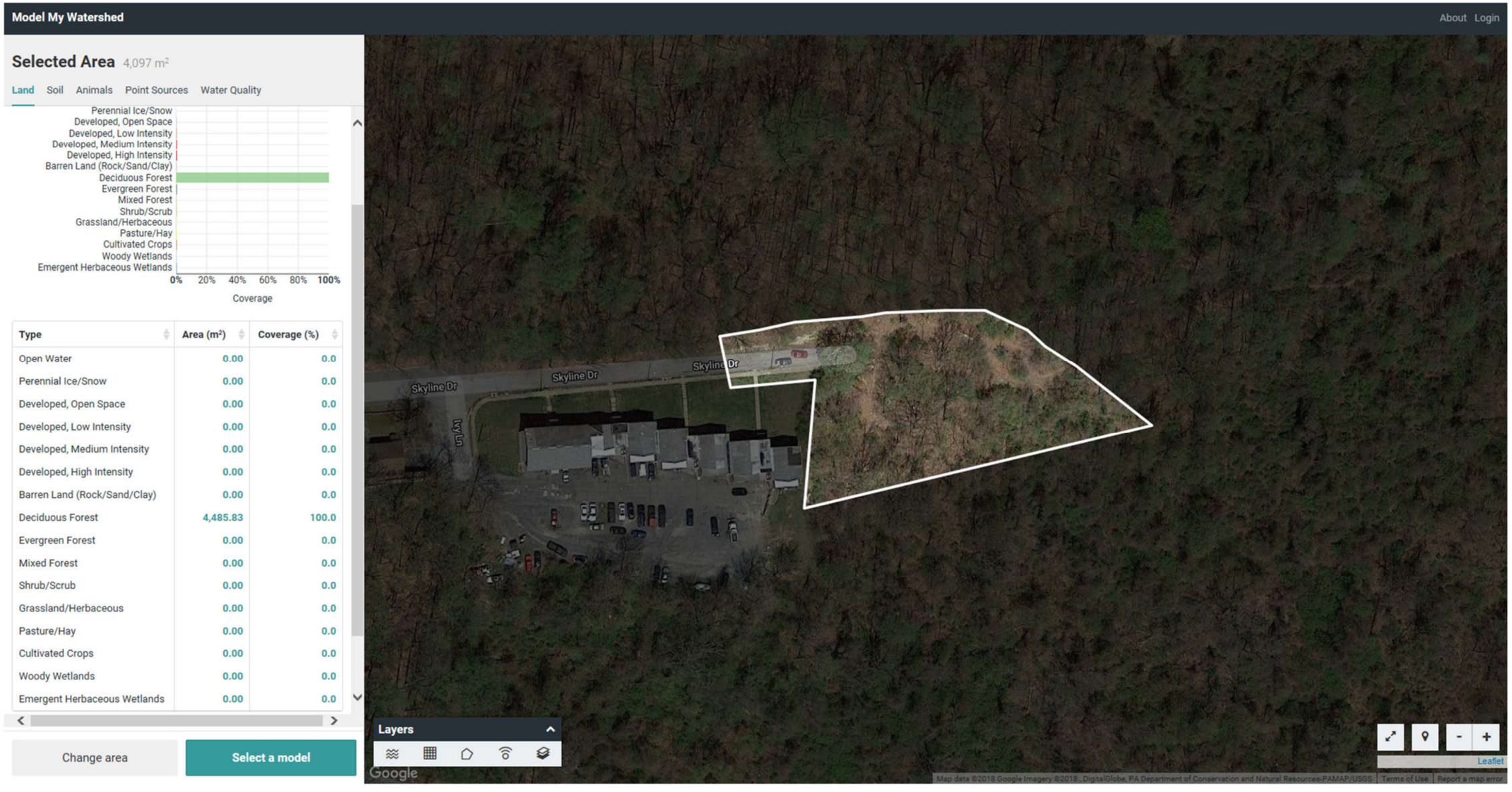
CONTRIBUTING AREA E-1 - LEHIGH RIVER WATERSHED:



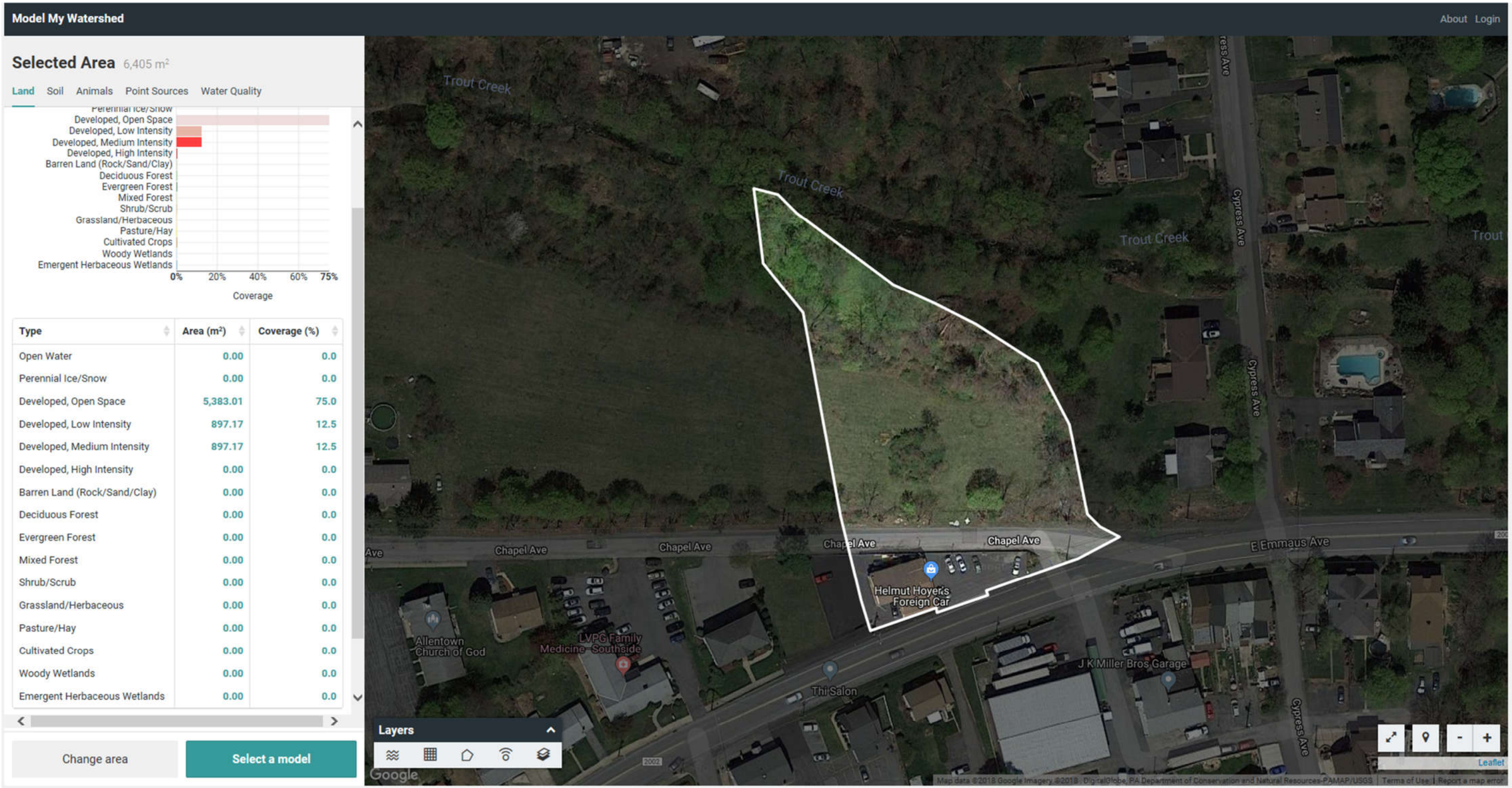
CONTRIBUTING AREA E-2 - LEHIGH RIVER WATERSHED:



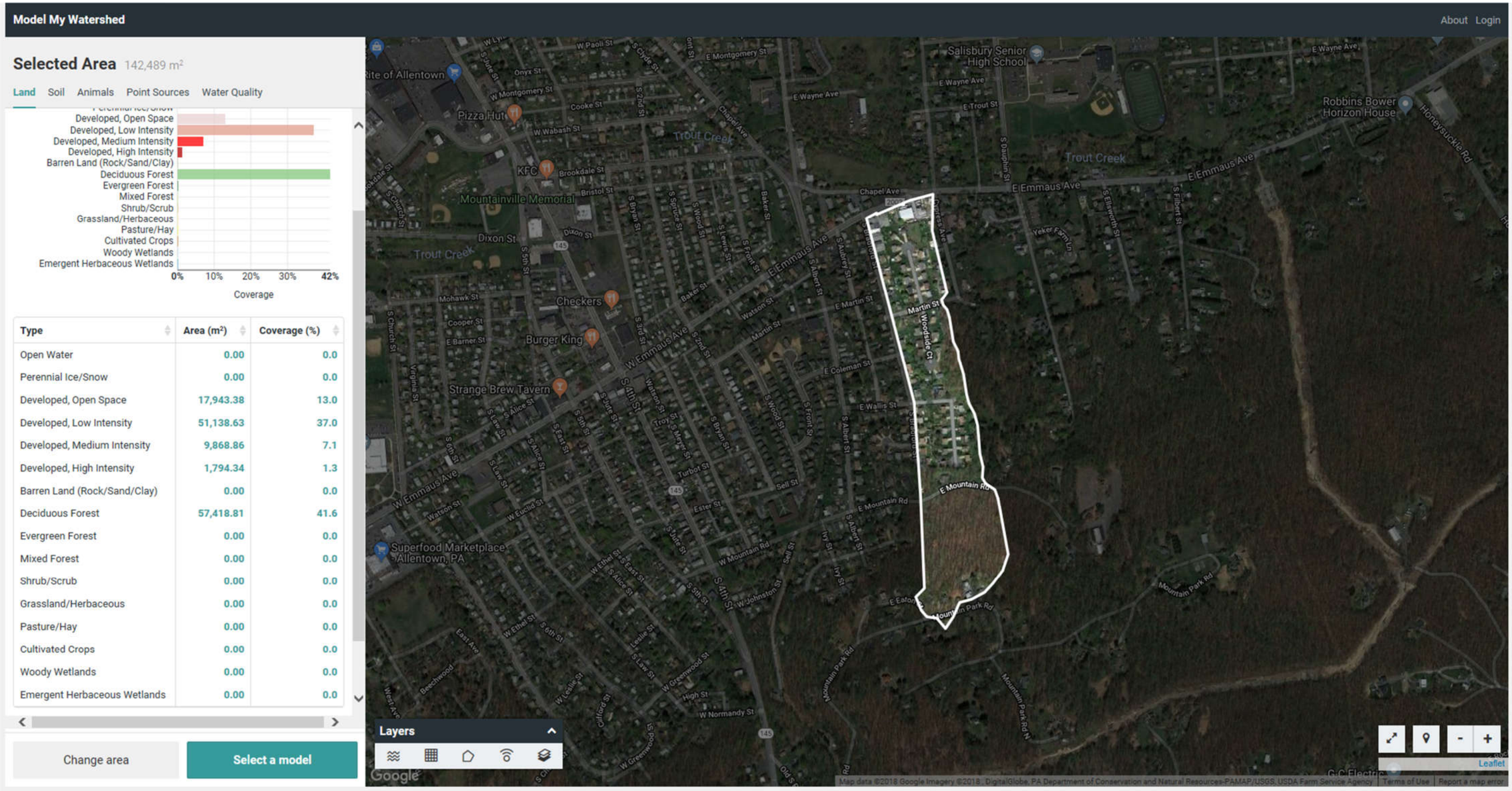
CONTRIBUTING AREA F - LEHIGH RIVER WATERSHED:



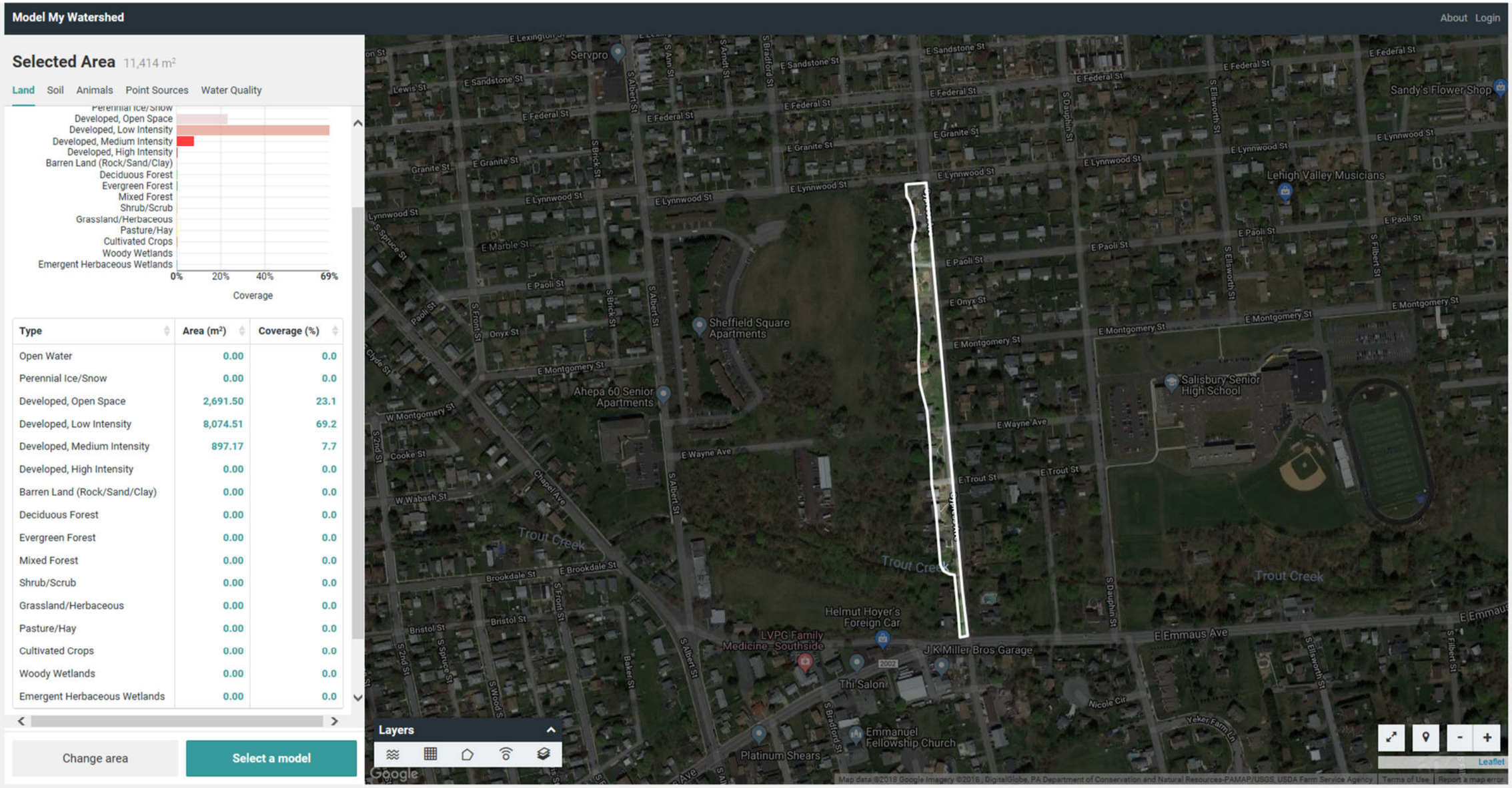
OUTFALL #011A - TROUT CREEK WATERSHED:



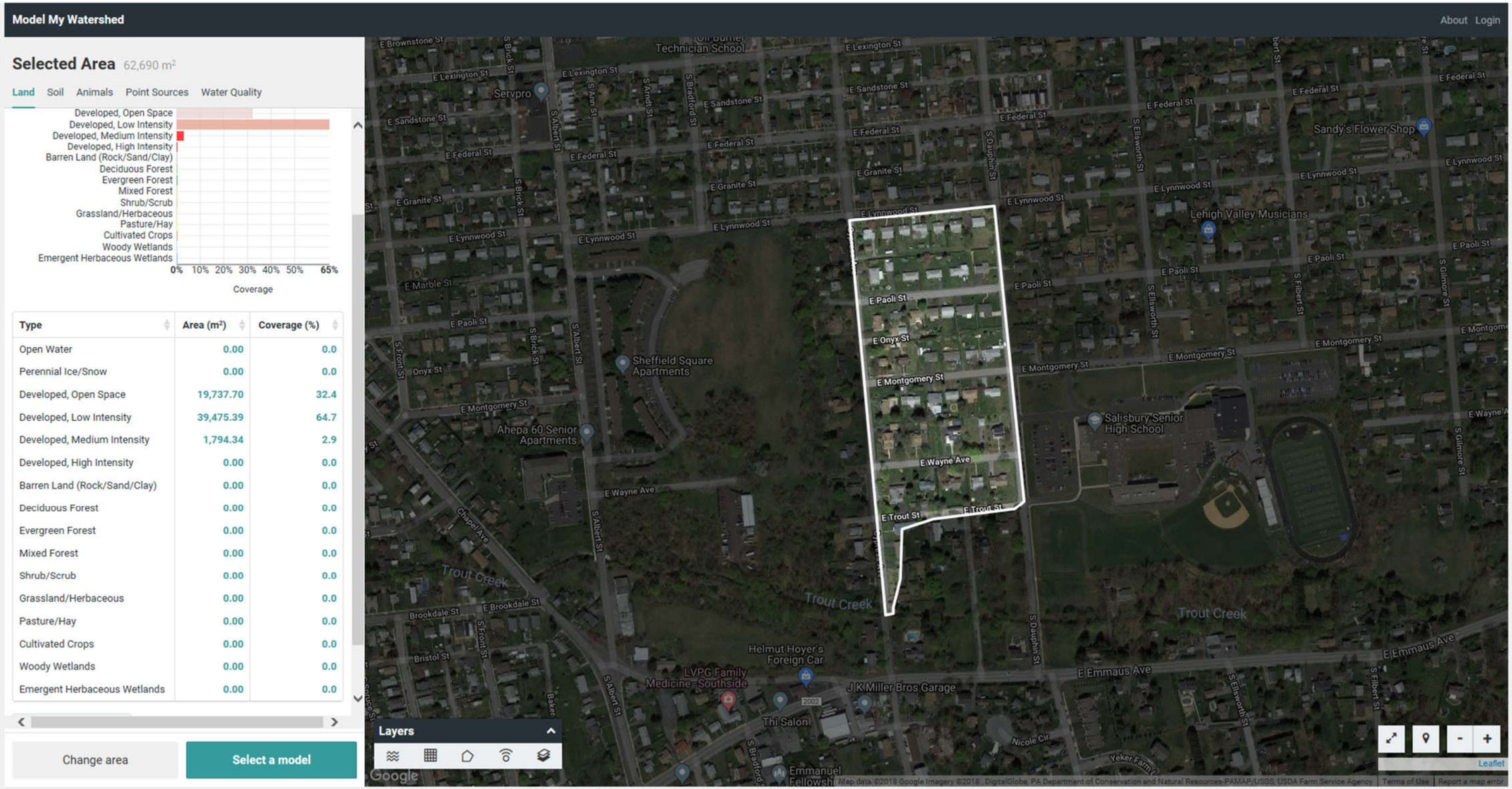
OUTFALL #011B - TROUT CREEK WATERSHED:



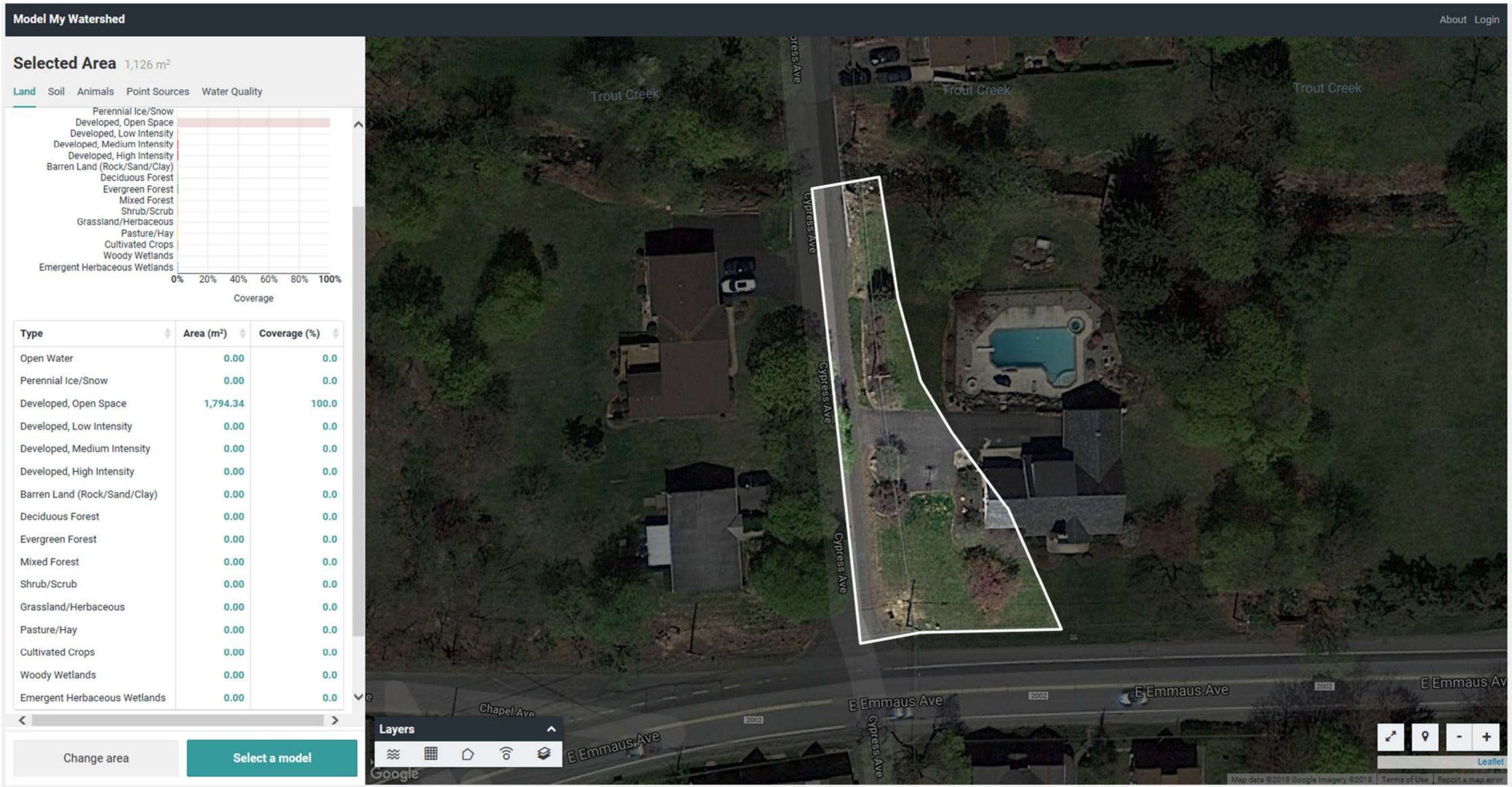
OUTFALL #012 - TROUT CREEK WATERSHED:



OUTFALL #013 - TROUT CREEK WATERSHED:



OUTFALL #014A - TROUT CREEK WATERSHED:



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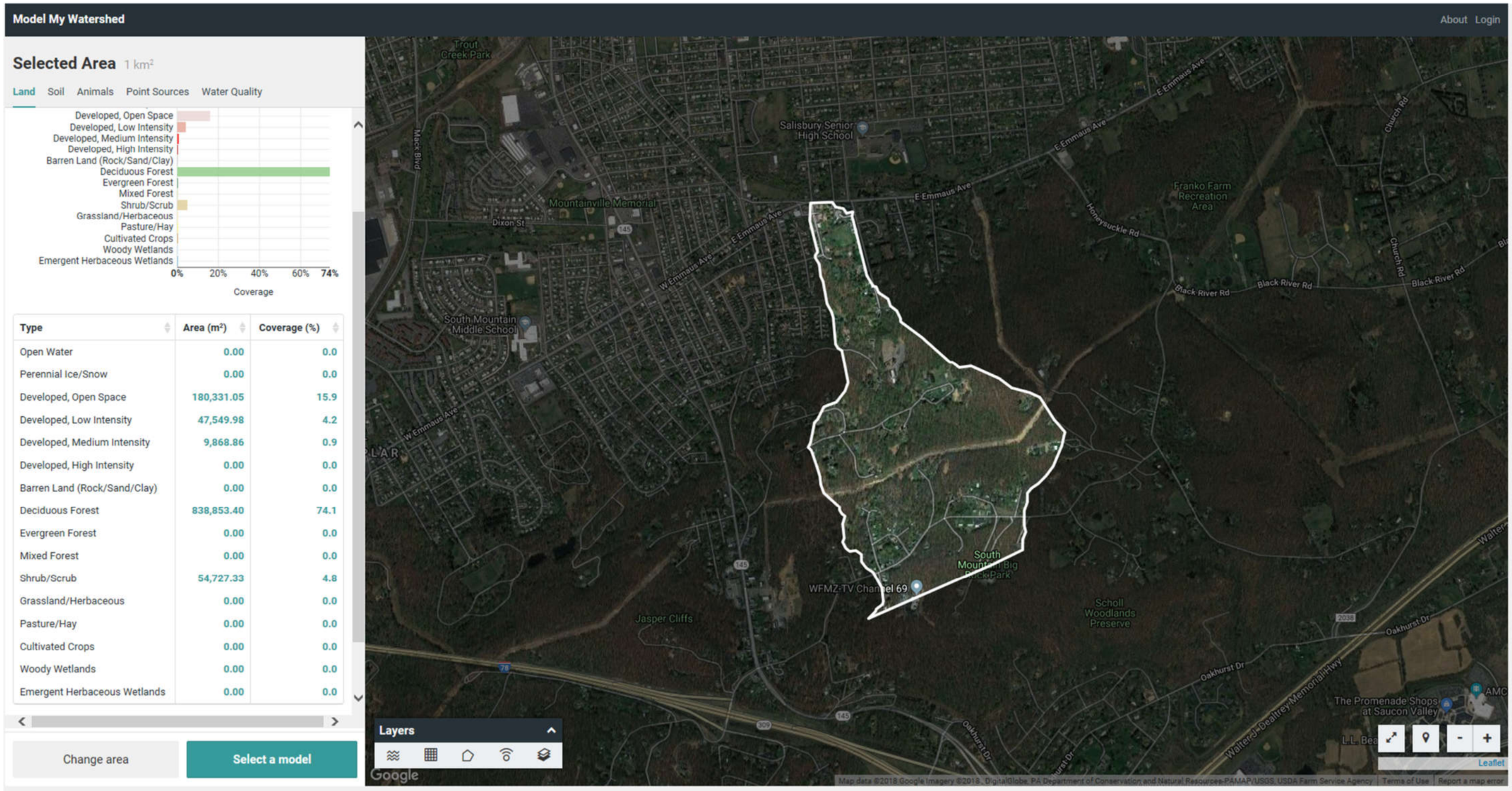
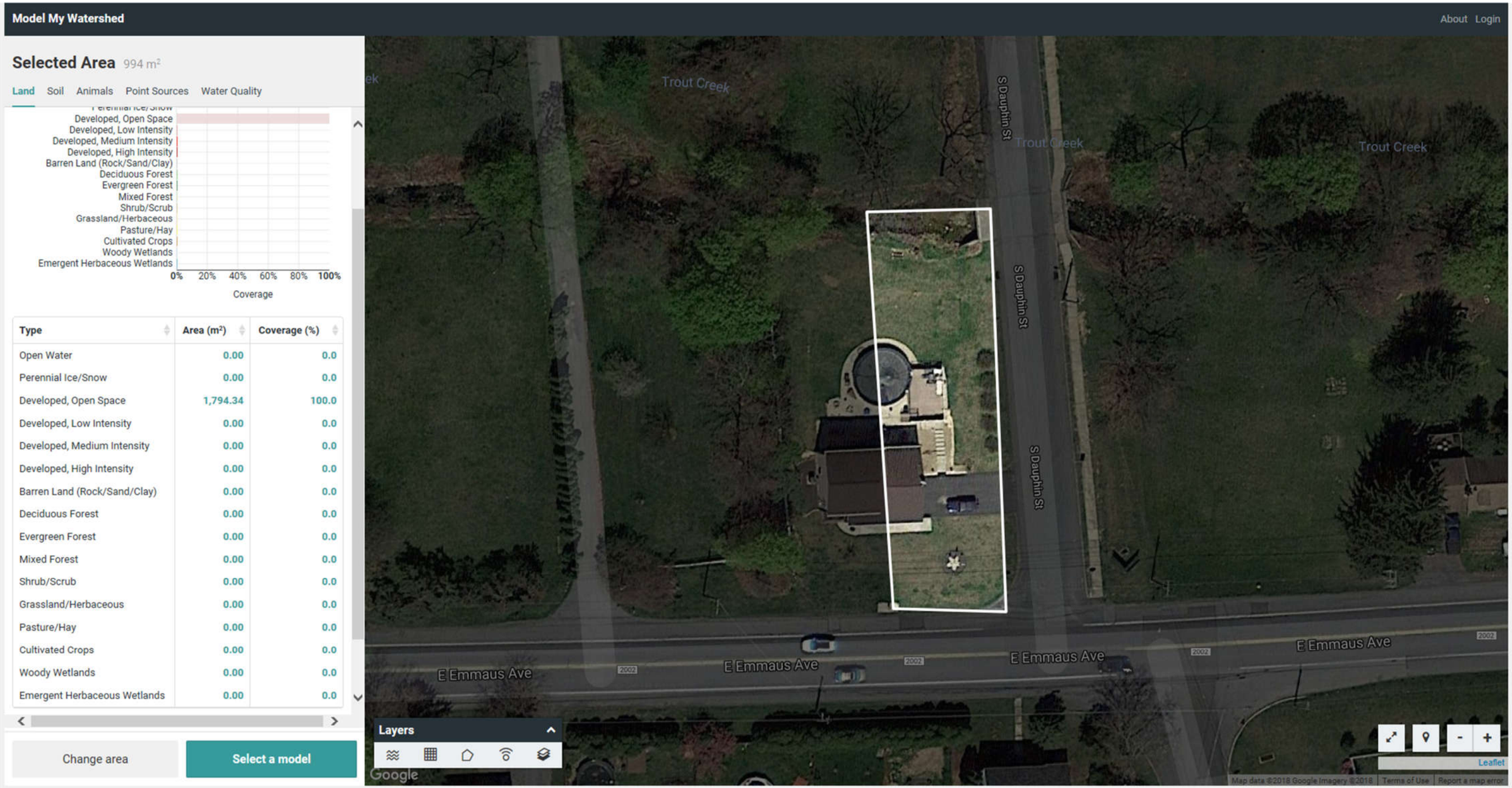
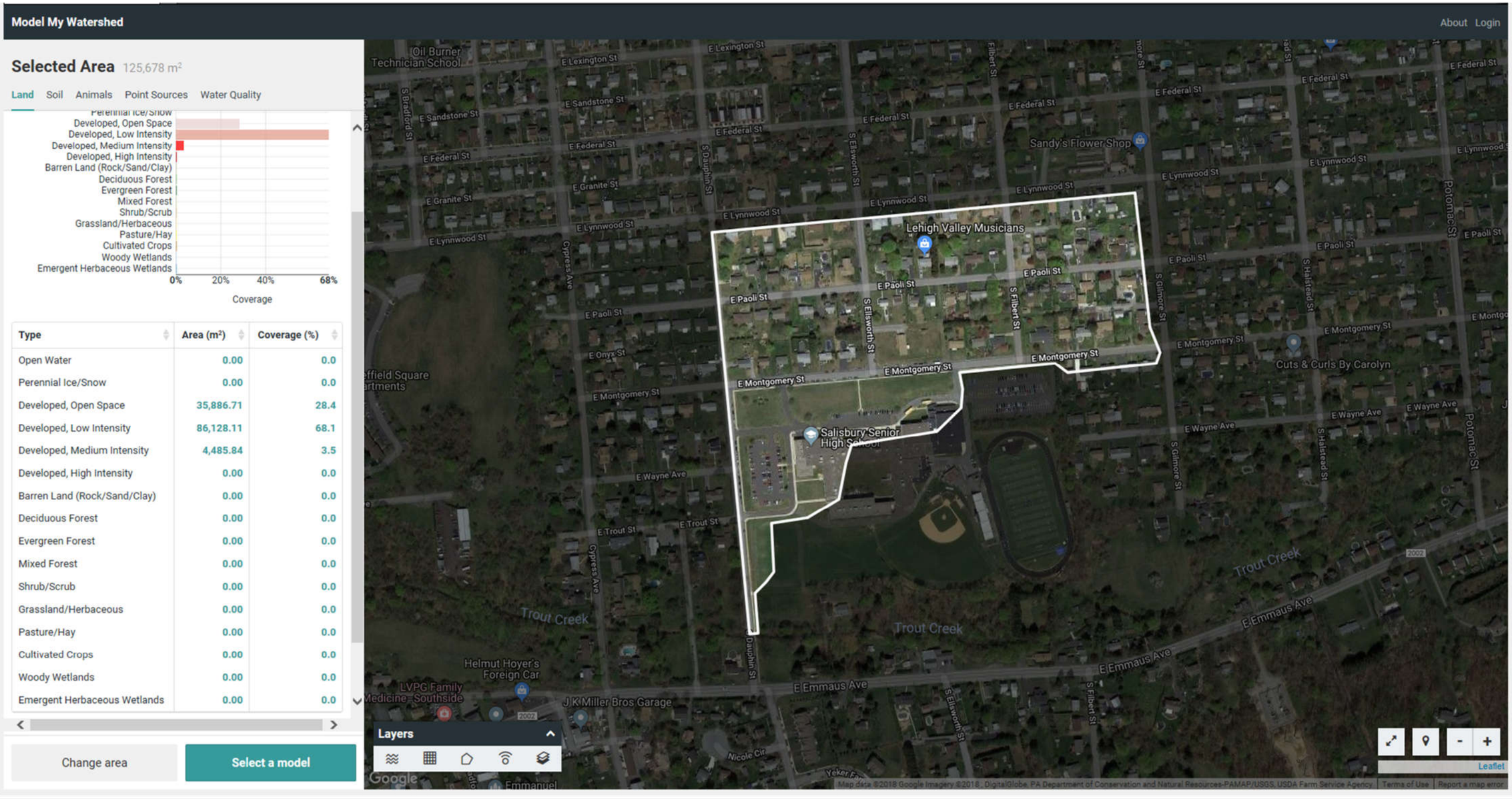


*** OUTFALL #015 - TROUT CREEK WATERSHED:**

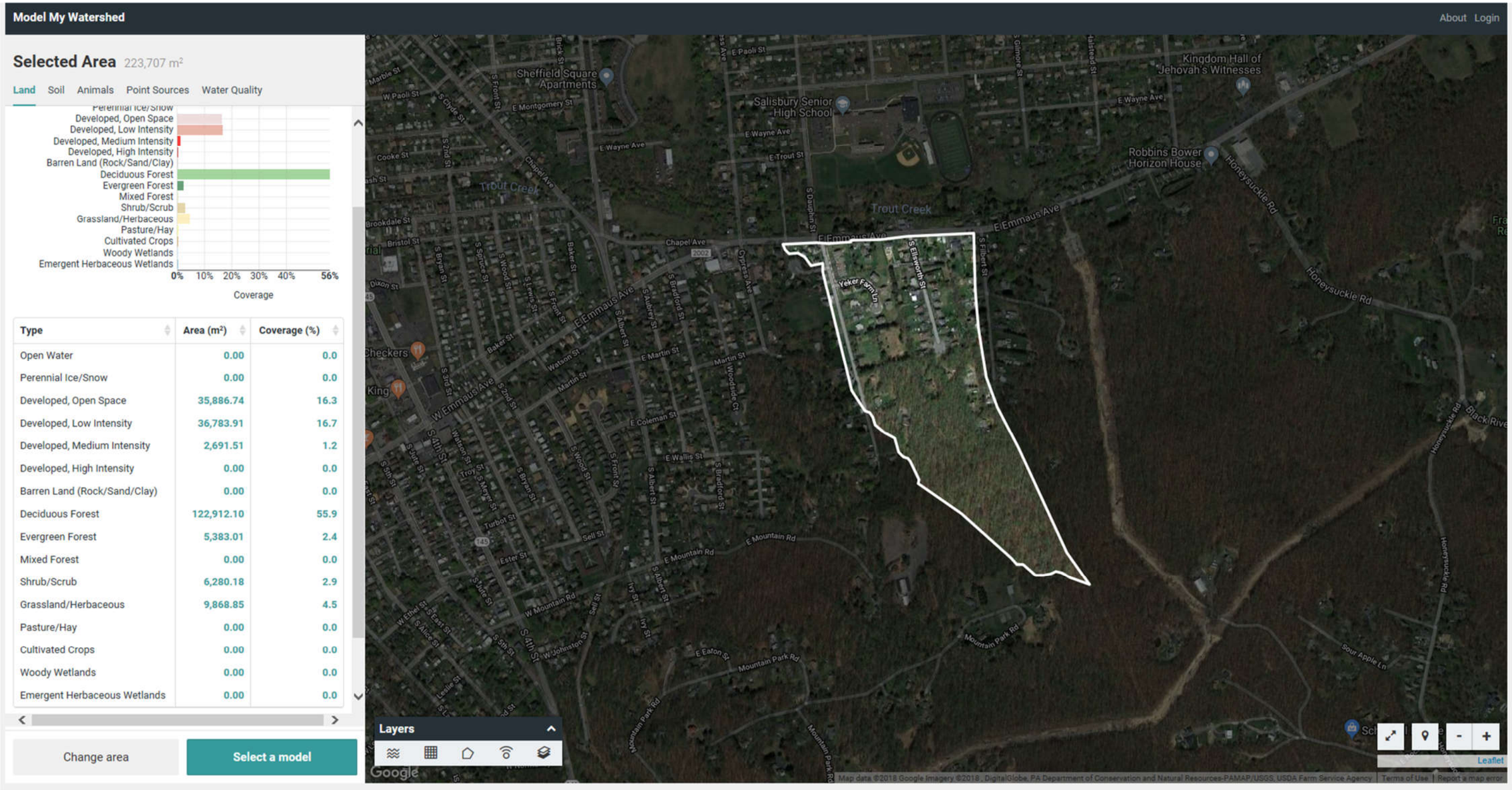


* AREA TO SMALL TO CALCULATE RESULTS, MODIFIED LOADING AREA AND FOUND TO BE 100% OPEN SPACE, USED ACTUAL AREA IN SPREAD SHEET.

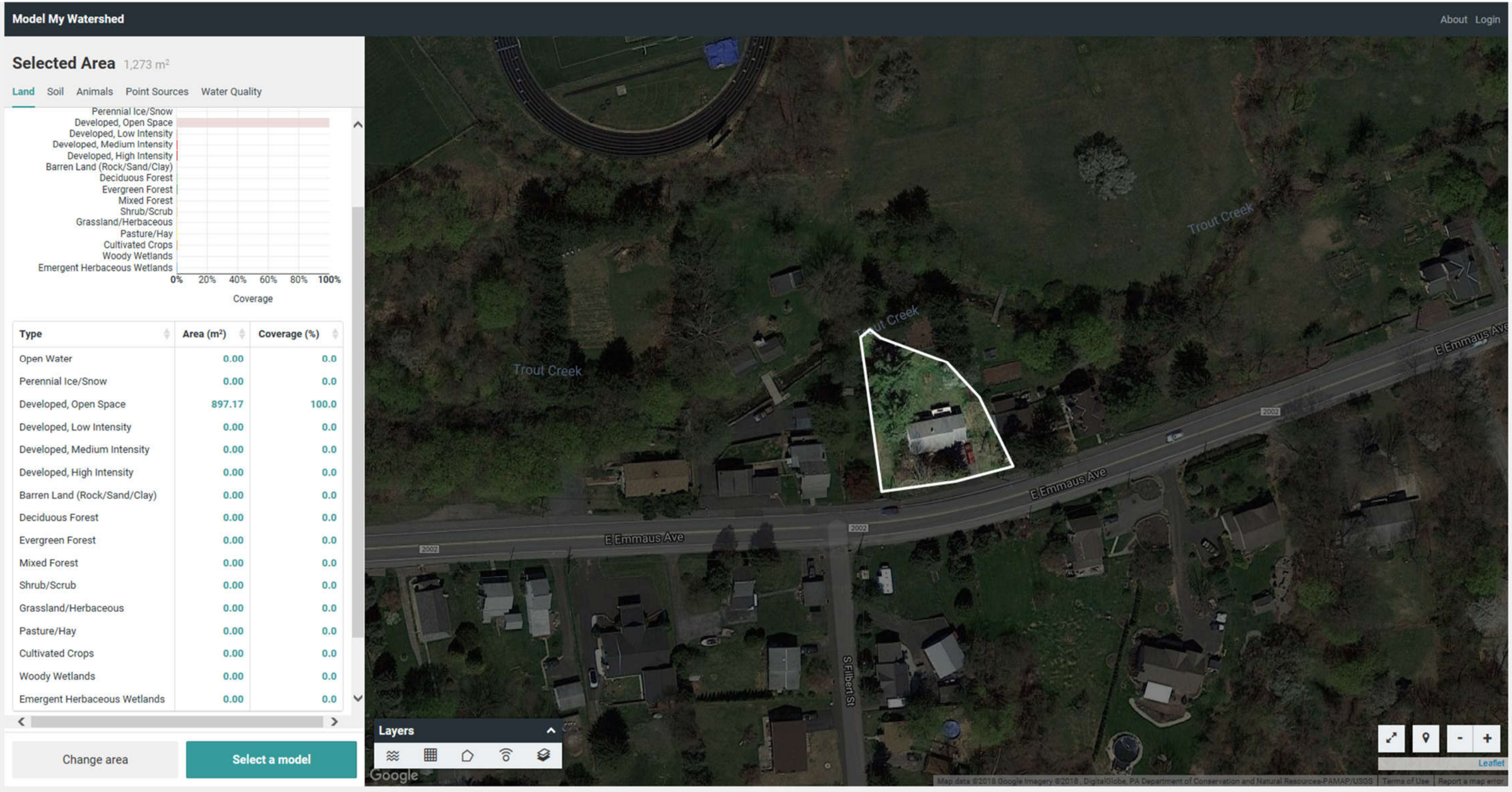
OUTFALL #016 - TROUT CREEK WATERSHED:



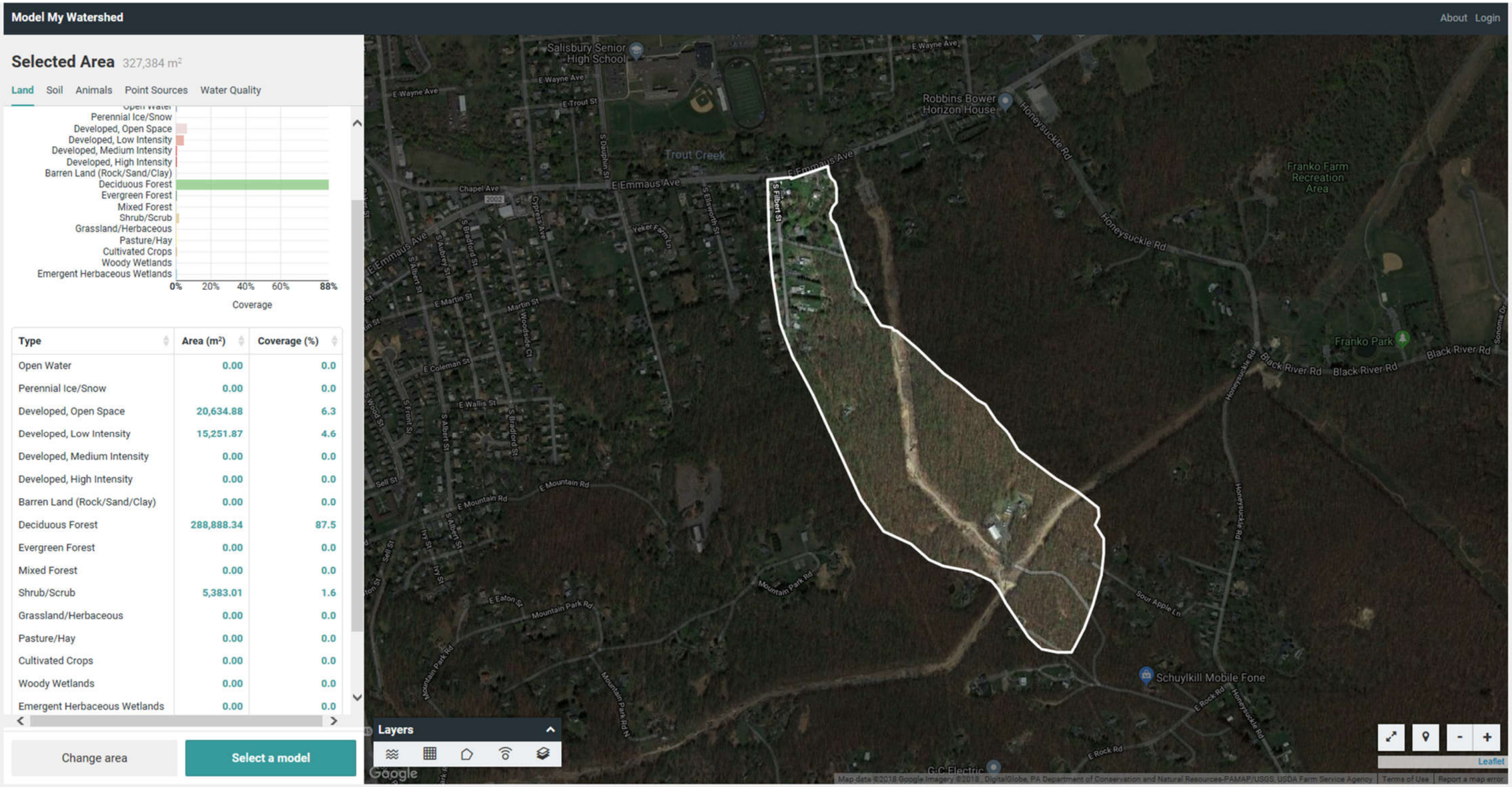
OUTFALL #017 - TROUT CREEK WATERSHED:



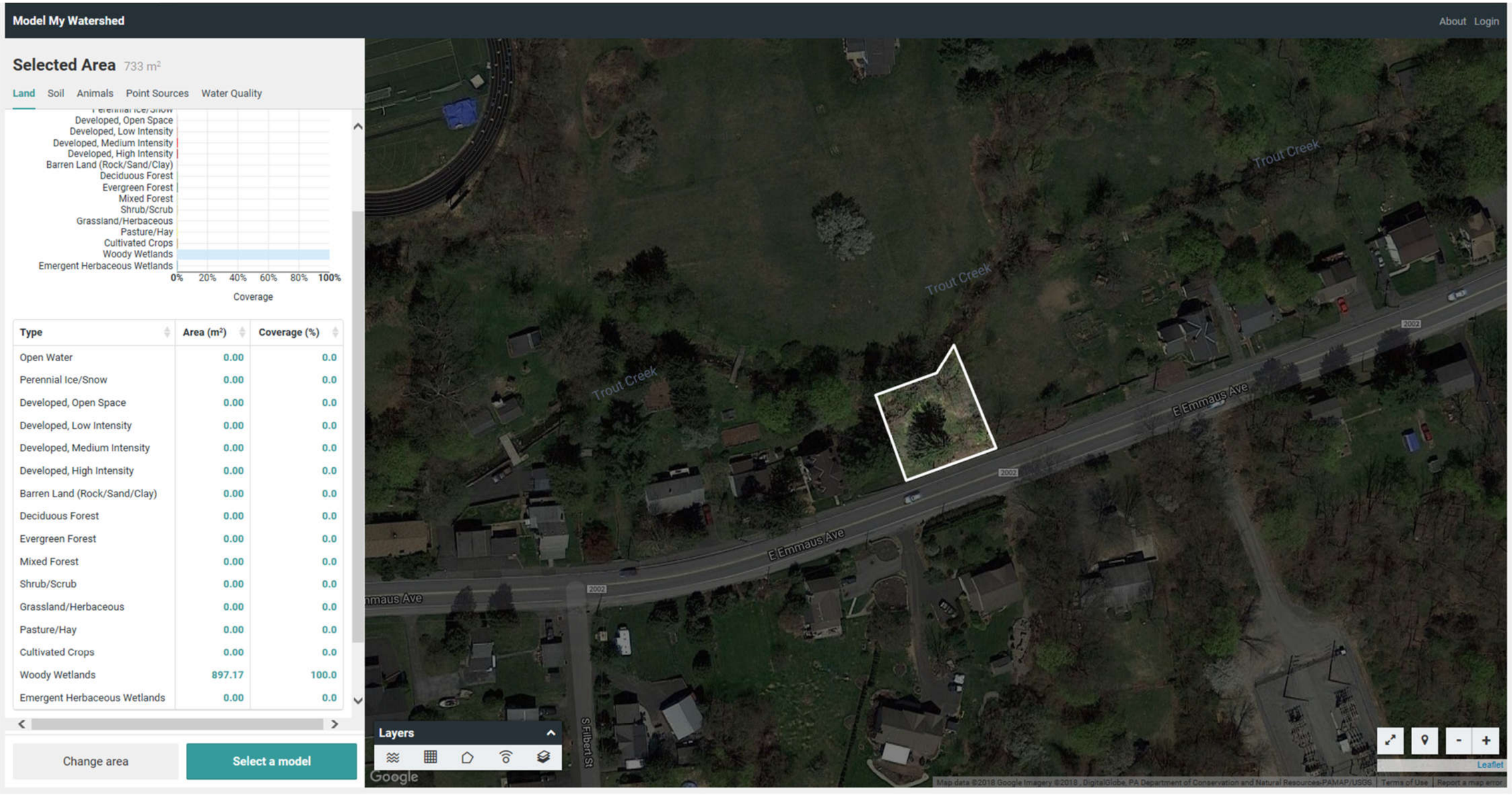
OUTFALL #018A - TROUT CREEK WATERSHED:



OUTFALL #018B - TROUT CREEK WATERSHED:

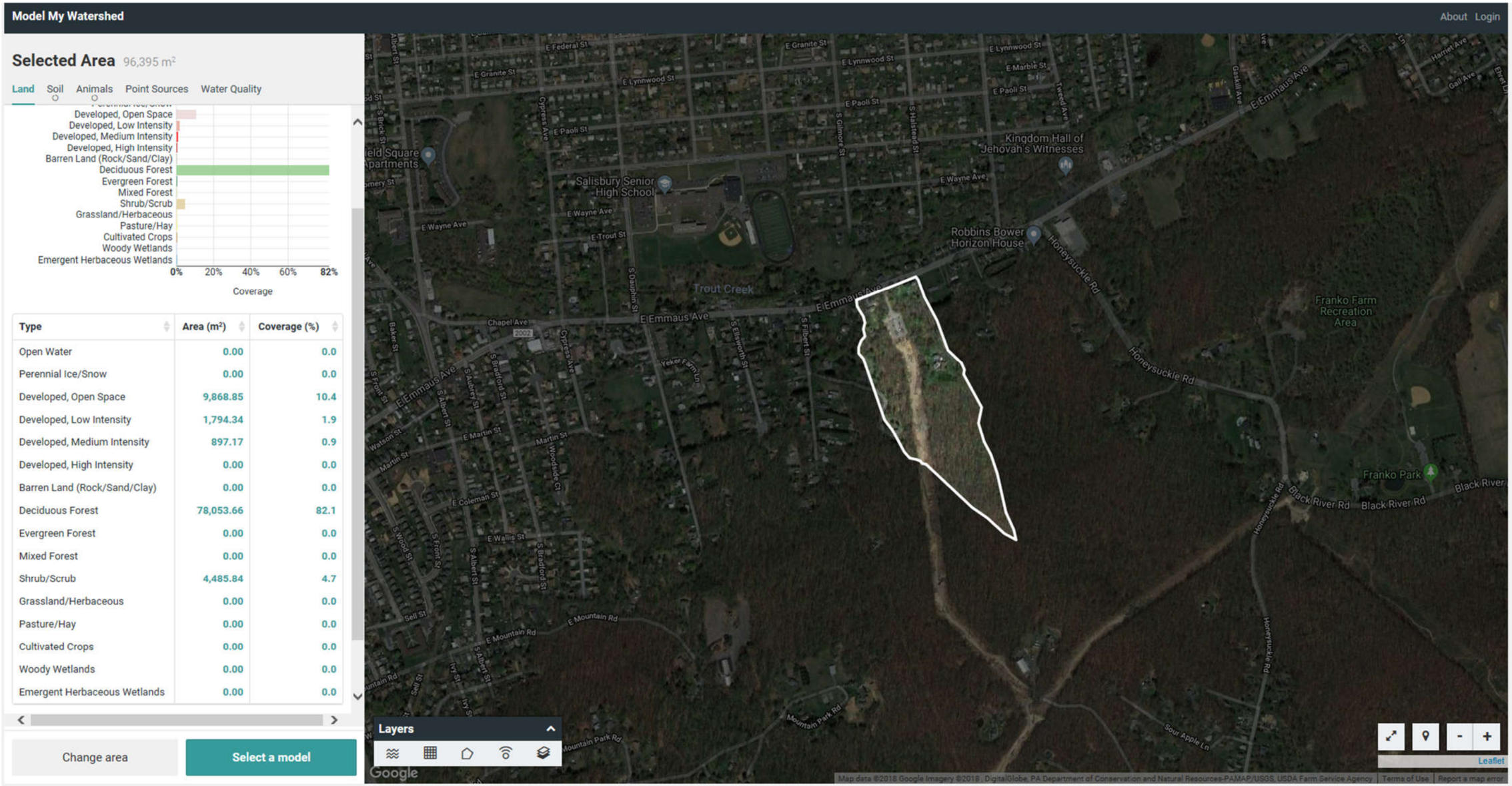


*** OUTFALL #019A - TROUT CREEK WATERSHED:**

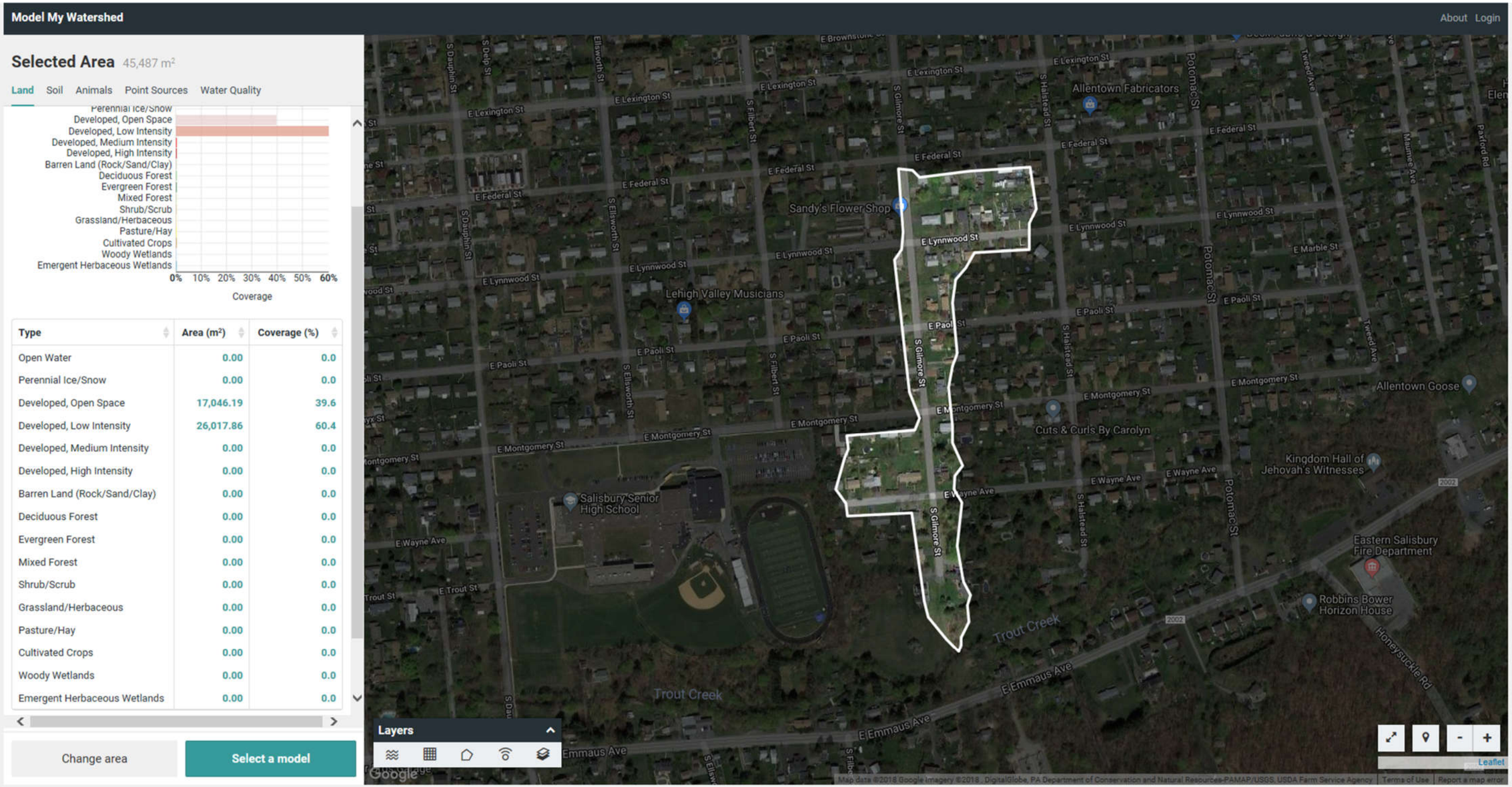


* AREA TO SMALL TO CALCULATE RESULTS, MODIFIED LOADING AREA AND FOUND TO BE 100% OPEN SPACE, USED ACTUAL AREA IN SPREAD SHEET

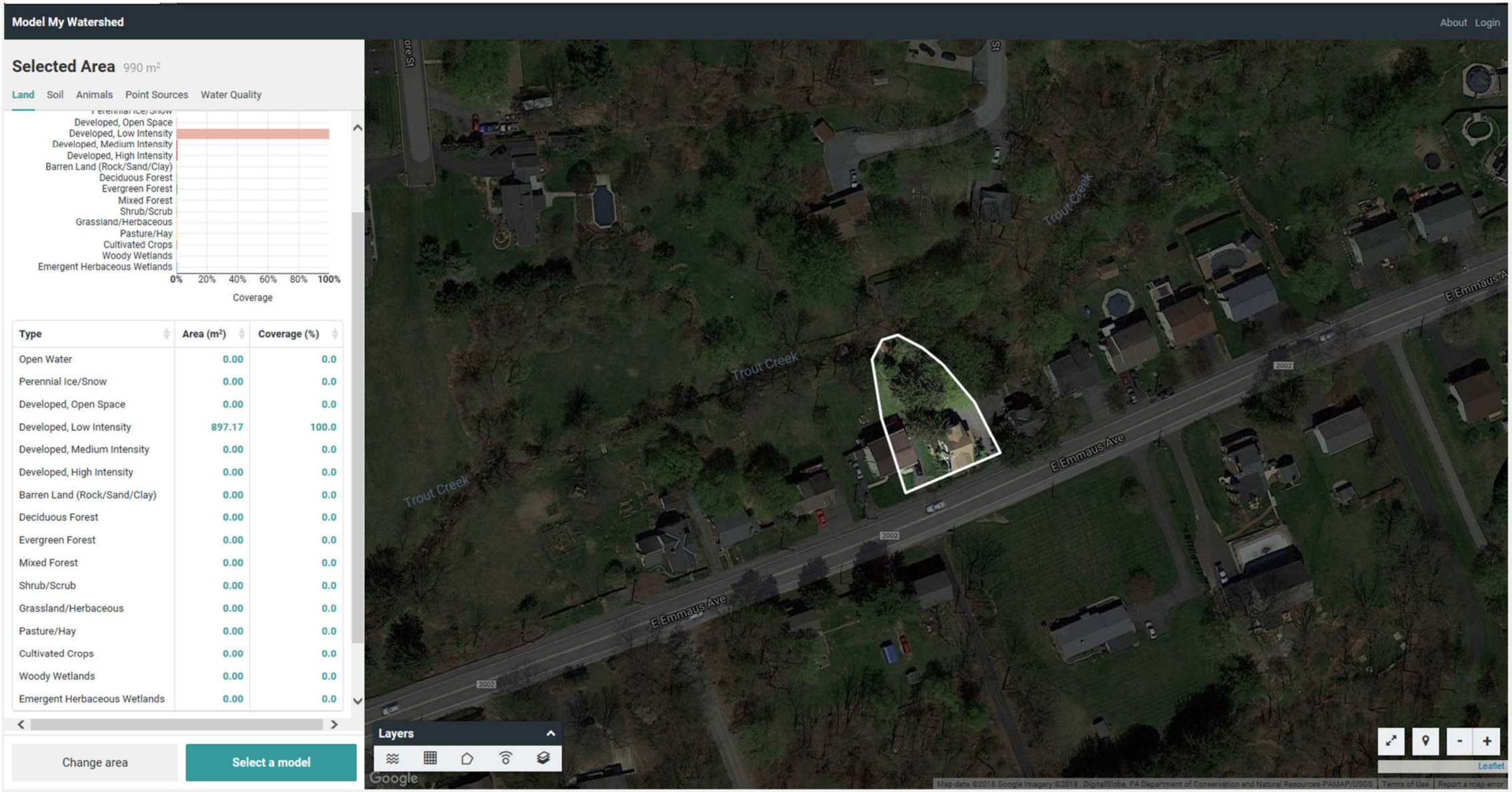
OUTFALL #019B - TROUT CREEK WATERSHED:



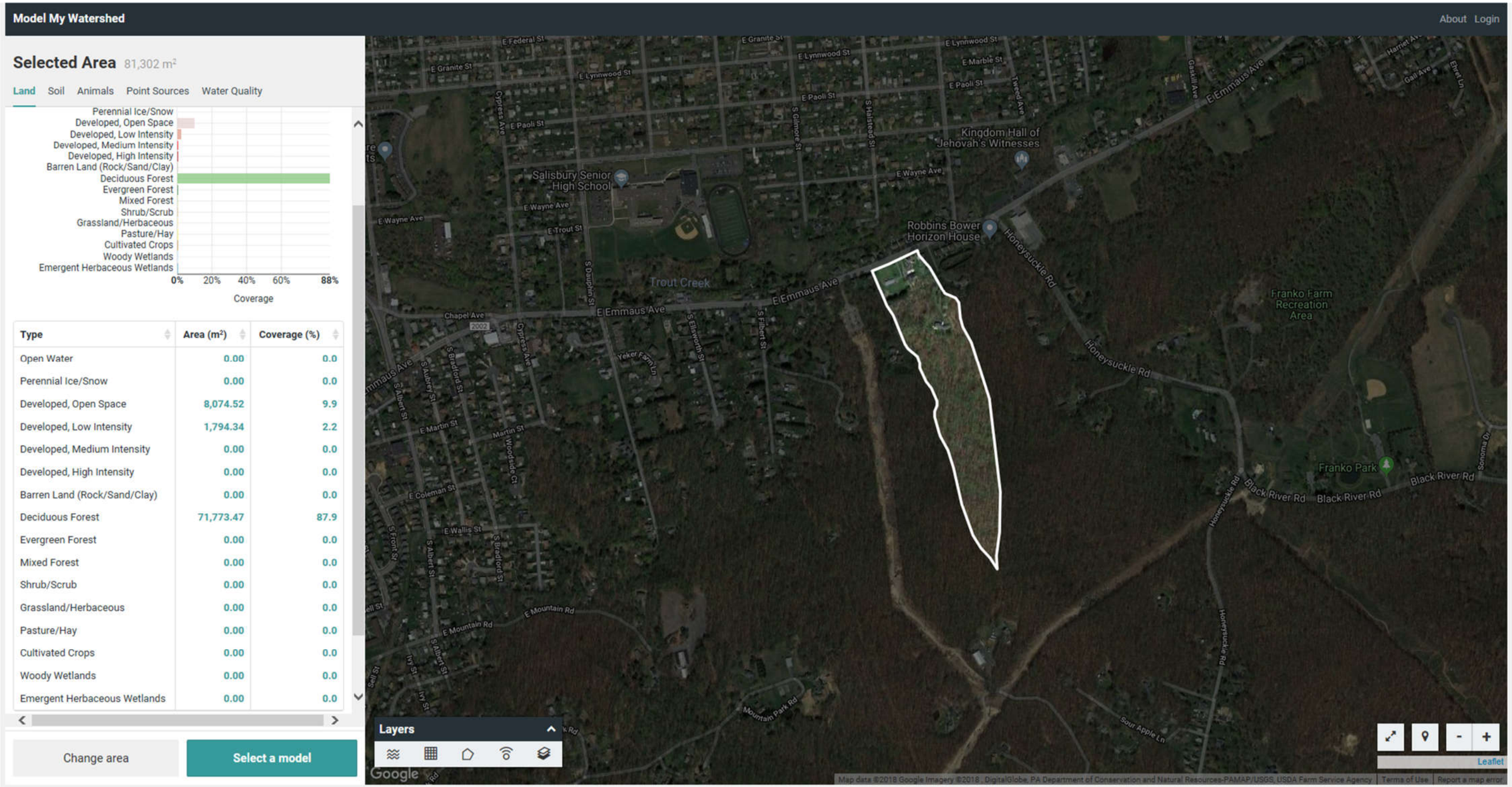
OUTFALL #020 - TROUT CREEK WATERSHED:



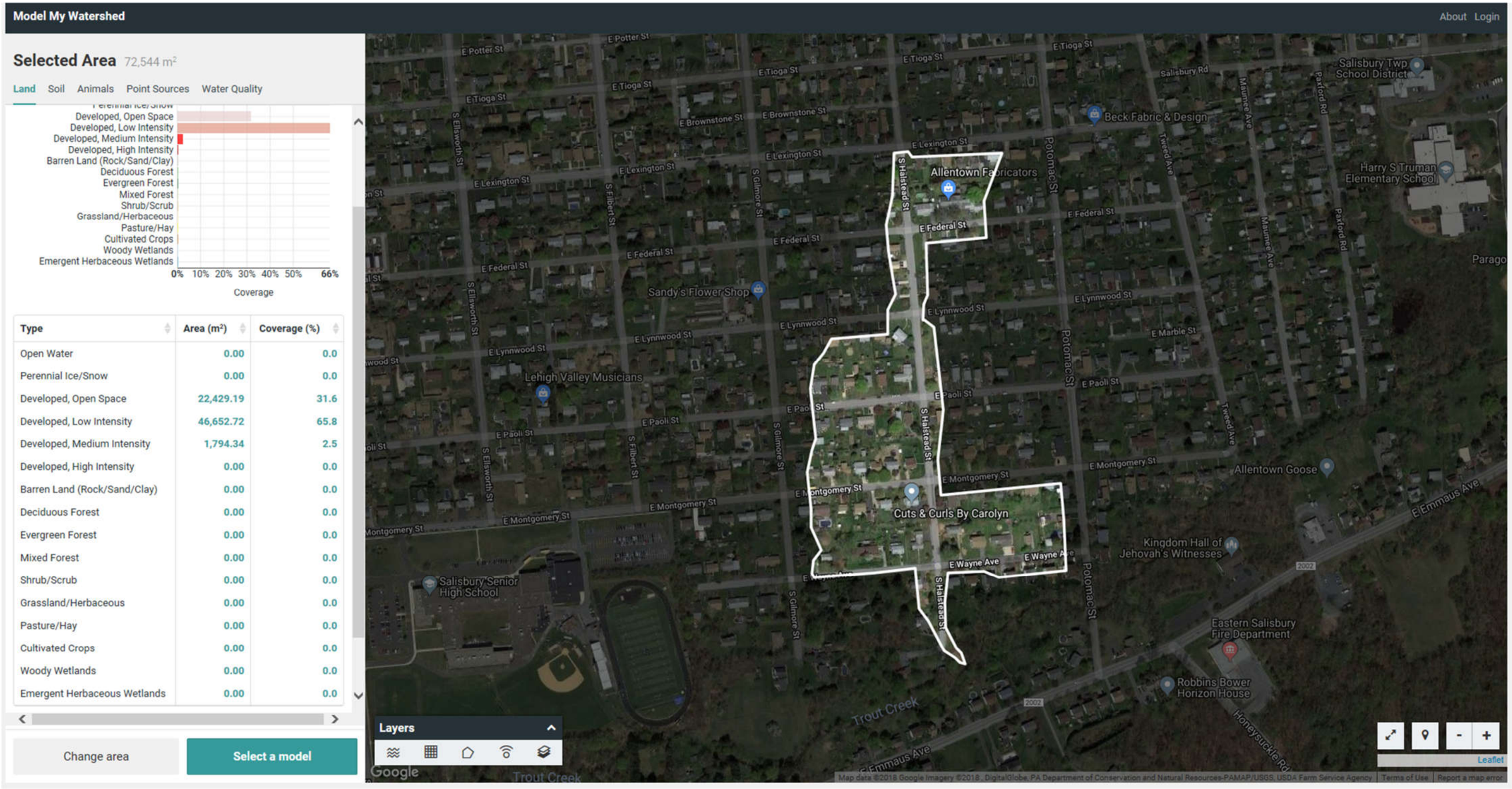
OUTFALL #021A - TROUT CREEK WATERSHED:



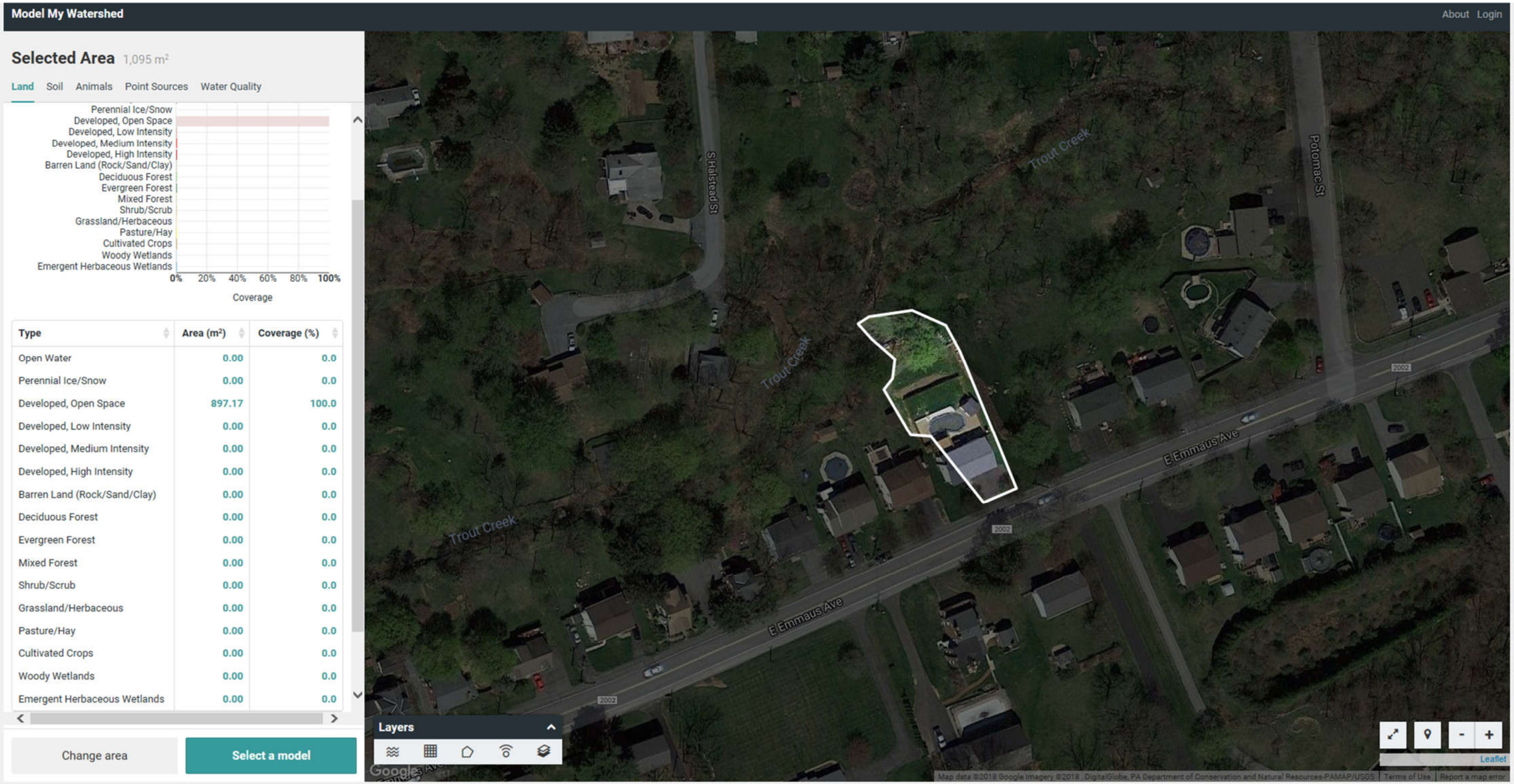
OUTFALL #021B - TROUT CREEK WATERSHED:



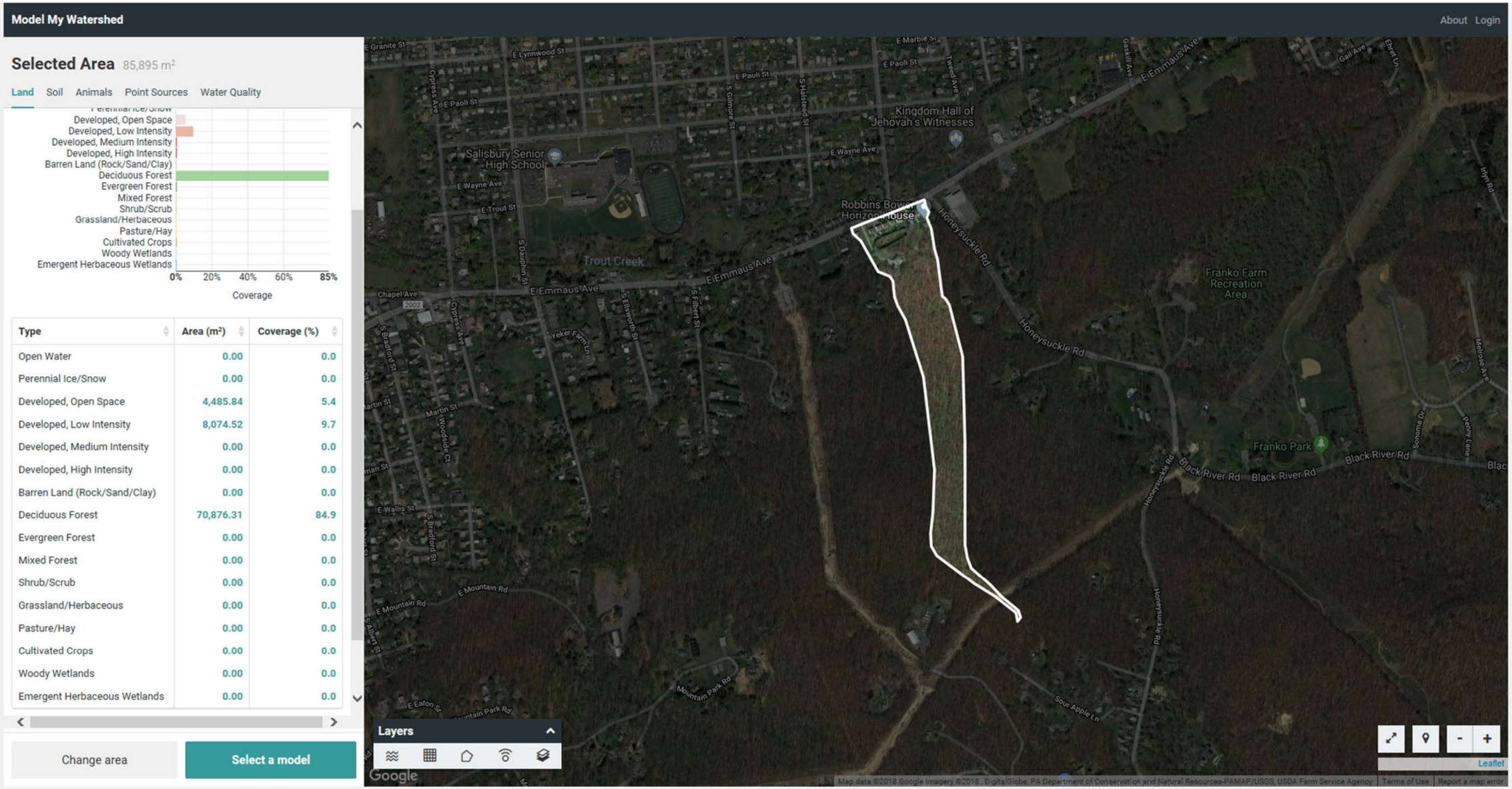
OUTFALL #022 - TROUT CREEK WATERSHED:



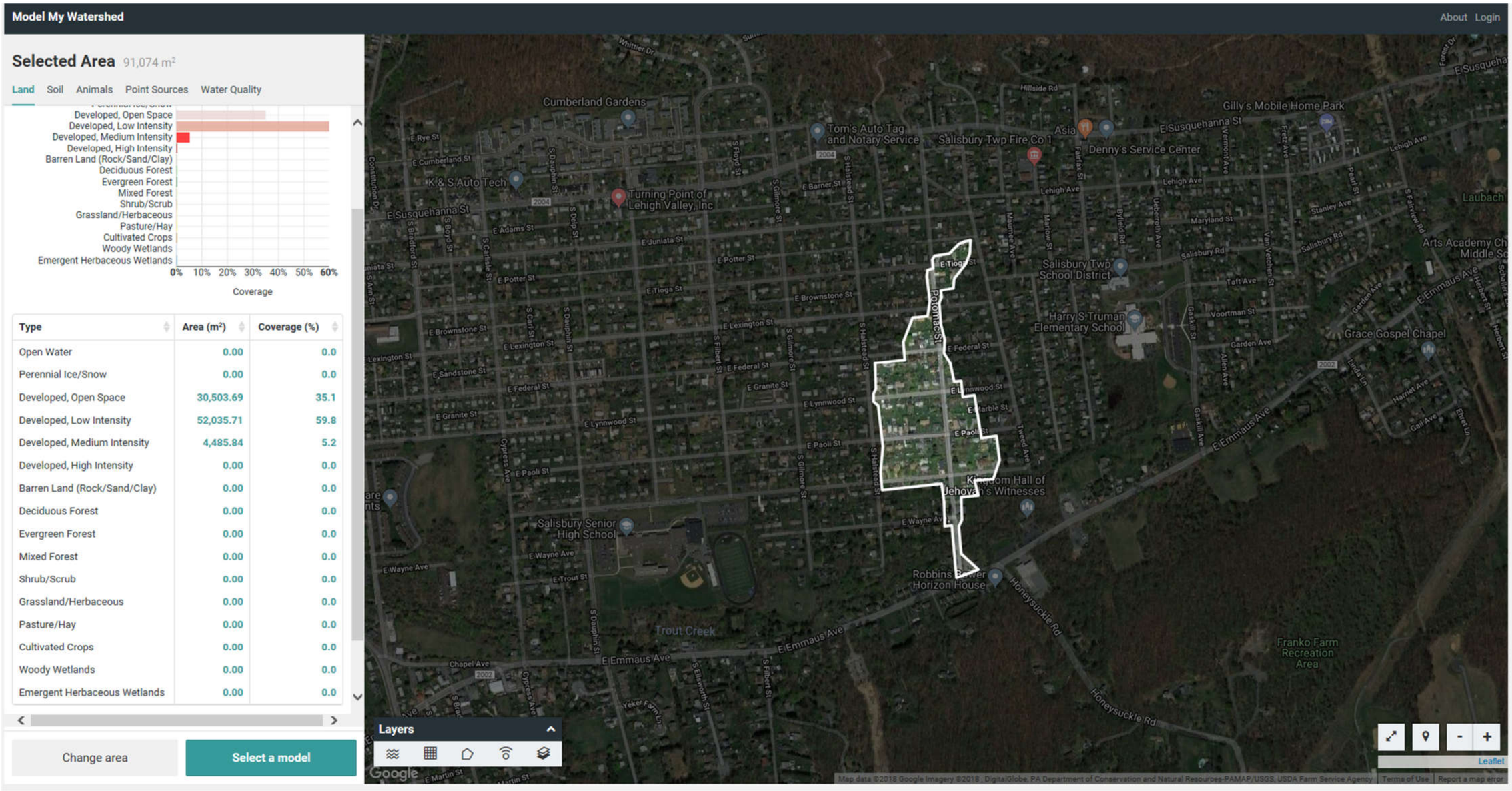
OUTFALL #023A - TROUT CREEK WATERSHED:



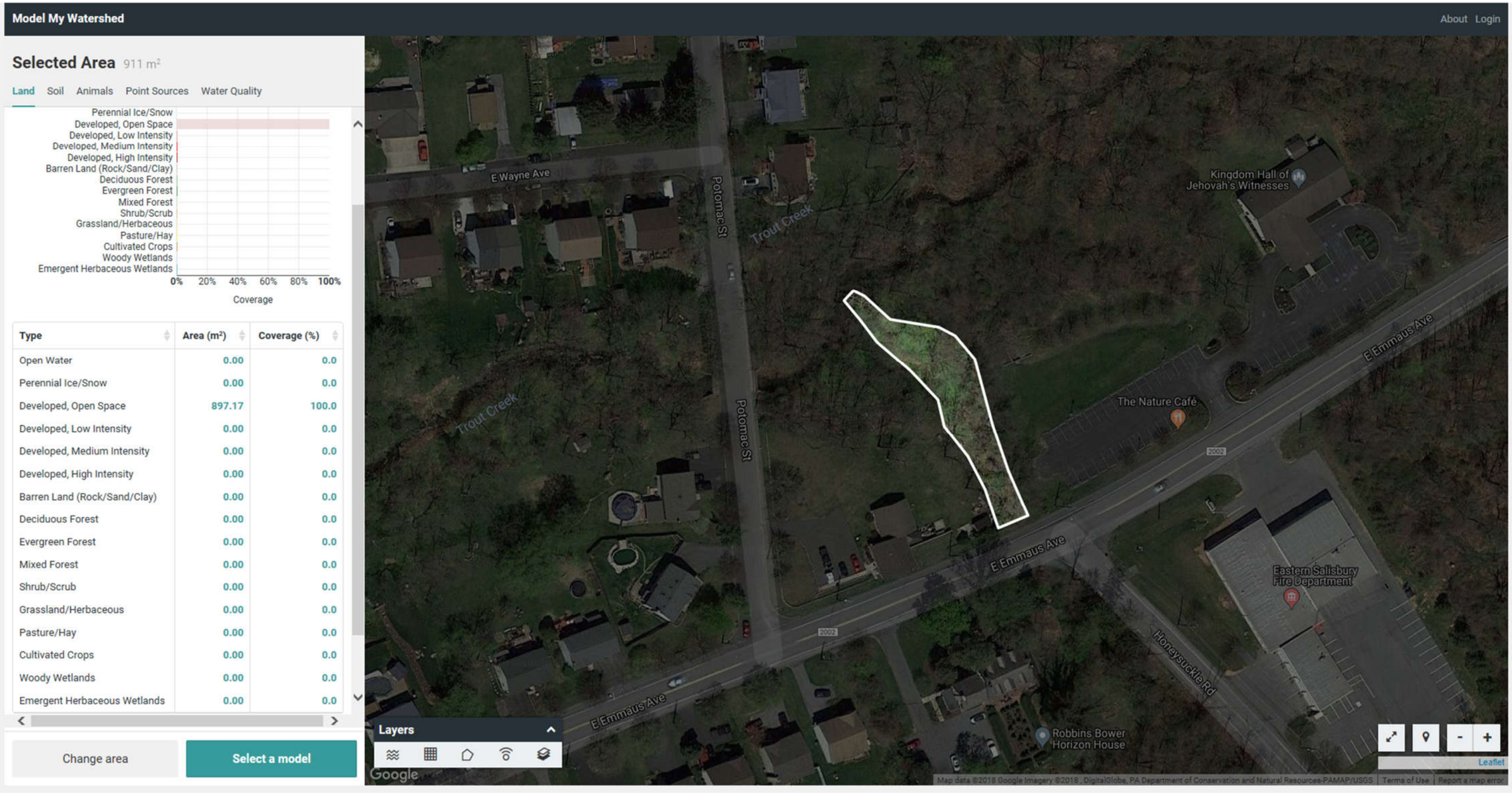
OUTFALL #023B - TROUT CREEK WATERSHED:



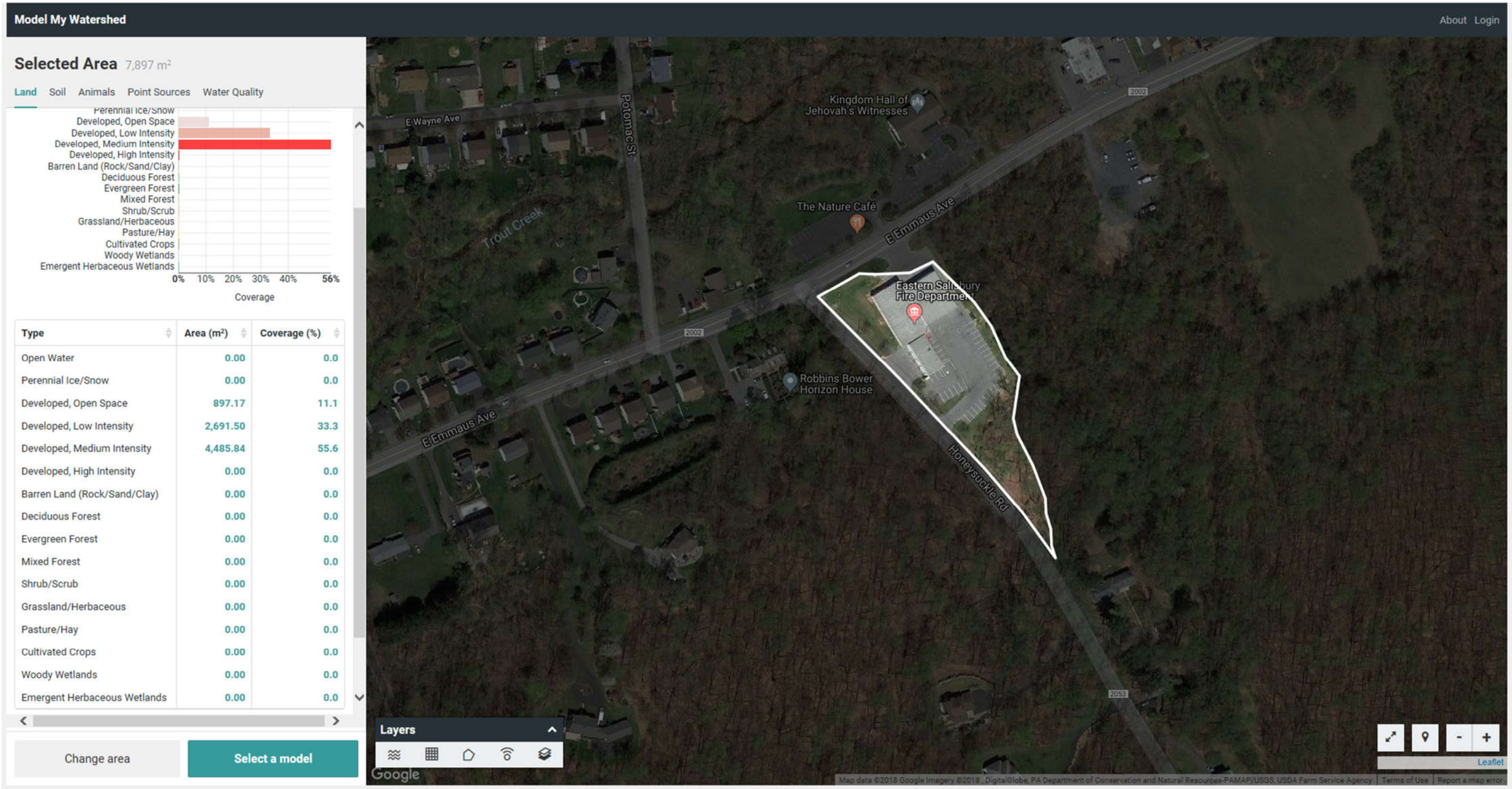
OUTFALL #024 - TROUT CREEK WATERSHED:



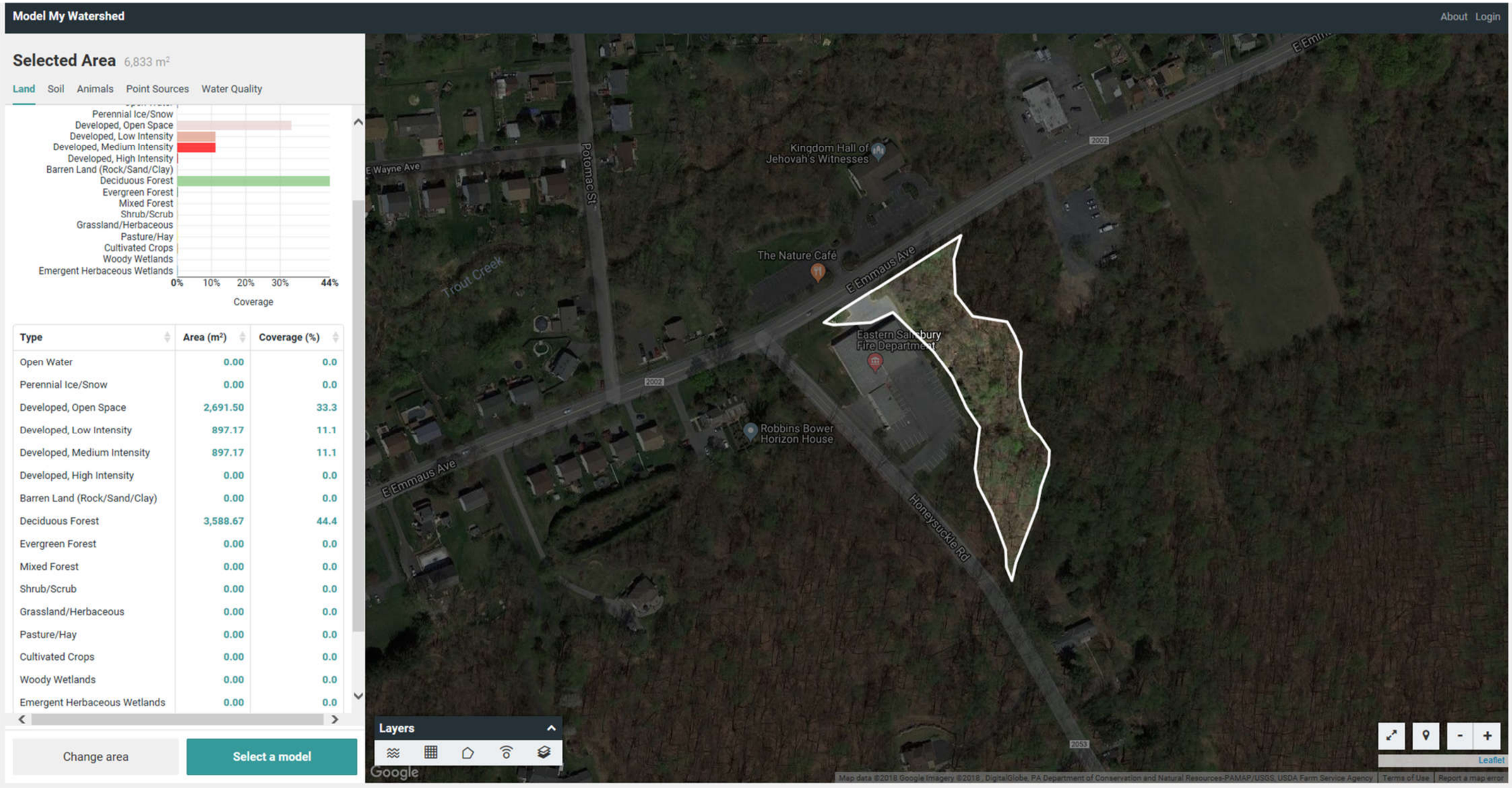
OUTFALL #025A - TROUT CREEK WATERSHED:



OUTFALL #025B - TROUT CREEK WATERSHED:



OUTFALL #026 - TROUT CREEK WATERSHED:



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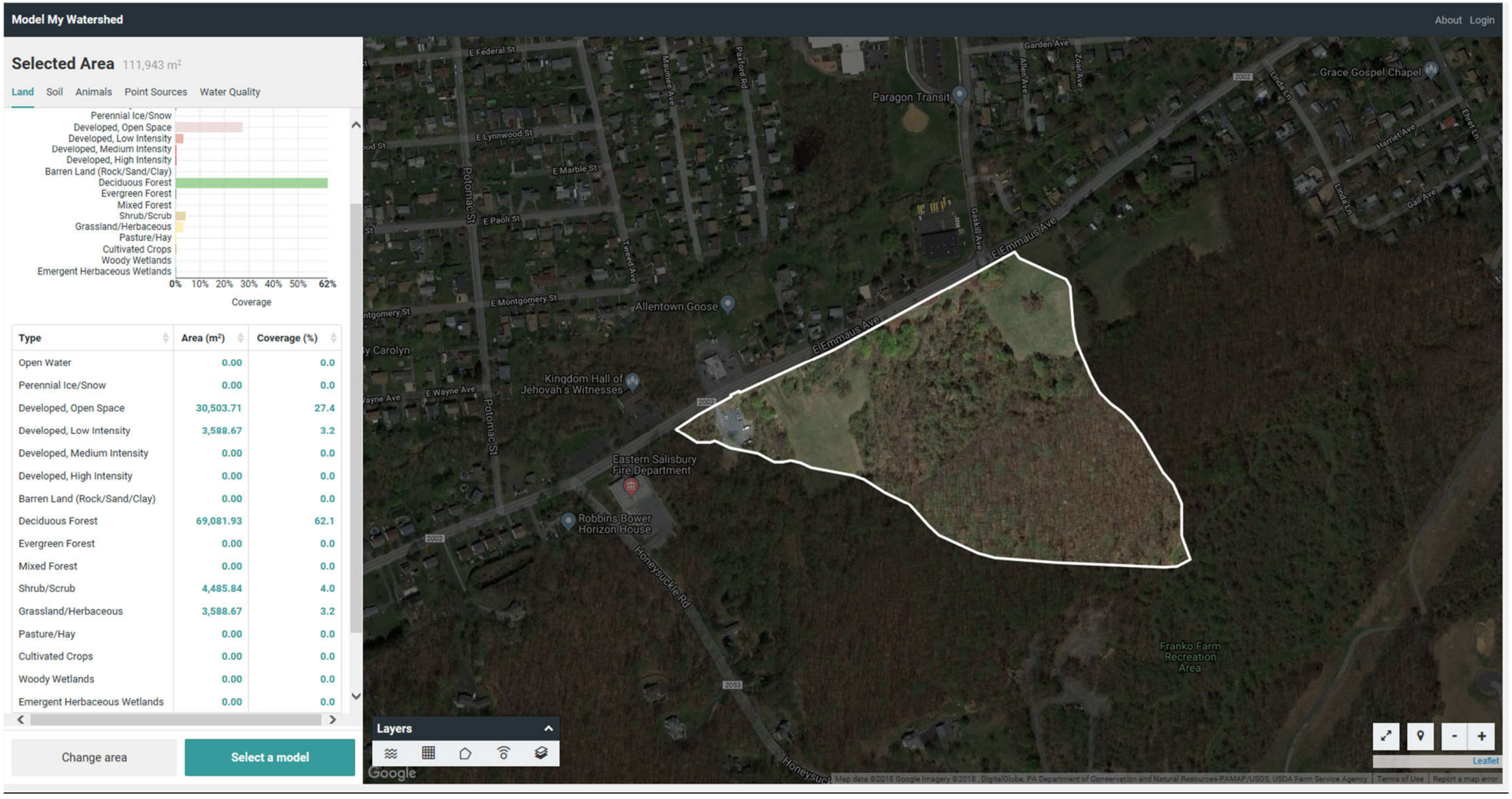
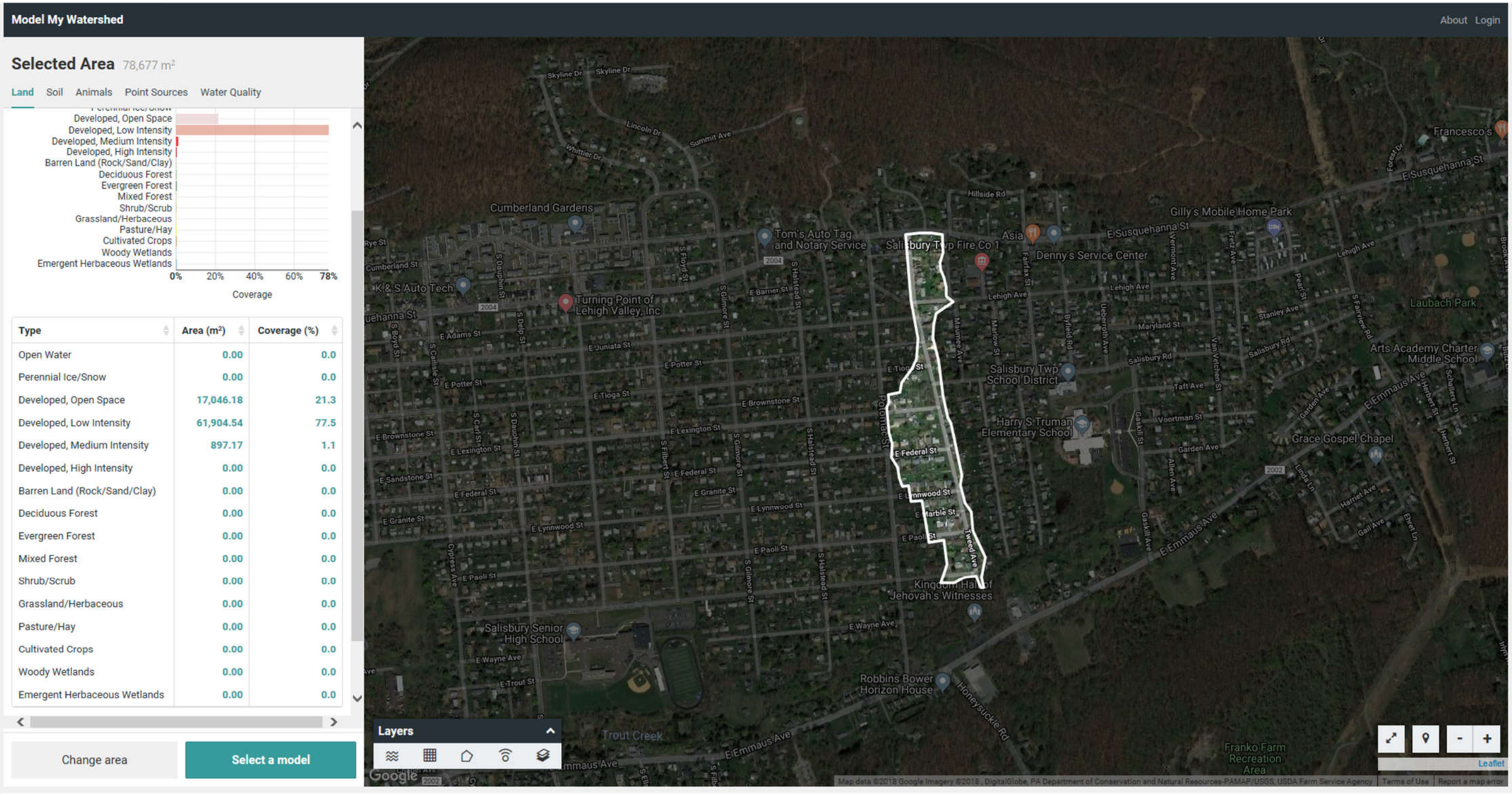
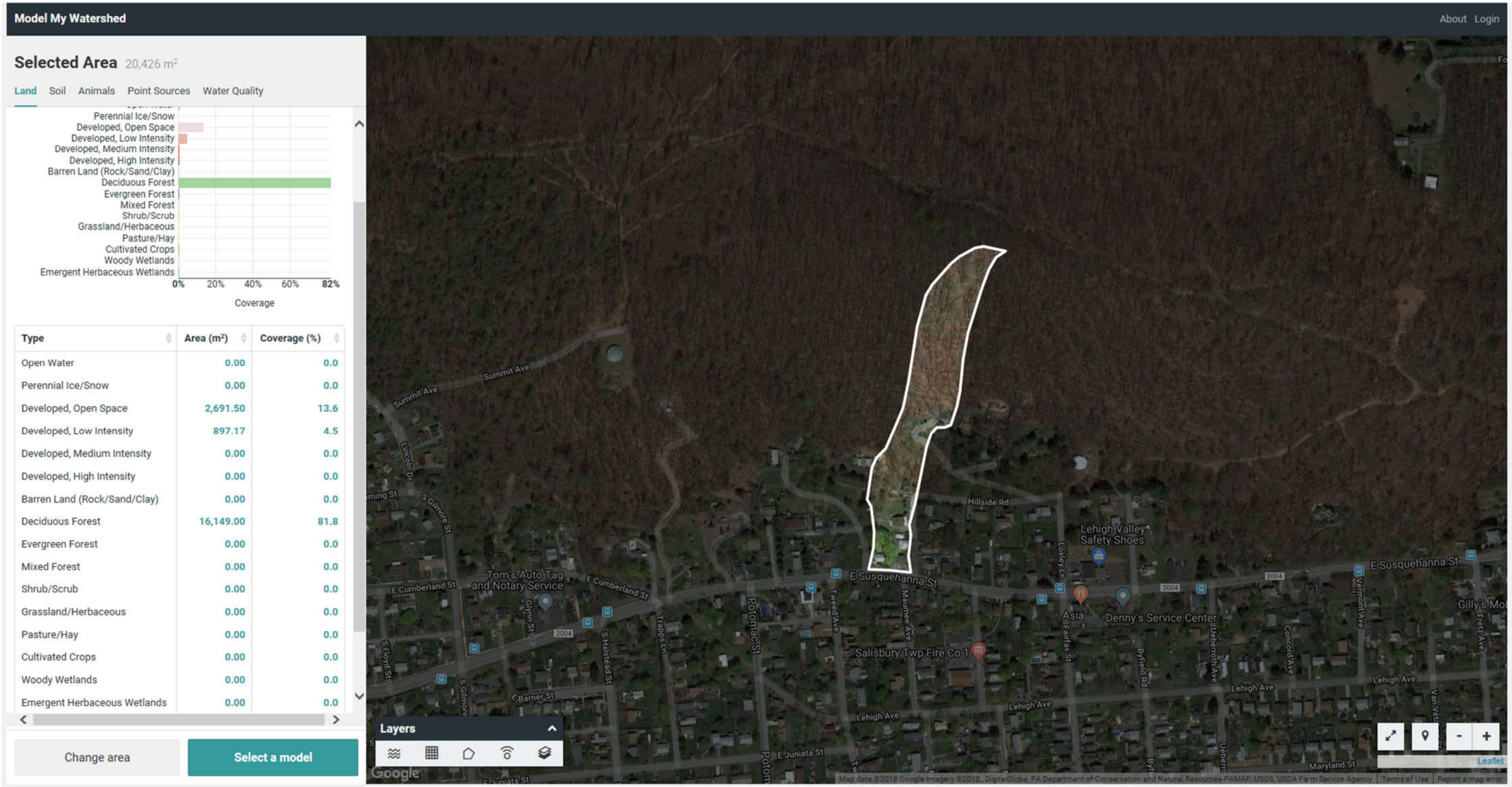


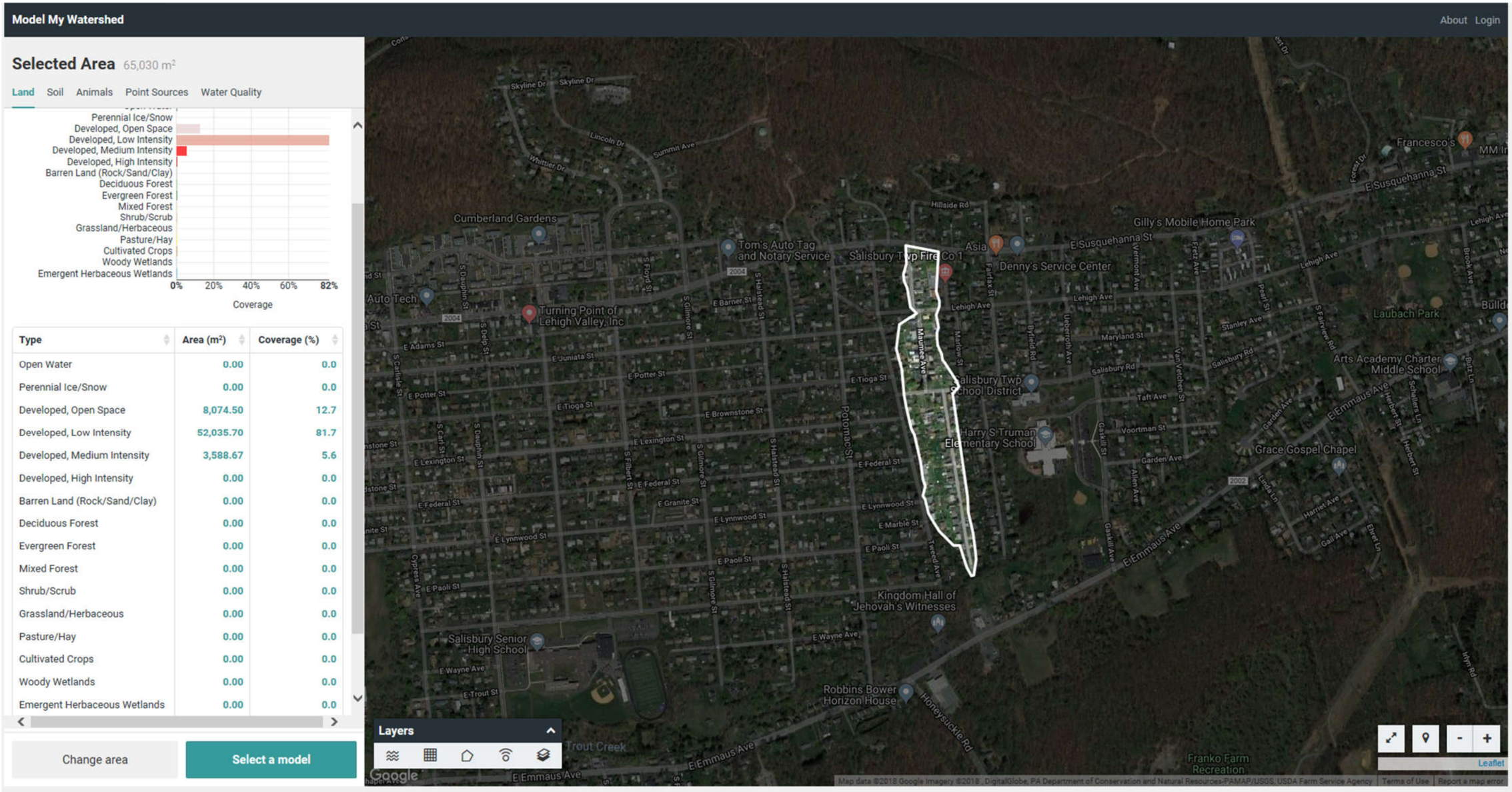
OUTFALL #028A - TROUT CREEK WATERSHED:



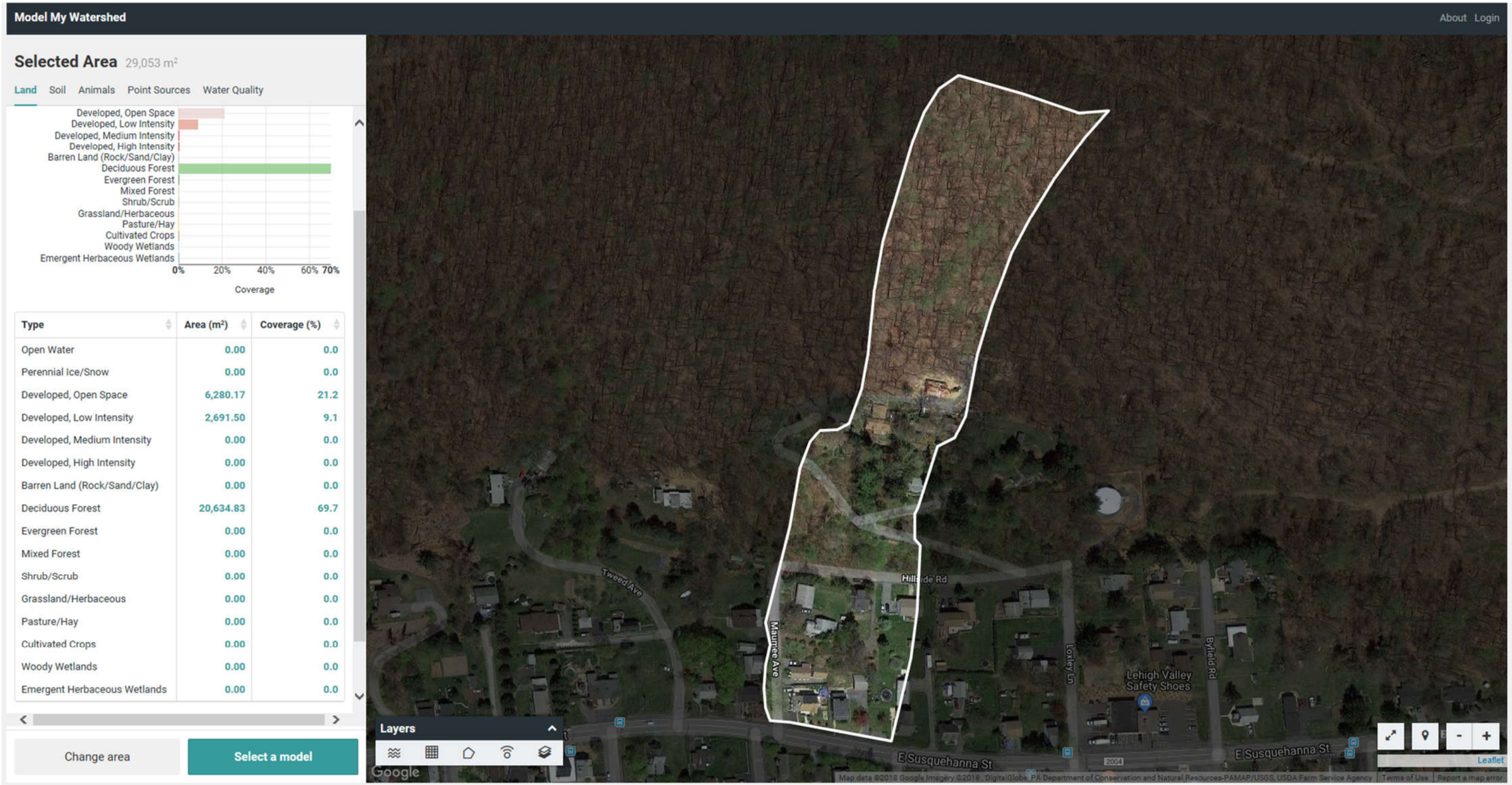
OUTFALL #028B - TROUT CREEK WATERSHED:



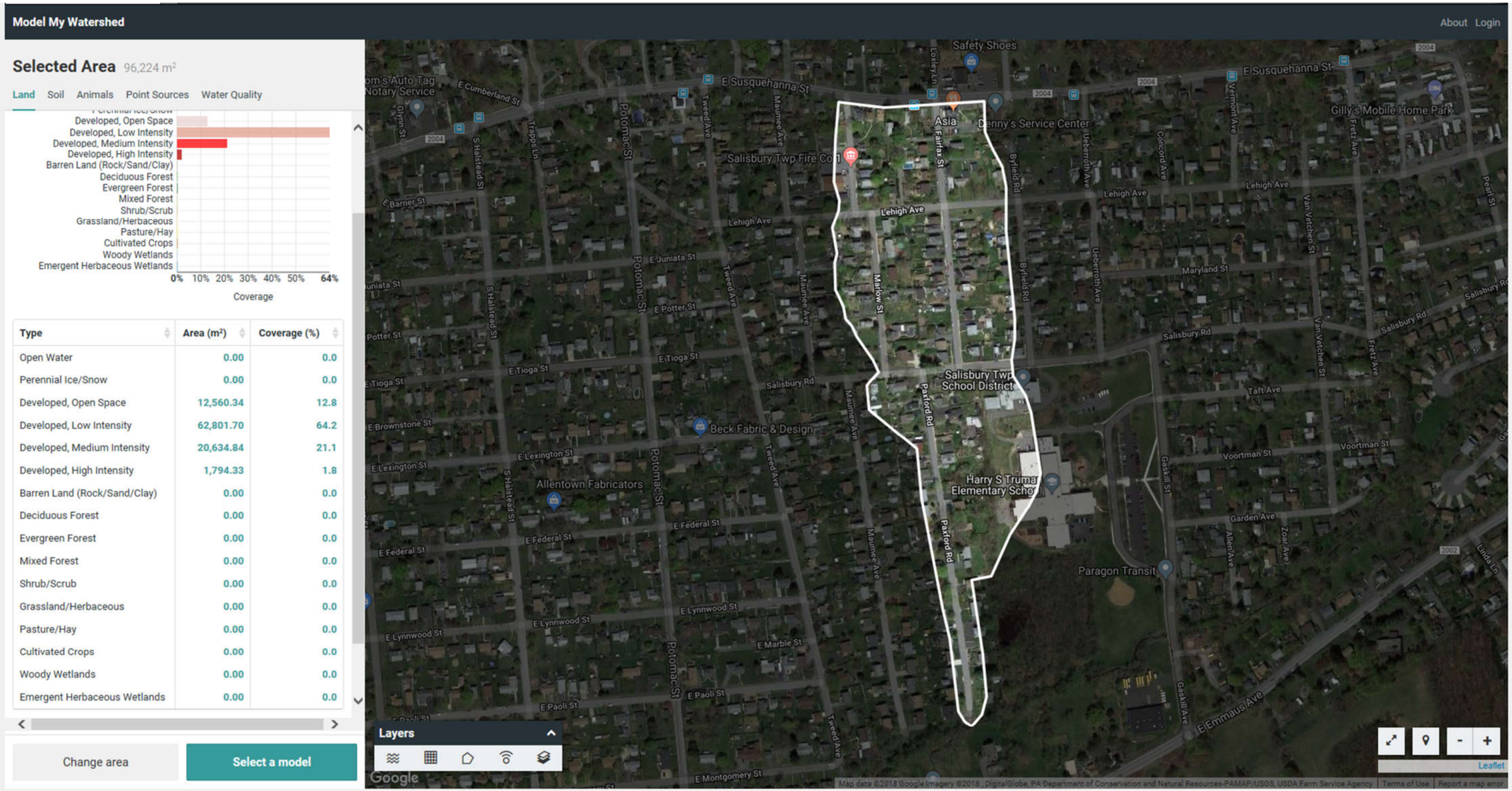
OUTFALL #029A - TROUT CREEK WATERSHED:



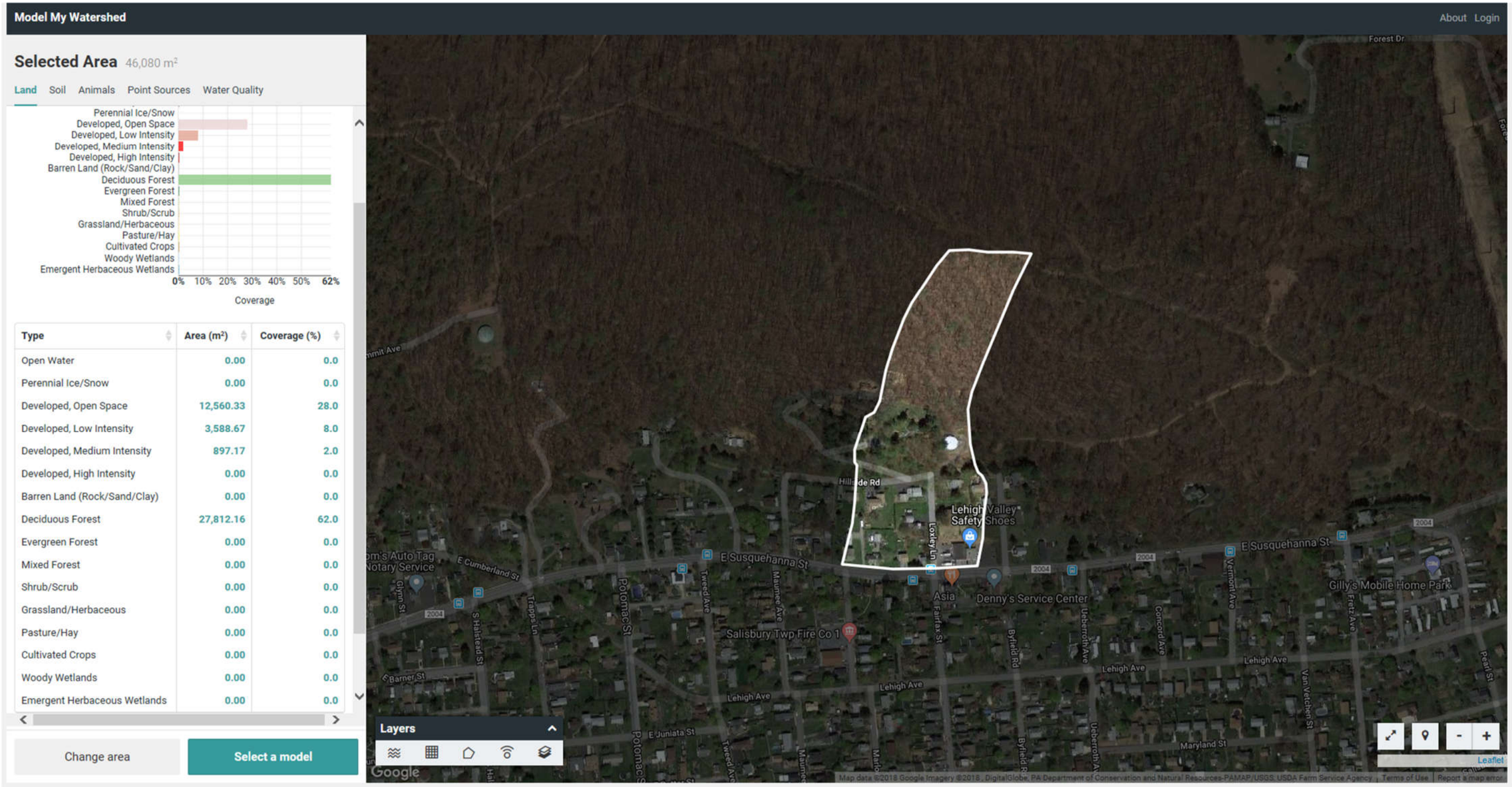
OUTFALL #029B - TROUT CREEK WATERSHED:



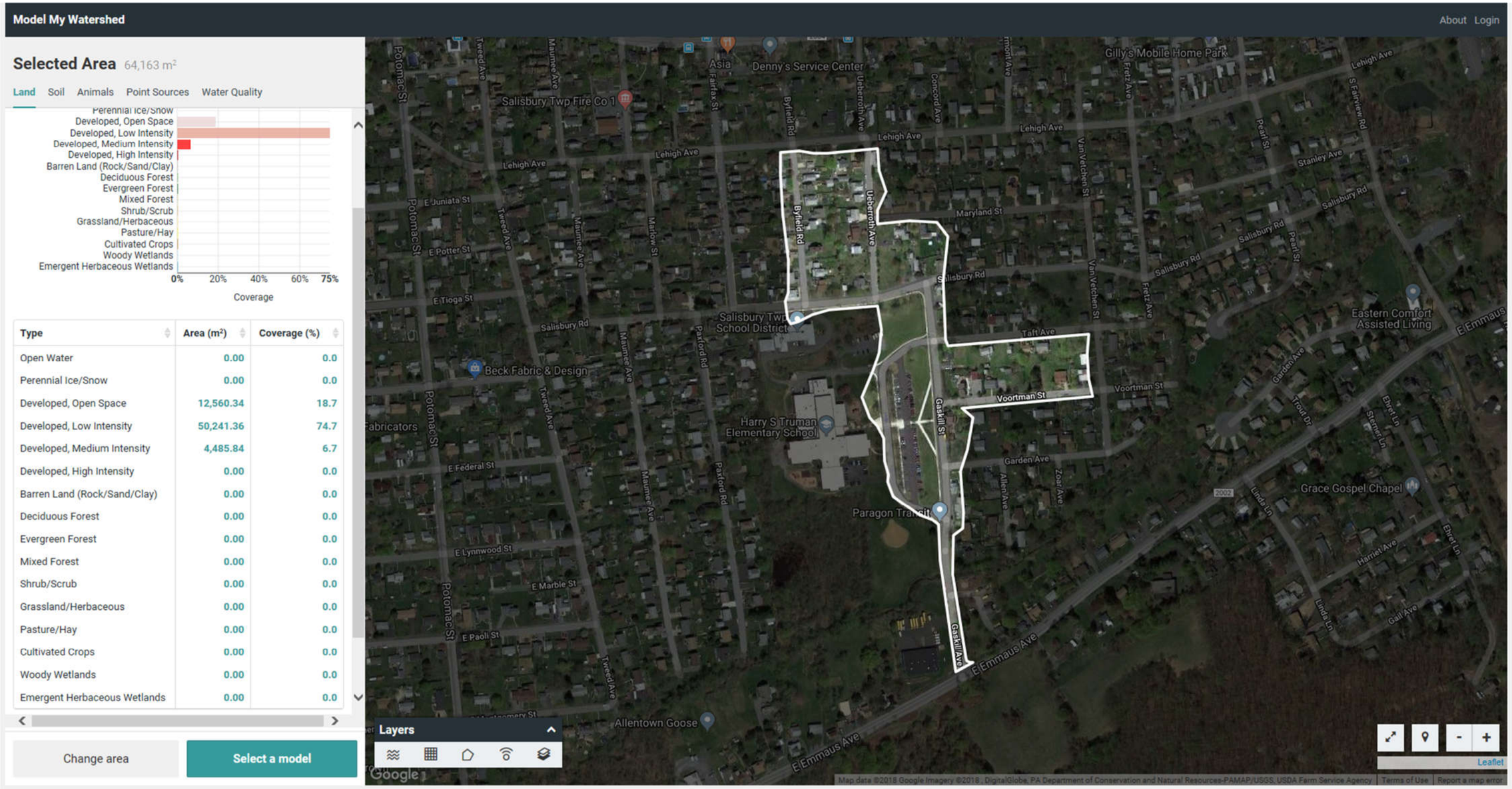
OUTFALL #030A - TROUT CREEK WATERSHED:



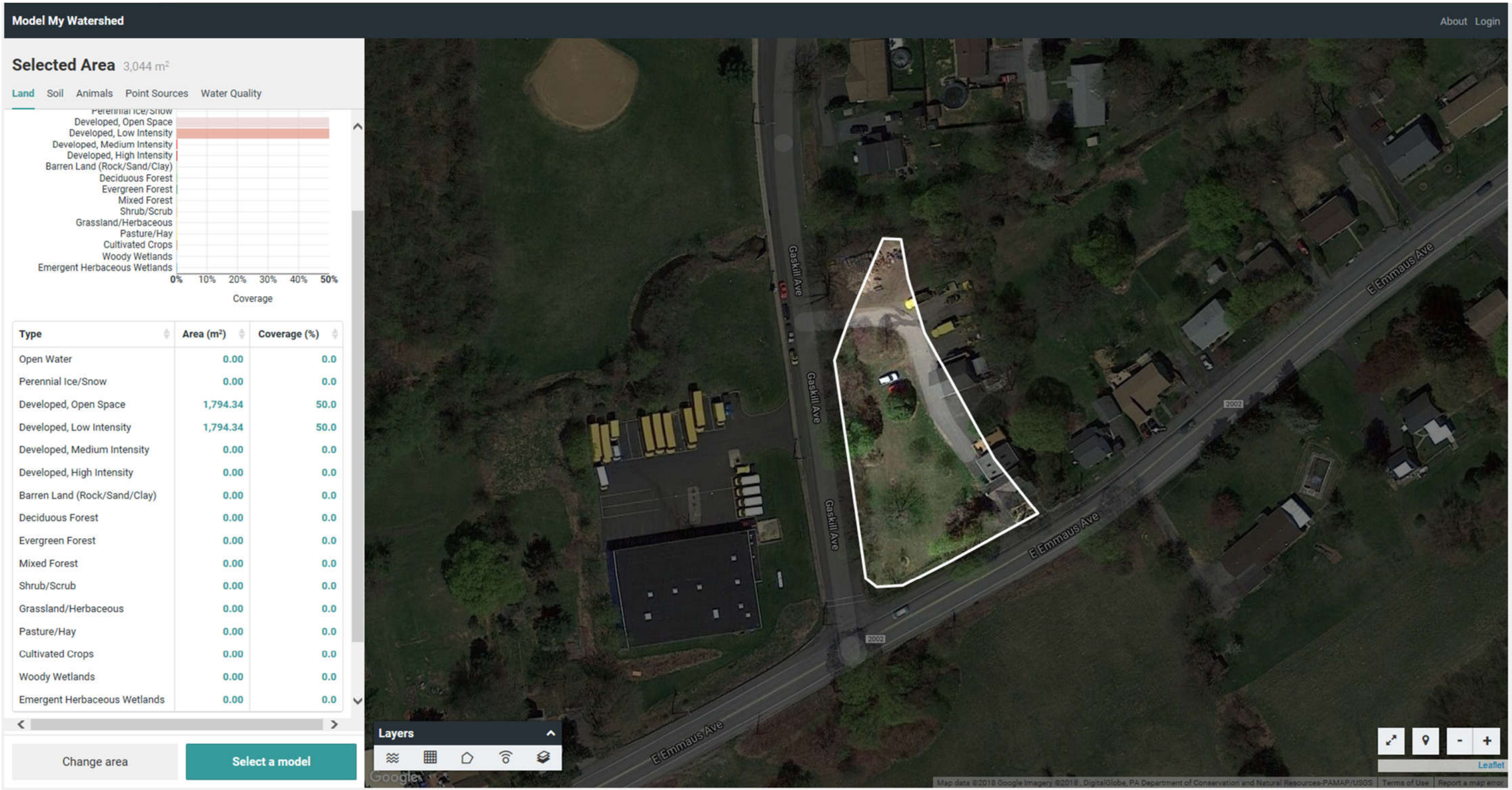
OUTFALL #030B - TROUT CREEK WATERSHED:



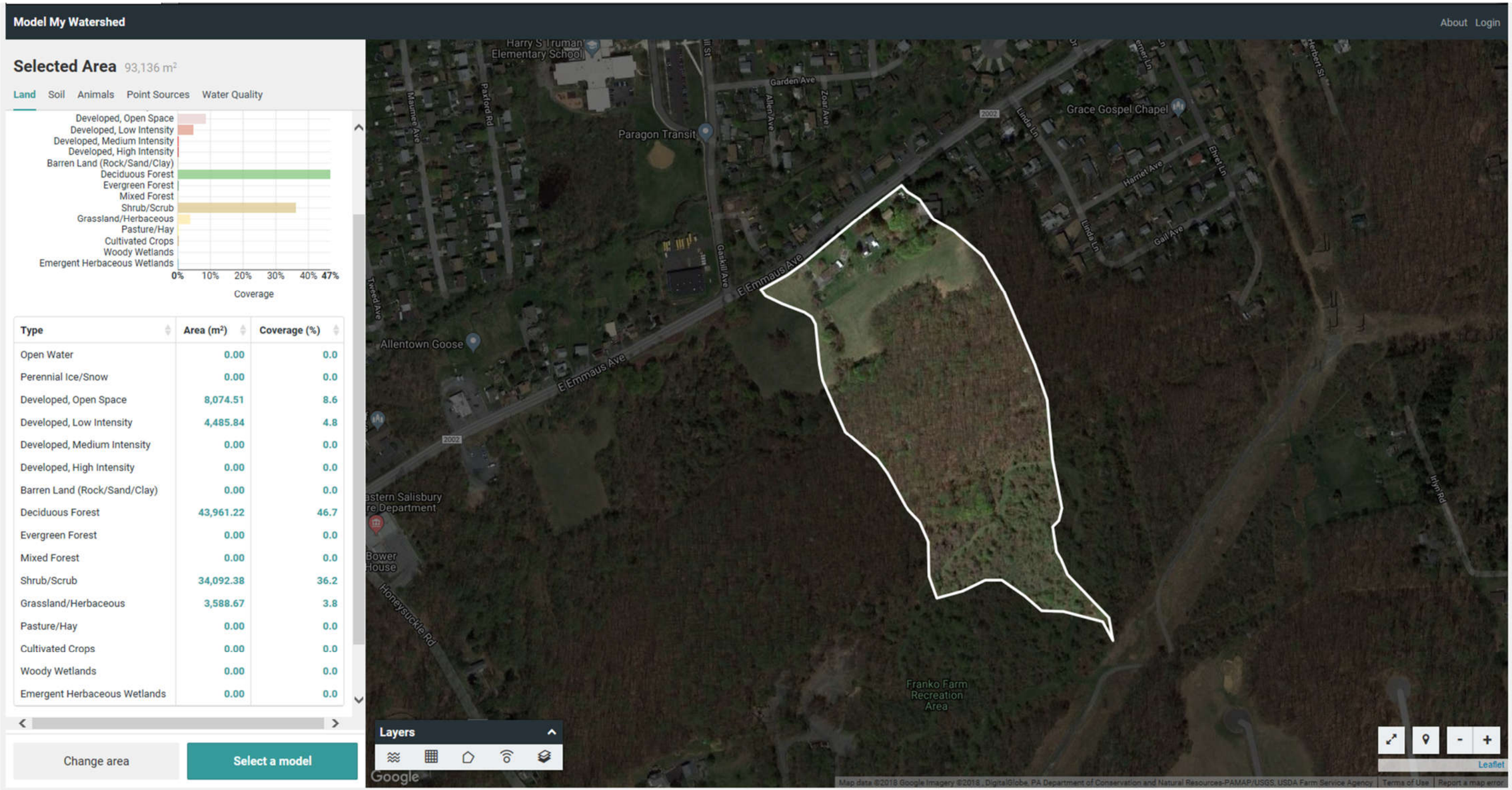
OUTFALL #031 - TROUT CREEK WATERSHED:



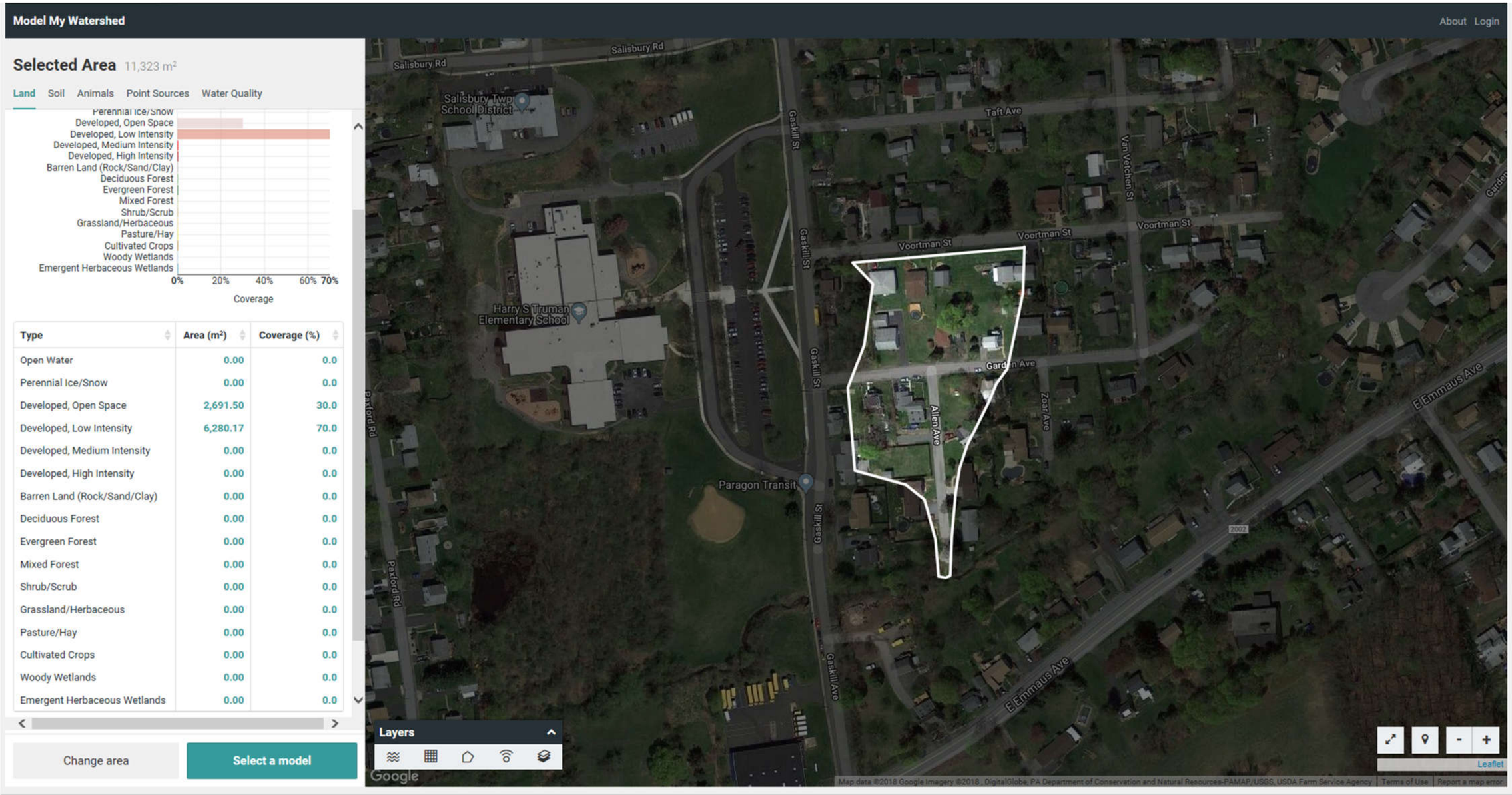
OUTFALL #032A - TROUT CREEK WATERSHED:



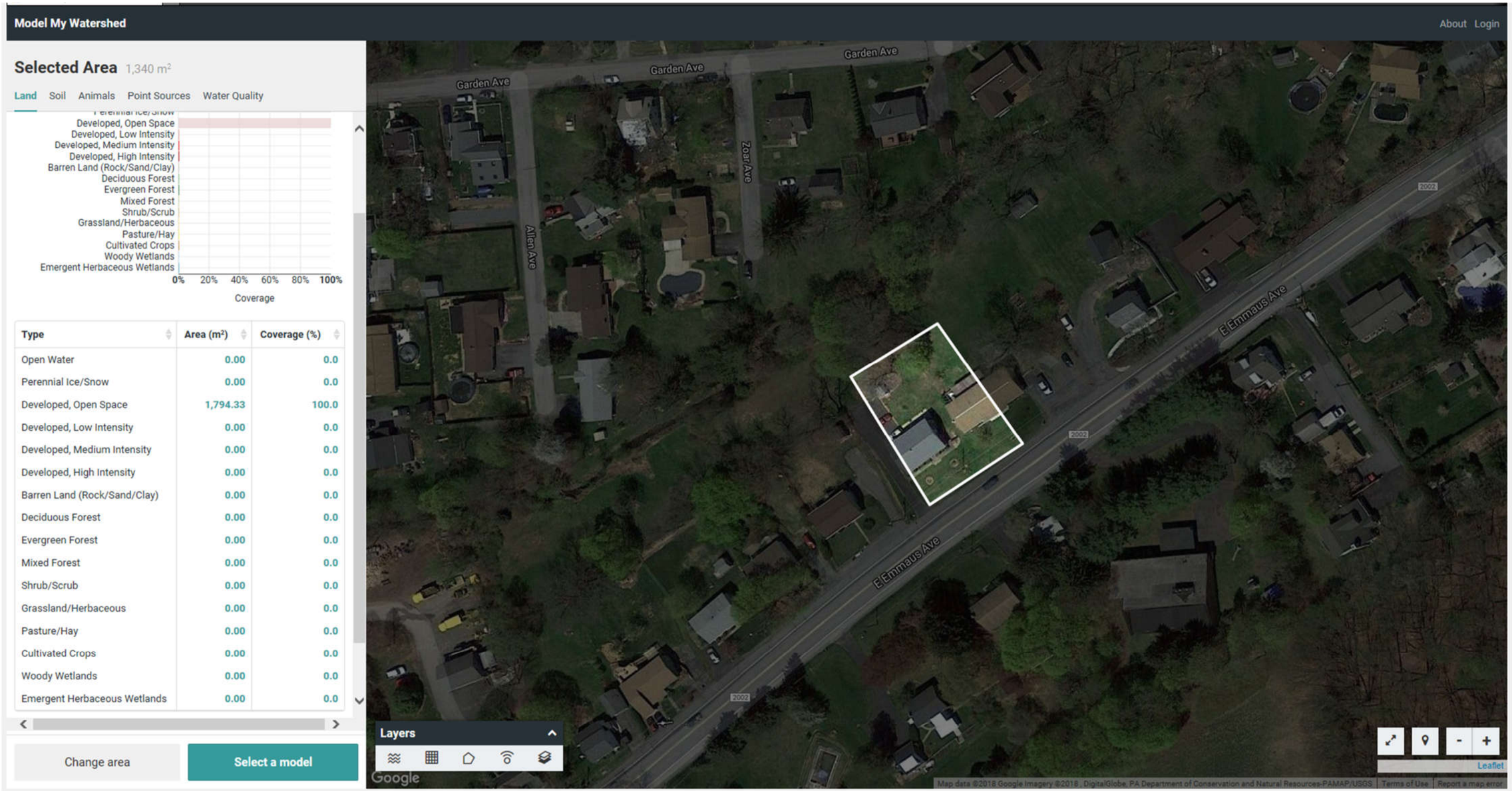
OUTFALL #032B - TROUT CREEK WATERSHED:



OUTFALL #033 - TROUT CREEK WATERSHED:

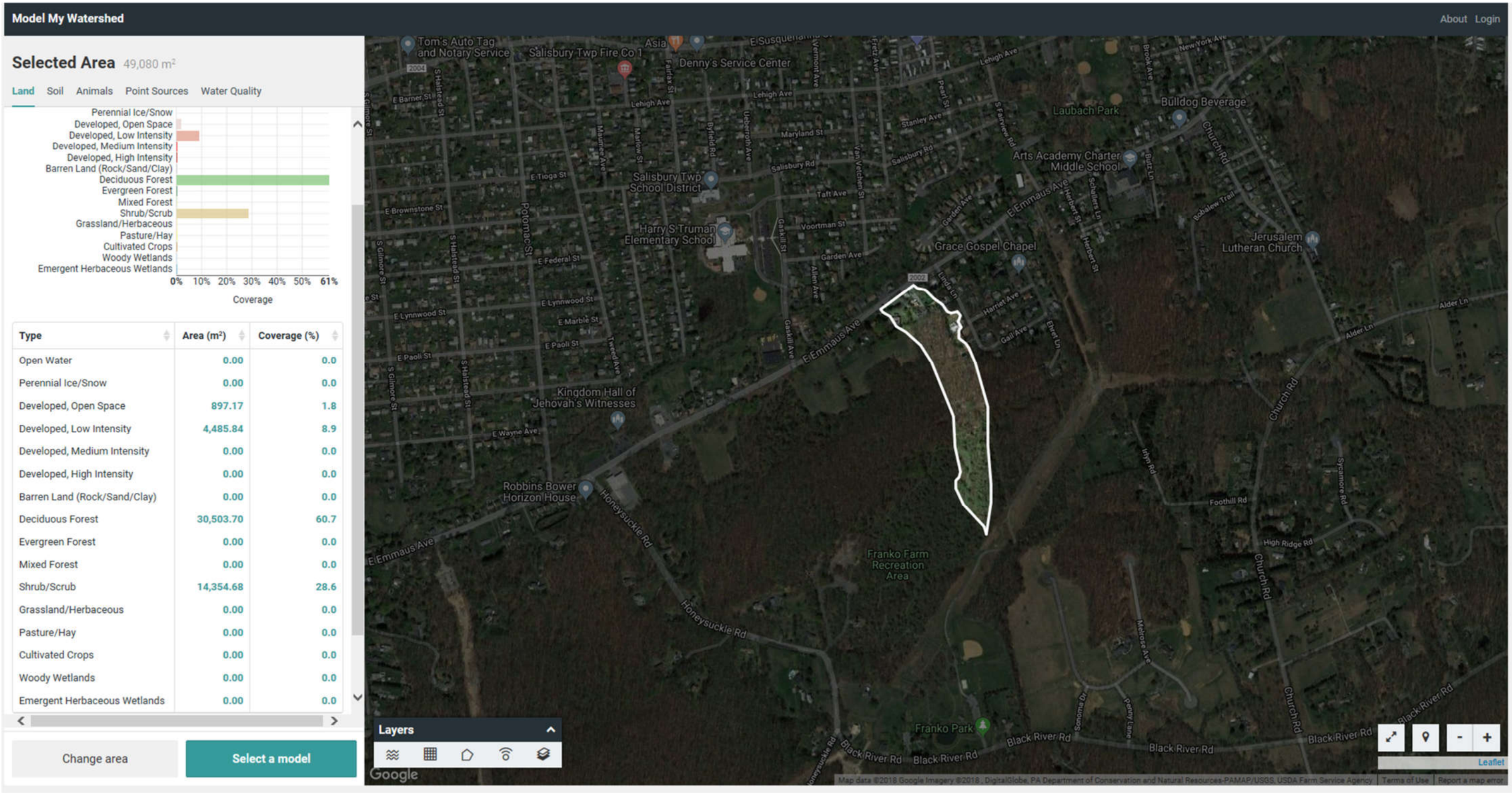


*** OUTFALL #034A - TROUT CREEK WATERSHED:**

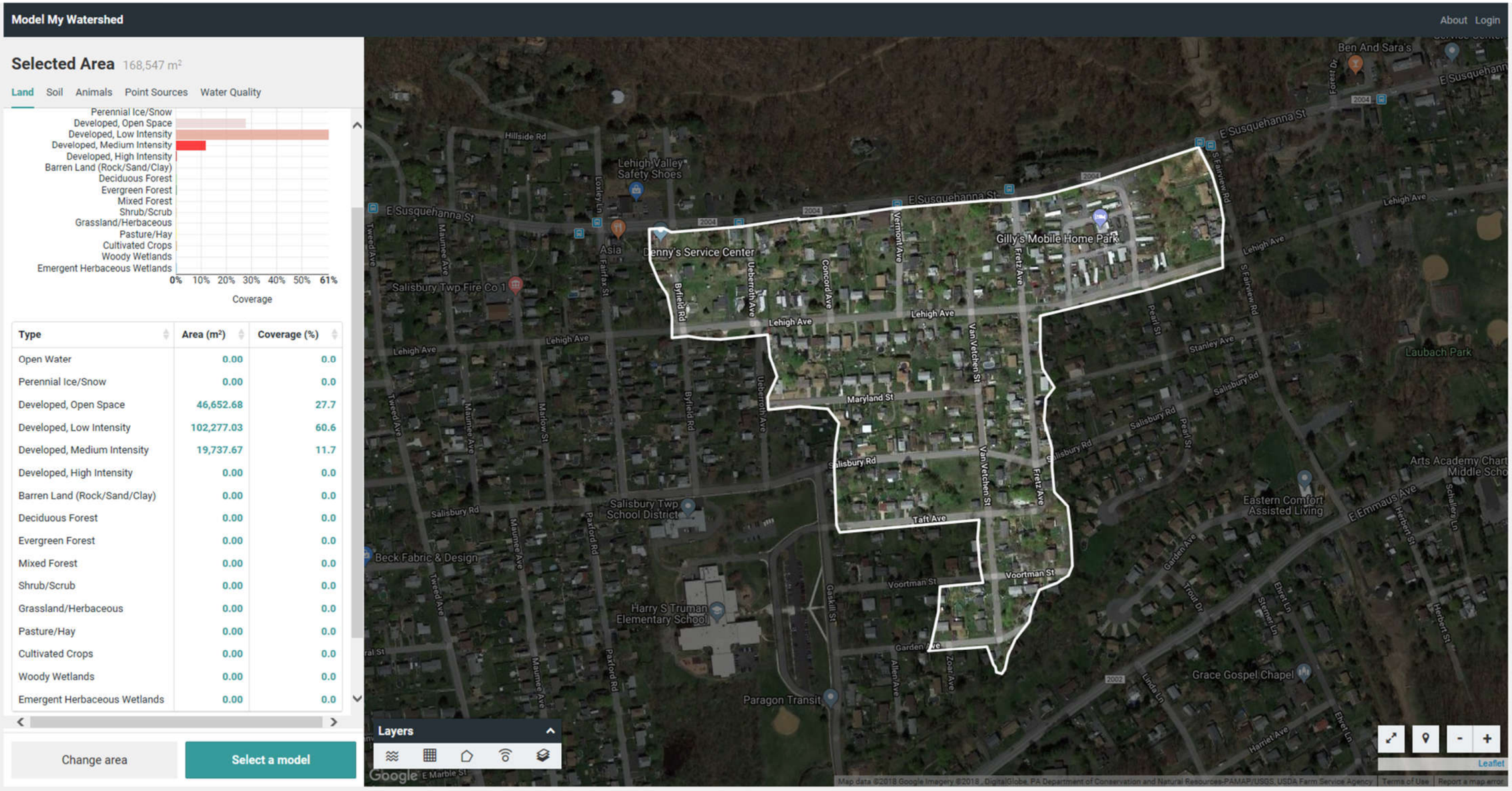


* AREA TO SMALL TO CALCULATE RESULTS, MODIFIED LOADING AREA AND FOUND TO BE 100% OPEN SPACE, USED ACTUAL AREA IN SPREAD SHEE

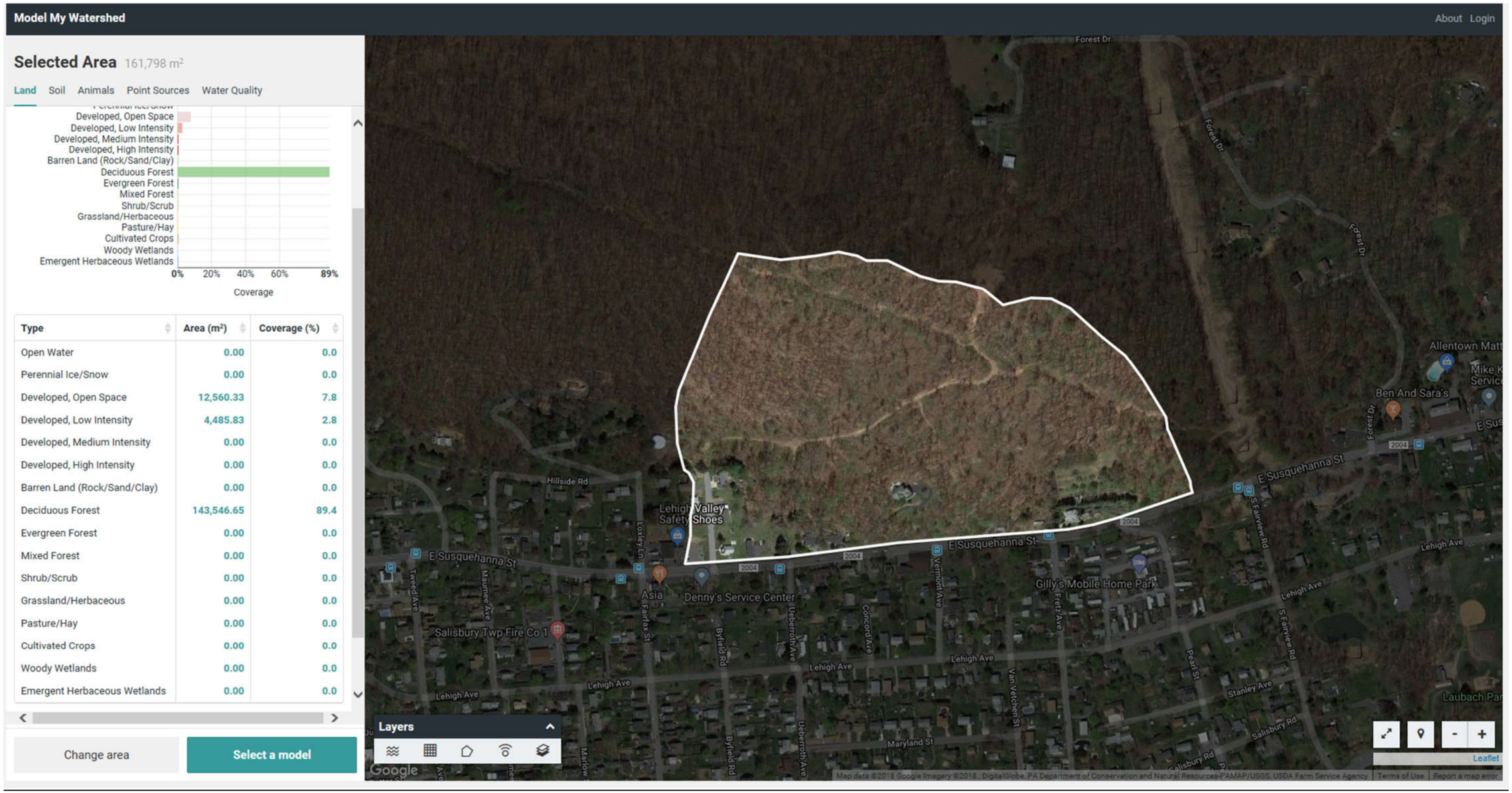
OUTFALL #034B - TROUT CREEK WATERSHED:



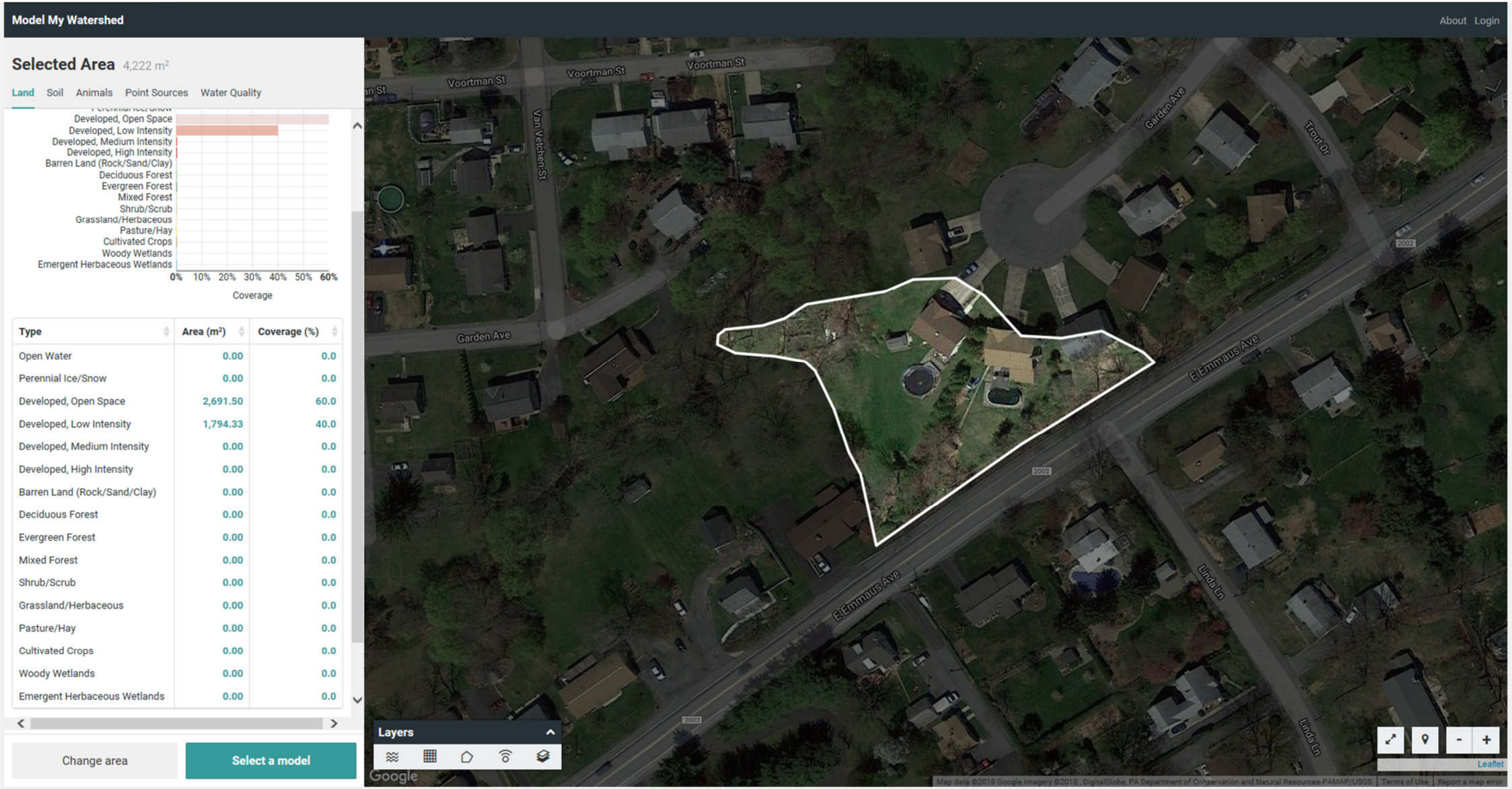
OUTFALL #035A - TROUT CREEK WATERSHED:



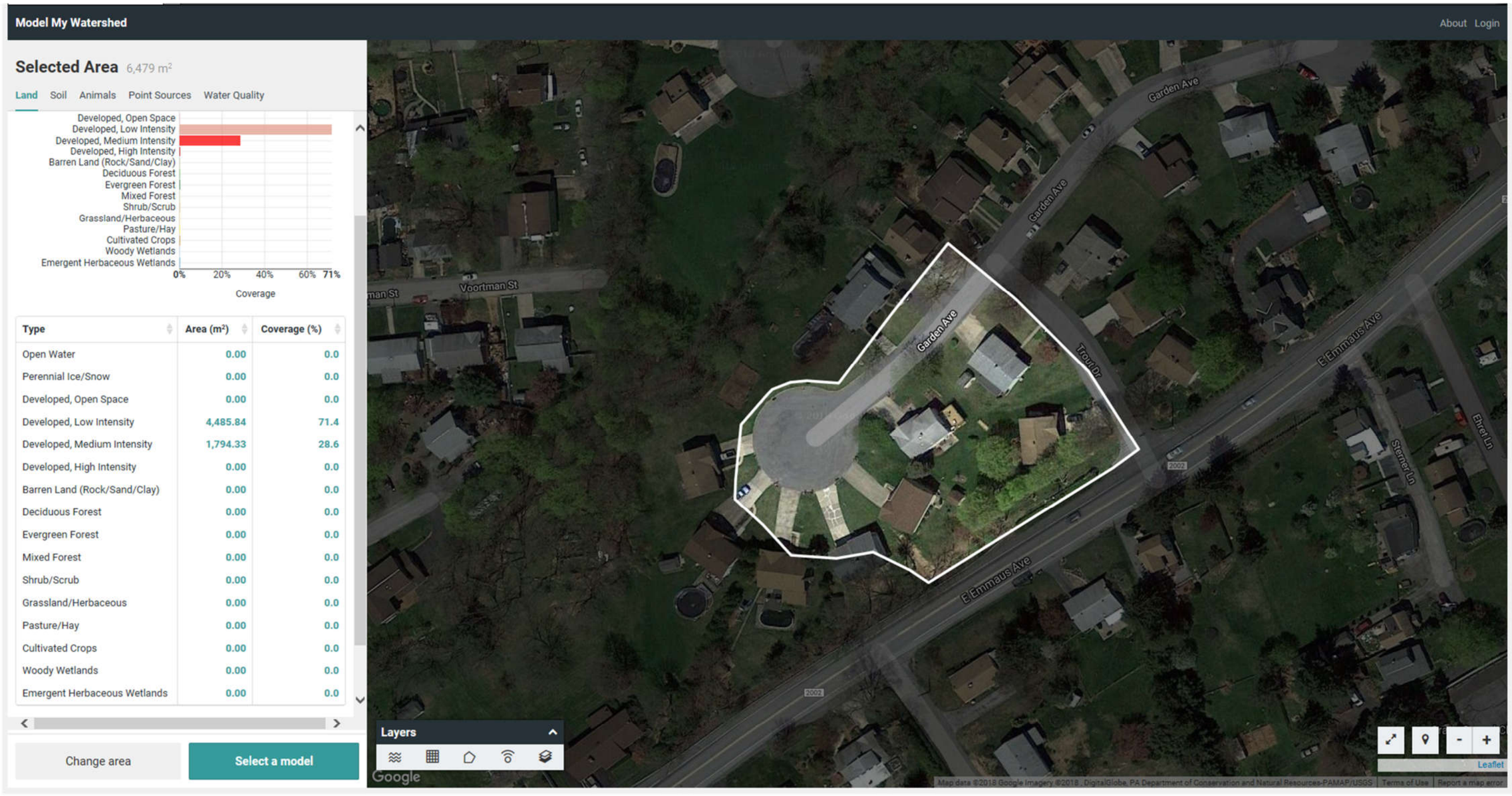
OUTFALL #035B - TROUT CREEK WATERSHED:



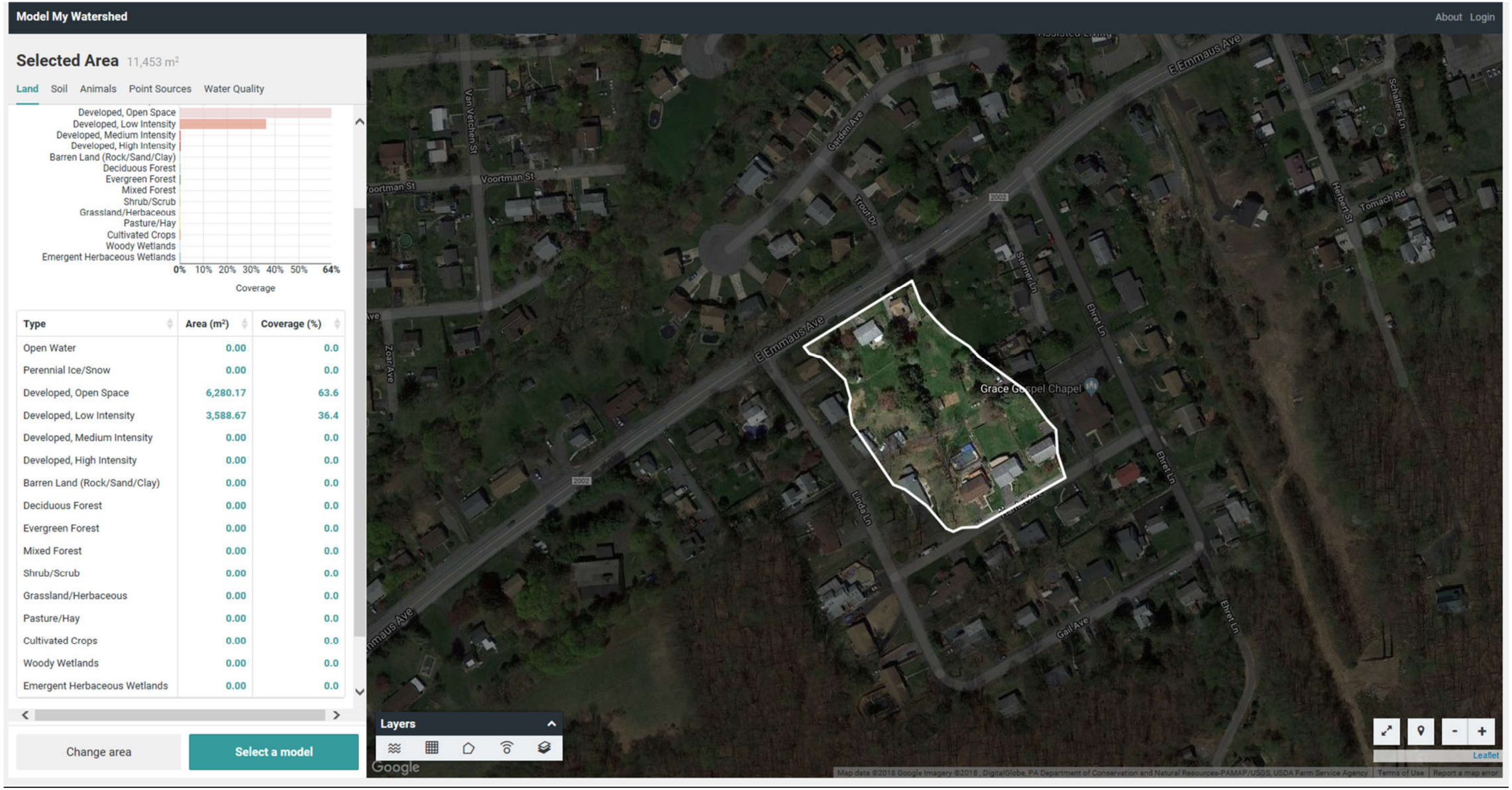
OUTFALL #036A - TROUT CREEK WATERSHED:



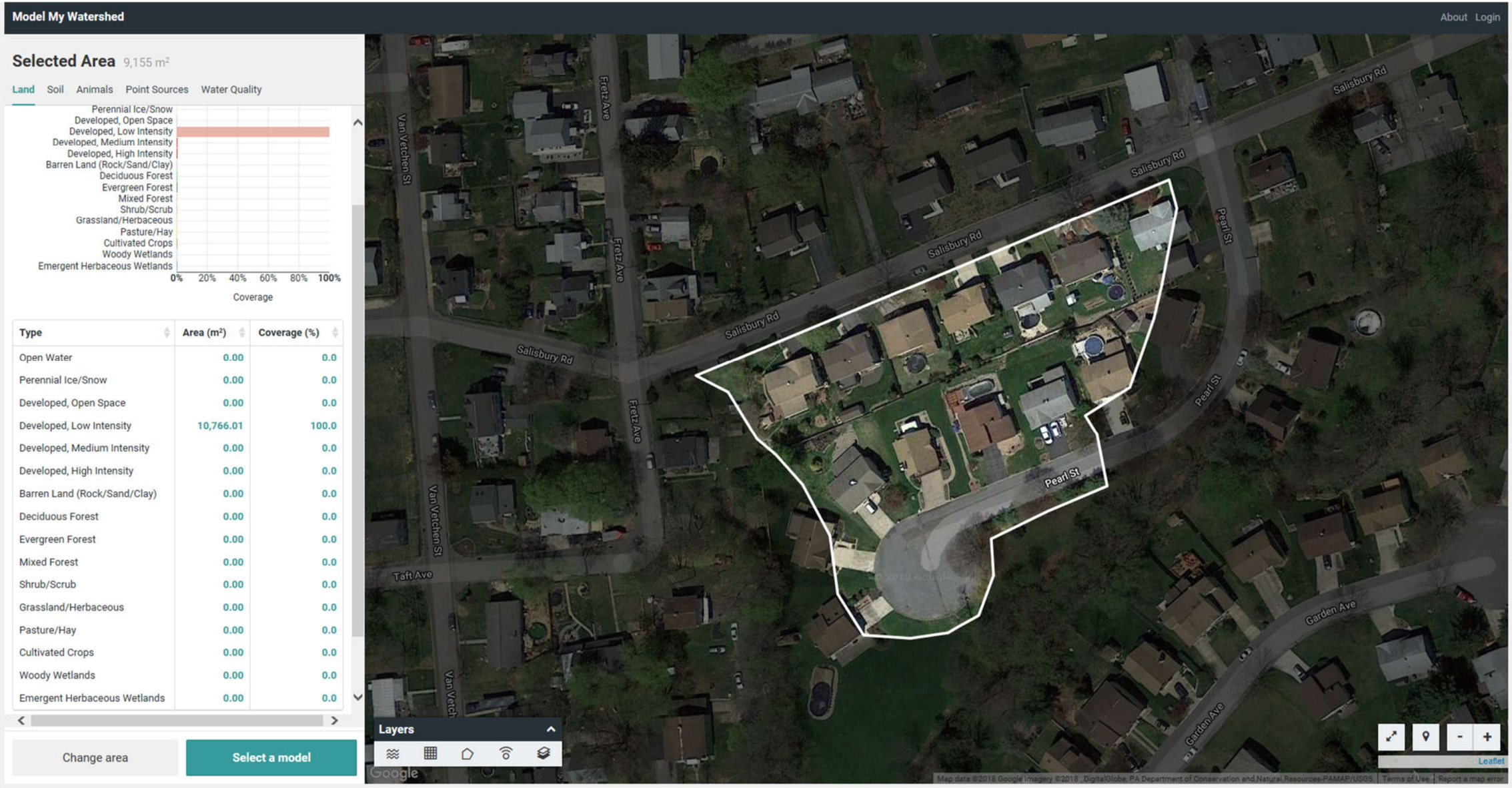
OUTFALL #037A - TROUT CREEK WATERSHED:



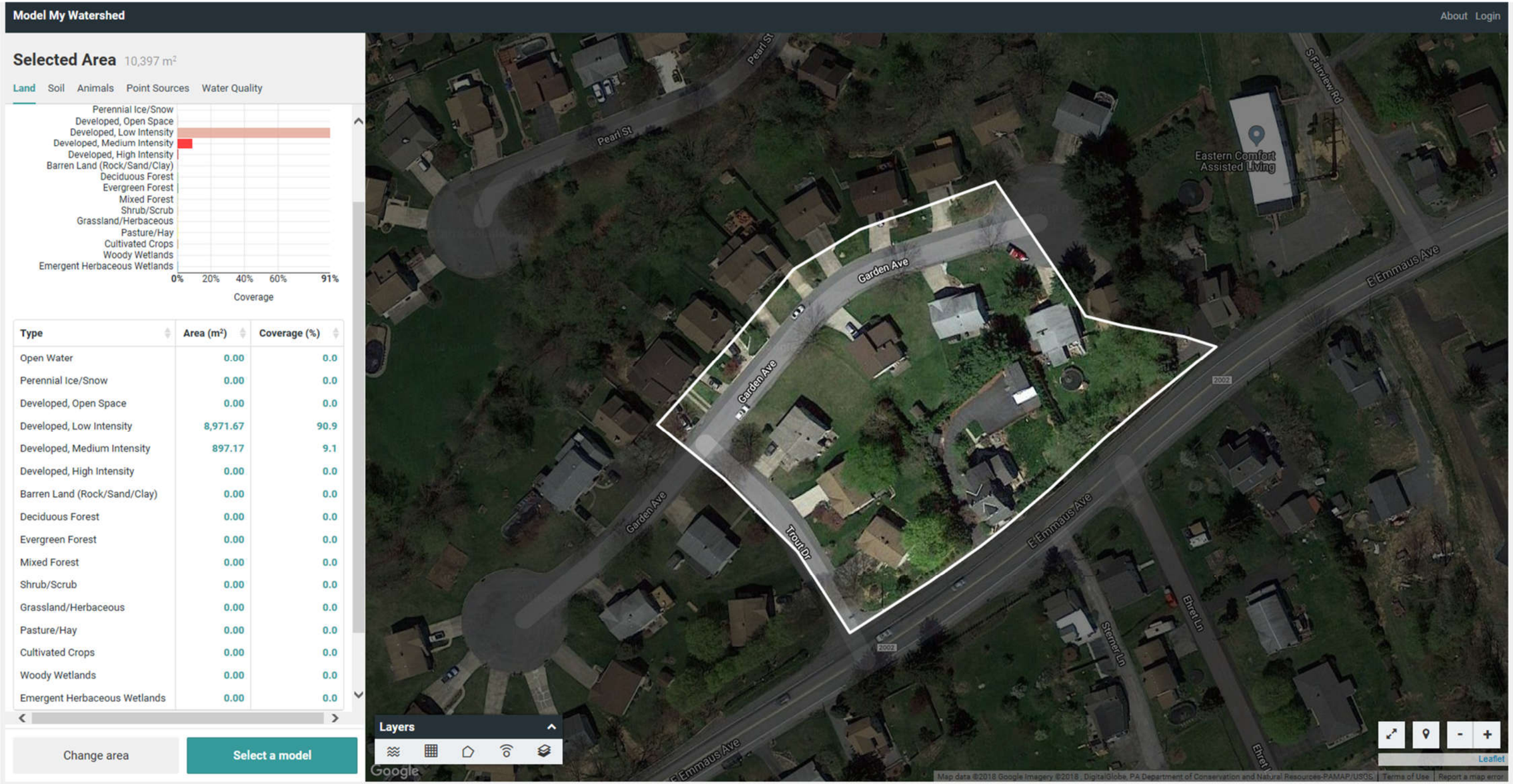
OUTFALL #037B - TROUT CREEK WATERSHED:



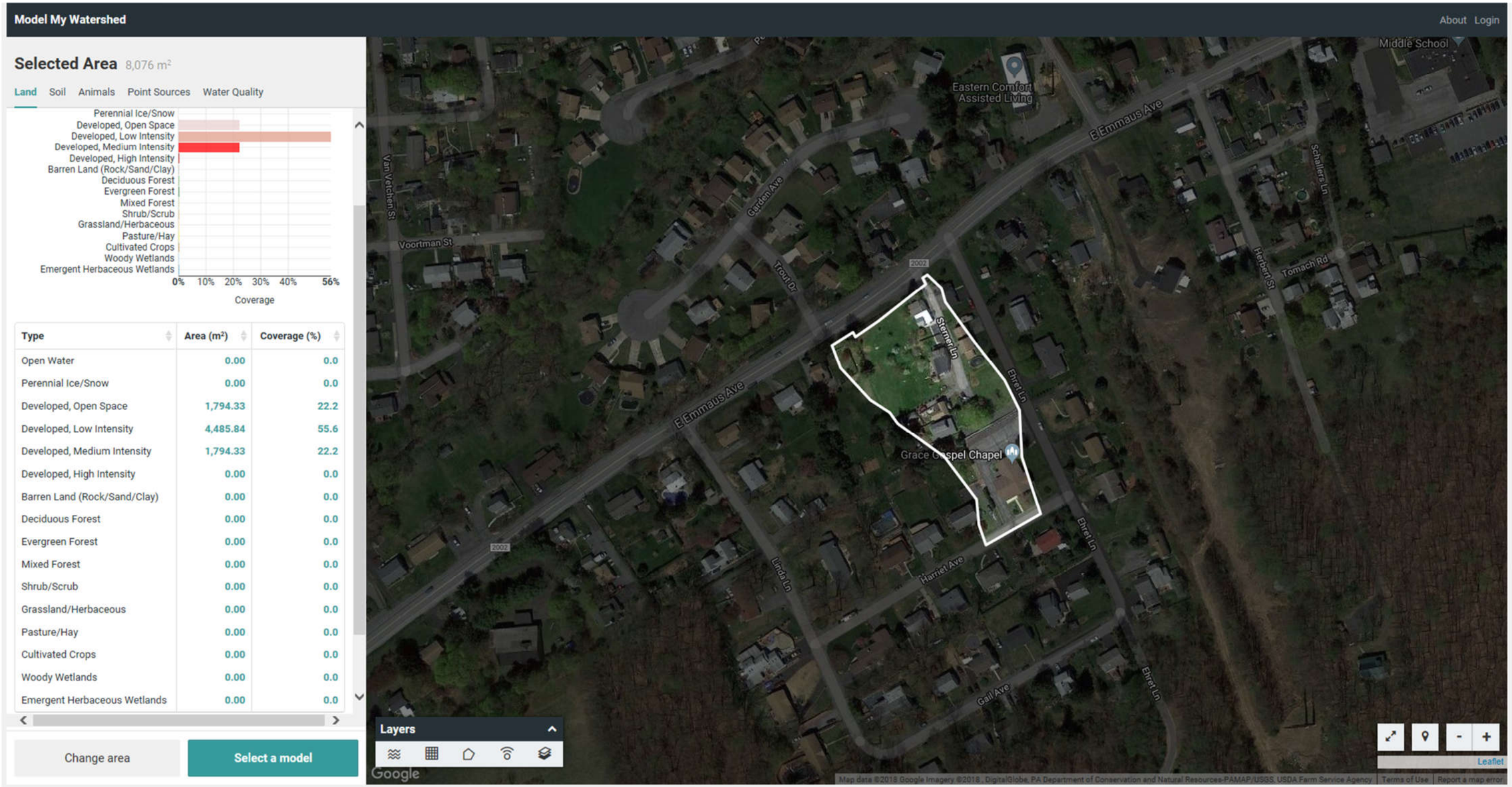
OUTFALL #038 - TROUT CREEK WATERSHED:



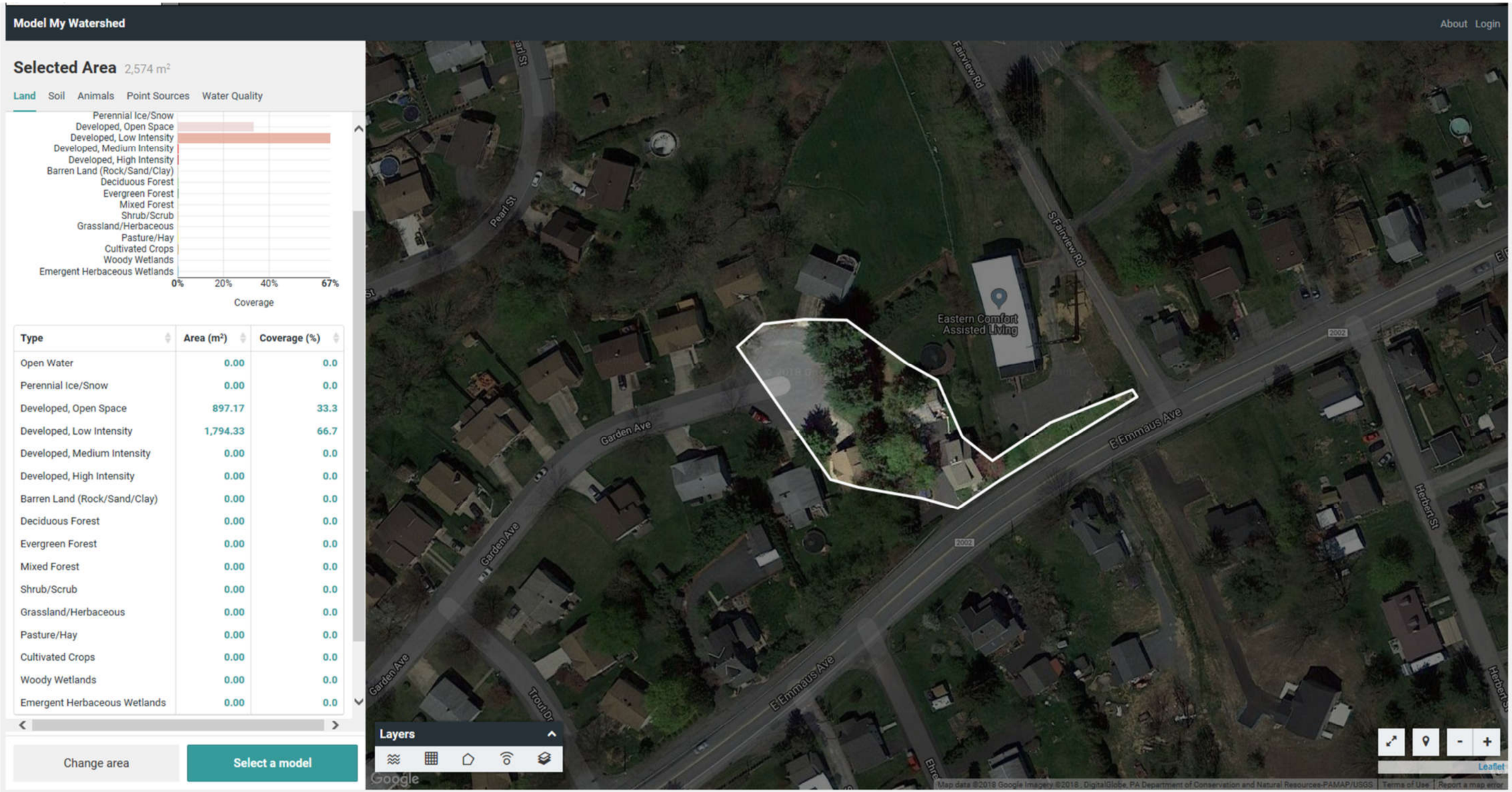
OUTFALL #039A - TROUT CREEK WATERSHED:



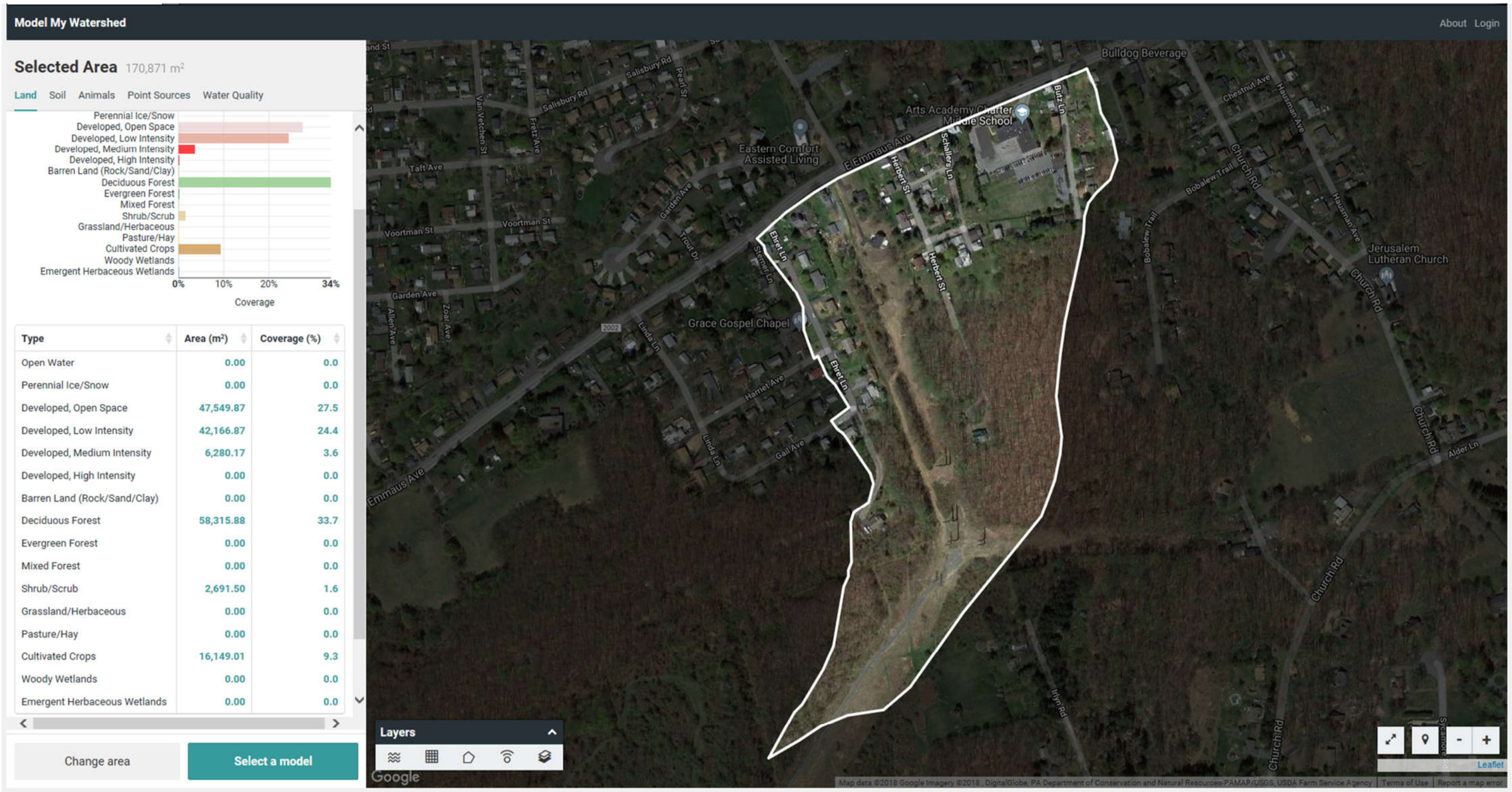
OUTFALL #039B - TROUT CREEK WATERSHED:



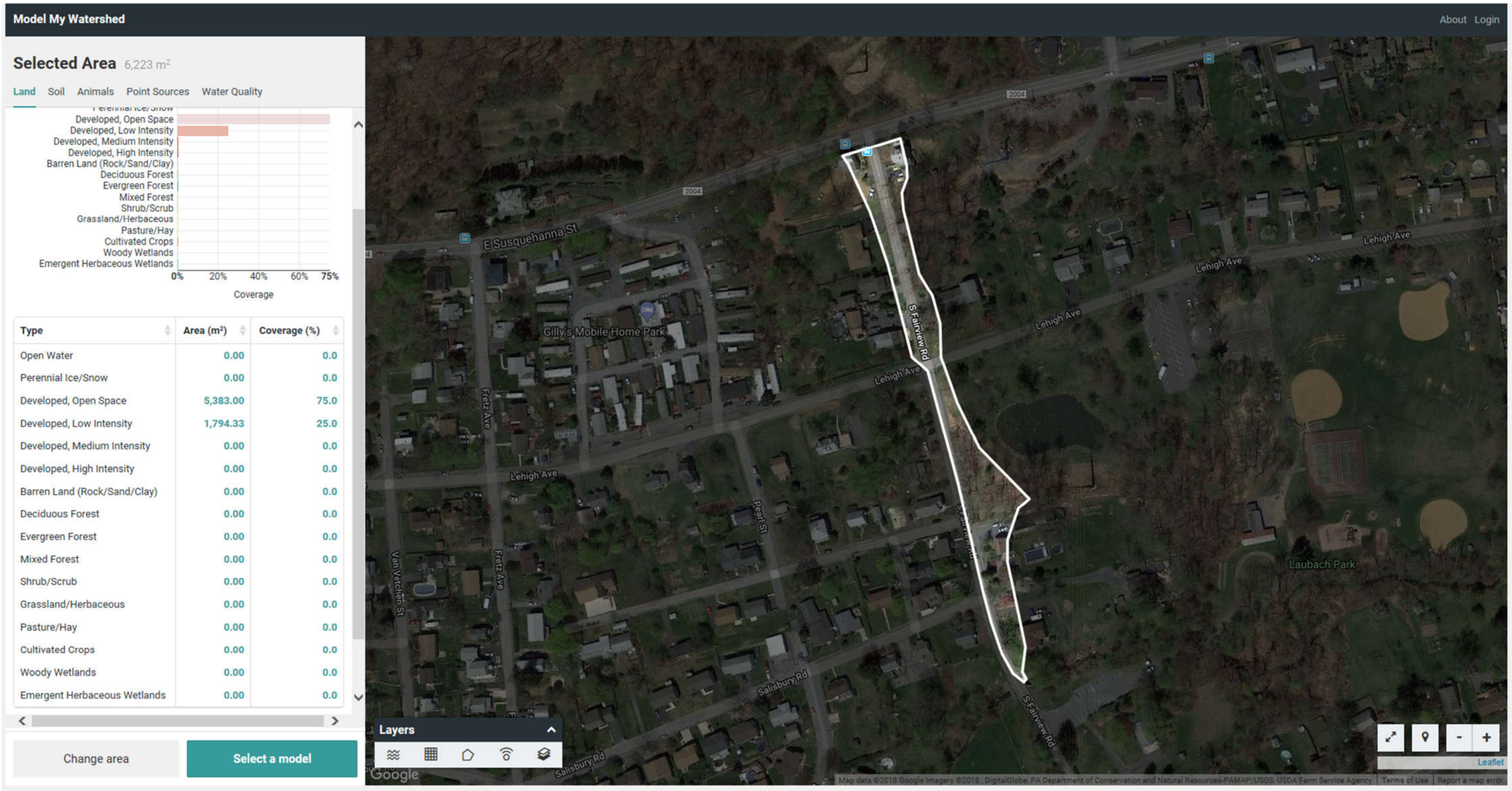
OUTFALL #040A - TROUT CREEK WATERSHED:



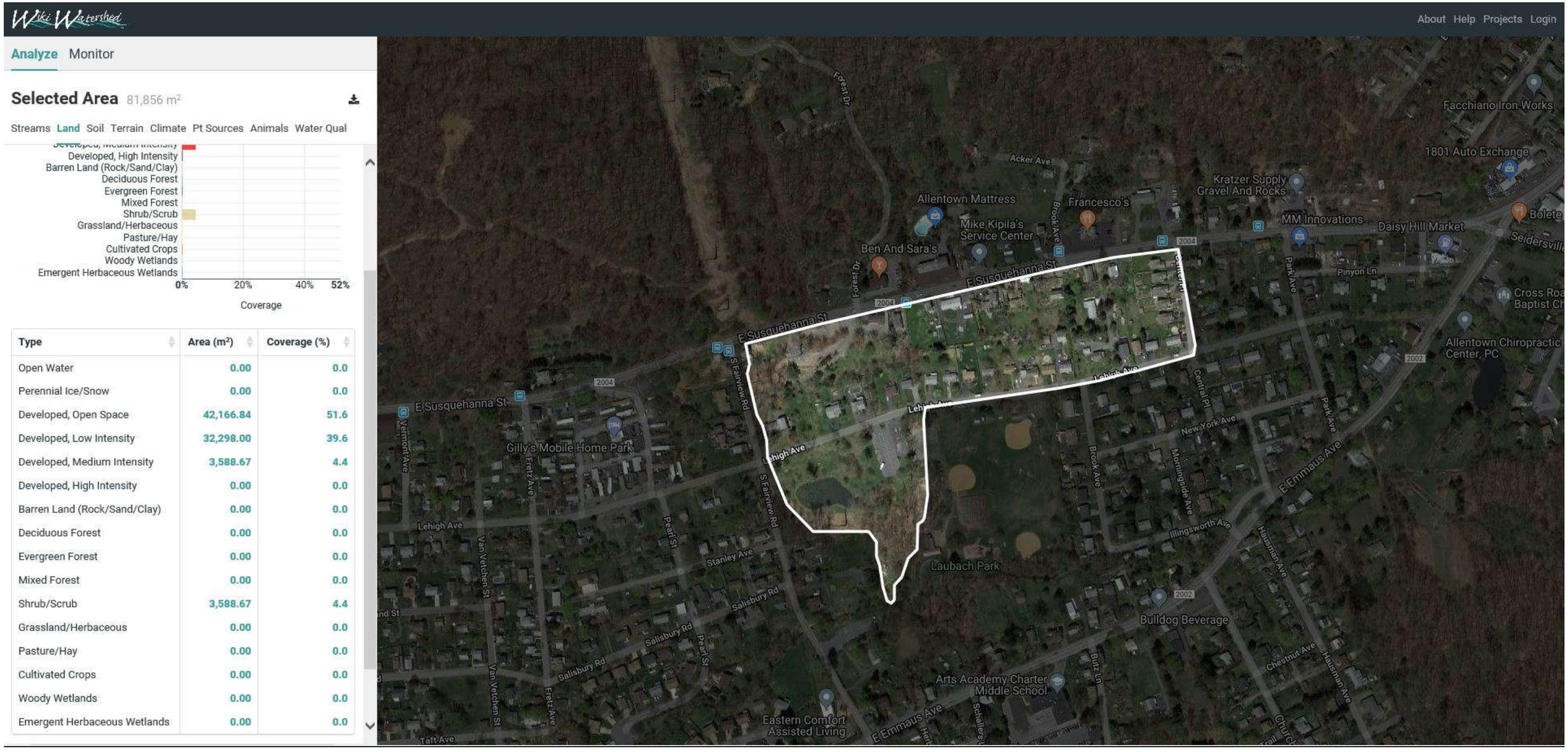
OUTFALL #040B - TROUT CREEK WATERSHED:



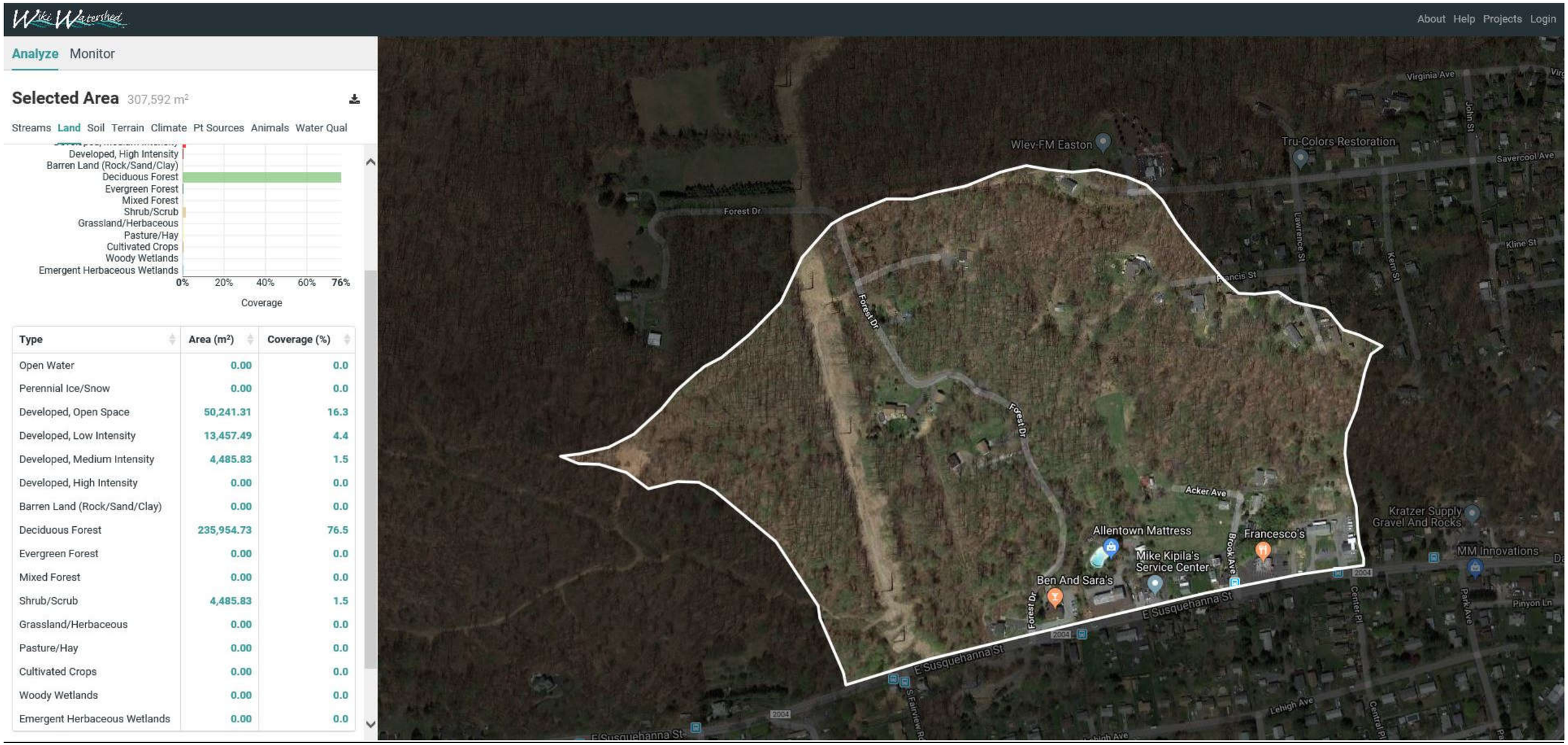
OUTFALL #041 - TROUT CREEK WATERSHED:



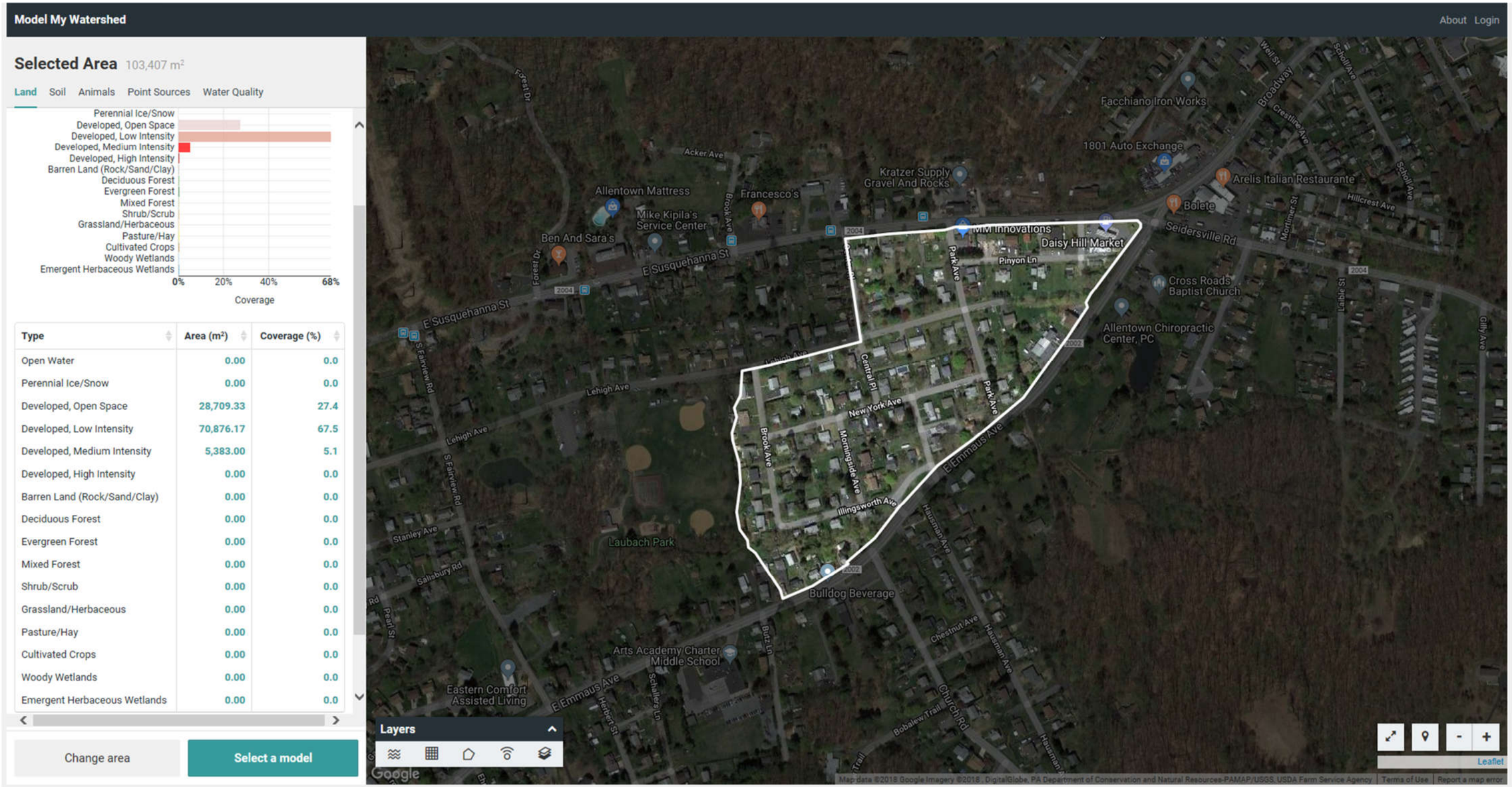
OUTFALL #042A - TROUT CREEK WATERSHED:



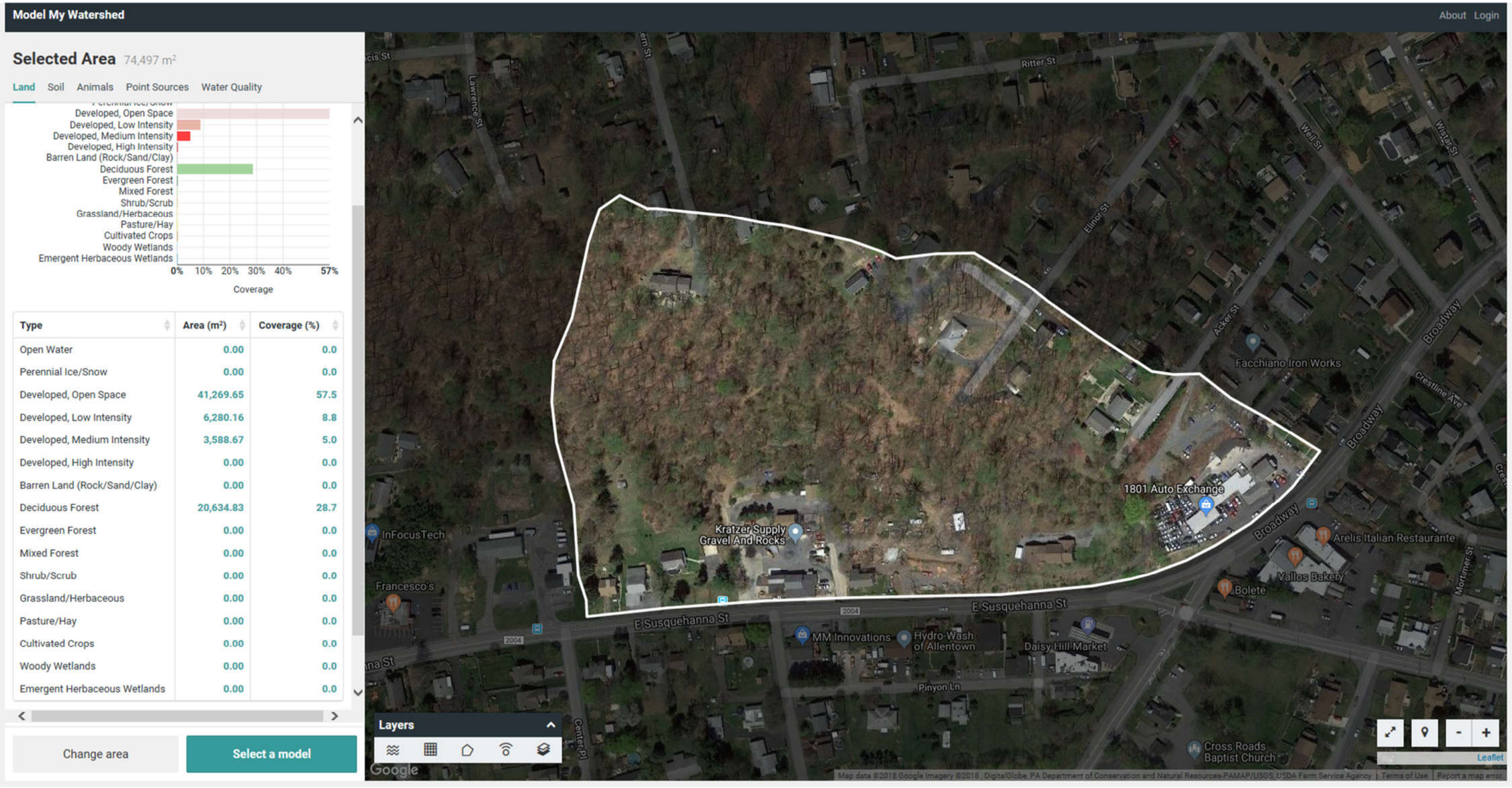
OUTFALL #042B - TROUT CREEK WATERSHED:



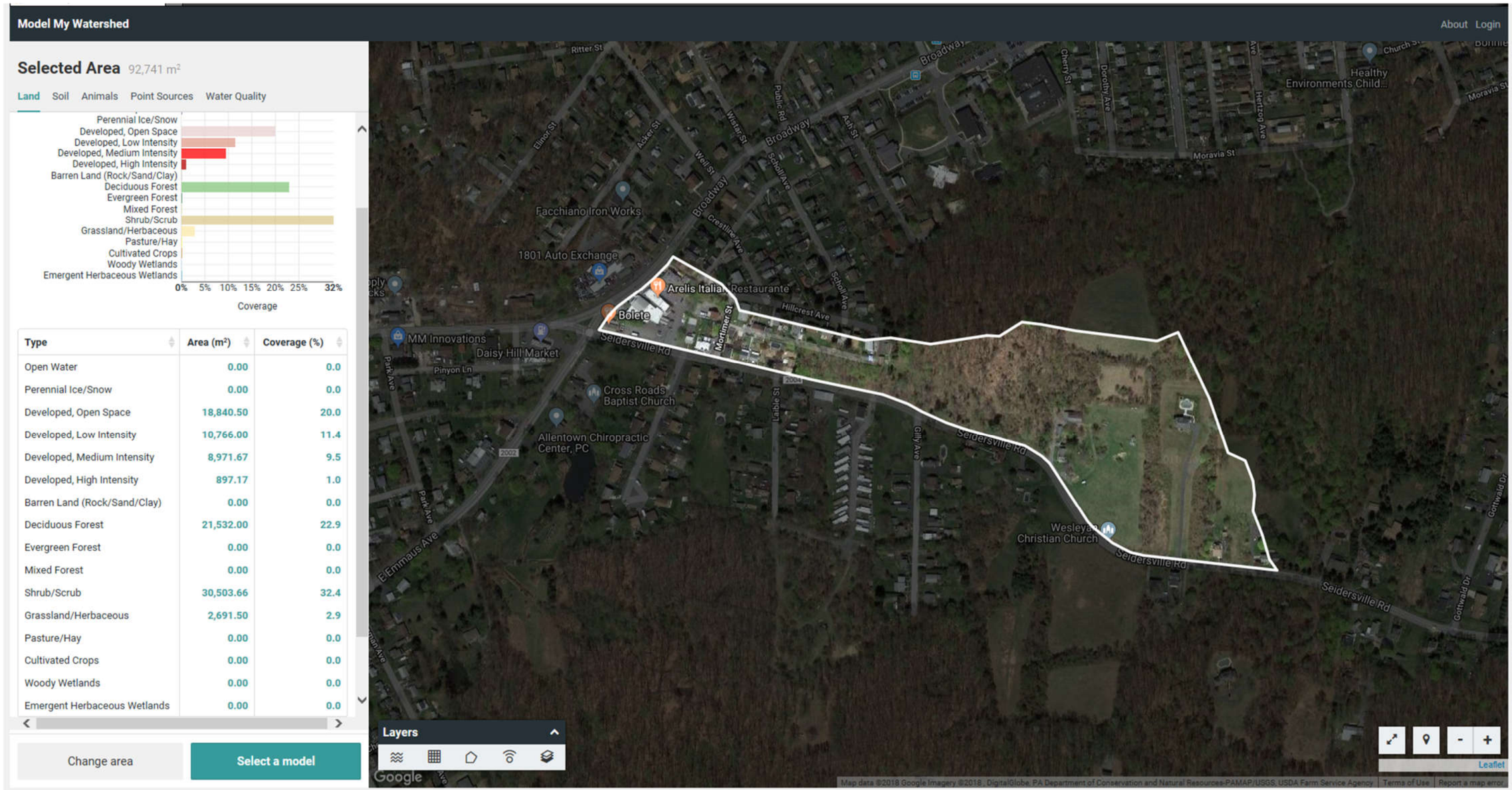
OUTFALL #043A - TROUT CREEK WATERSHED:



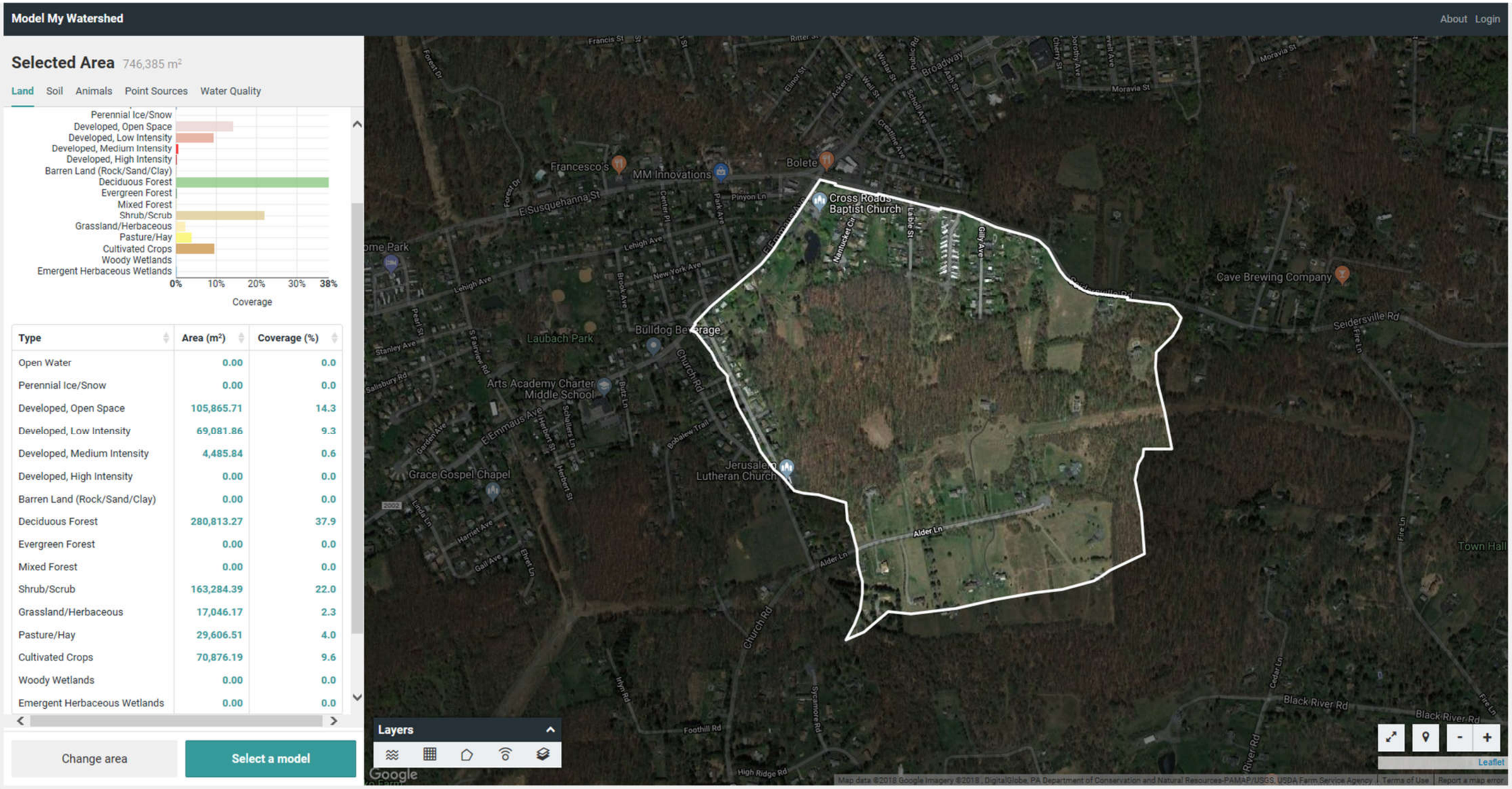
OUTFALL #043B - TROUT CREEK WATERSHED:



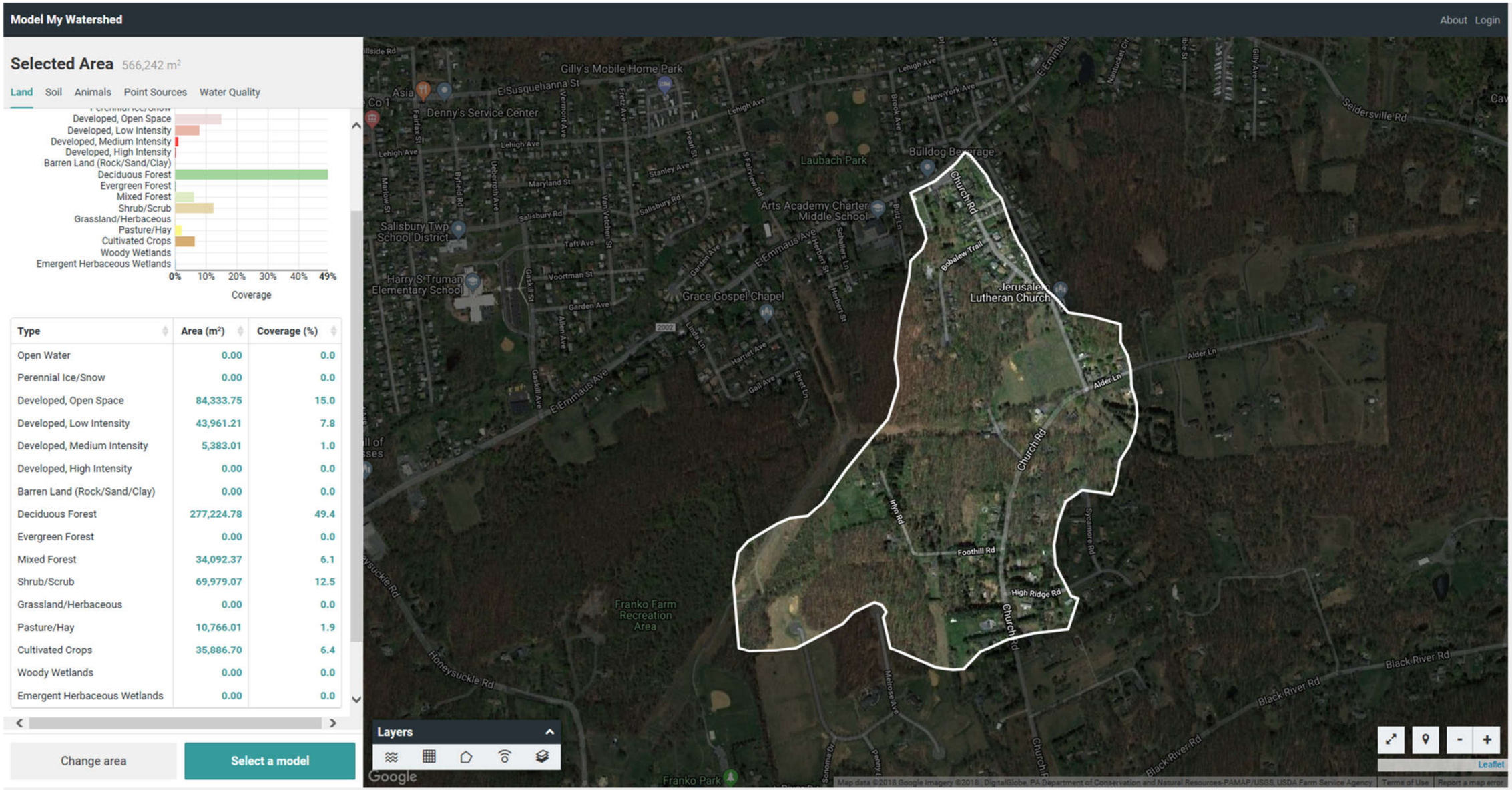
OUTFALL #043C - TROUT CREEK WATERSHED:



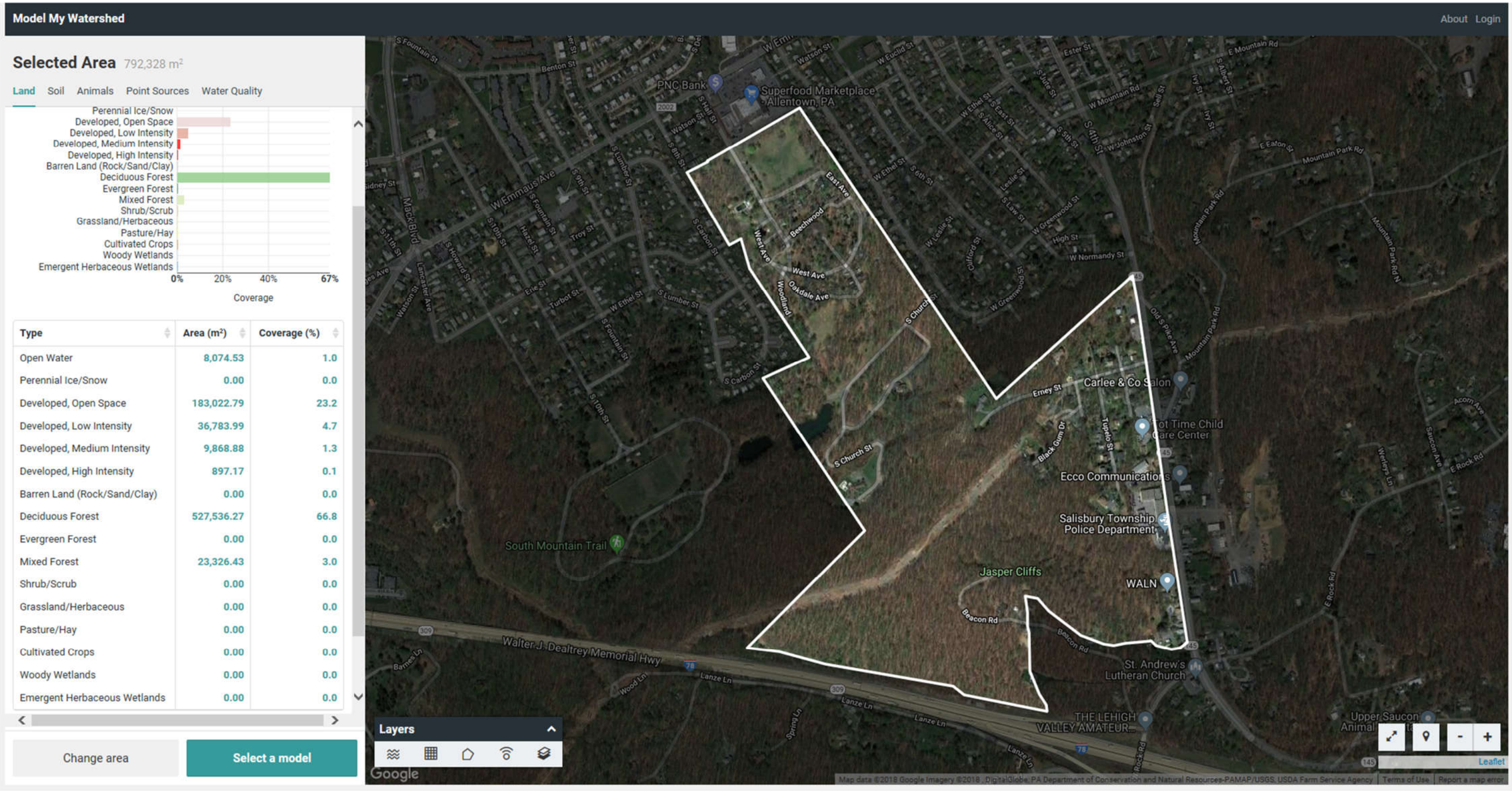
OUTFALL #043D - TROUT CREEK WATERSHED:



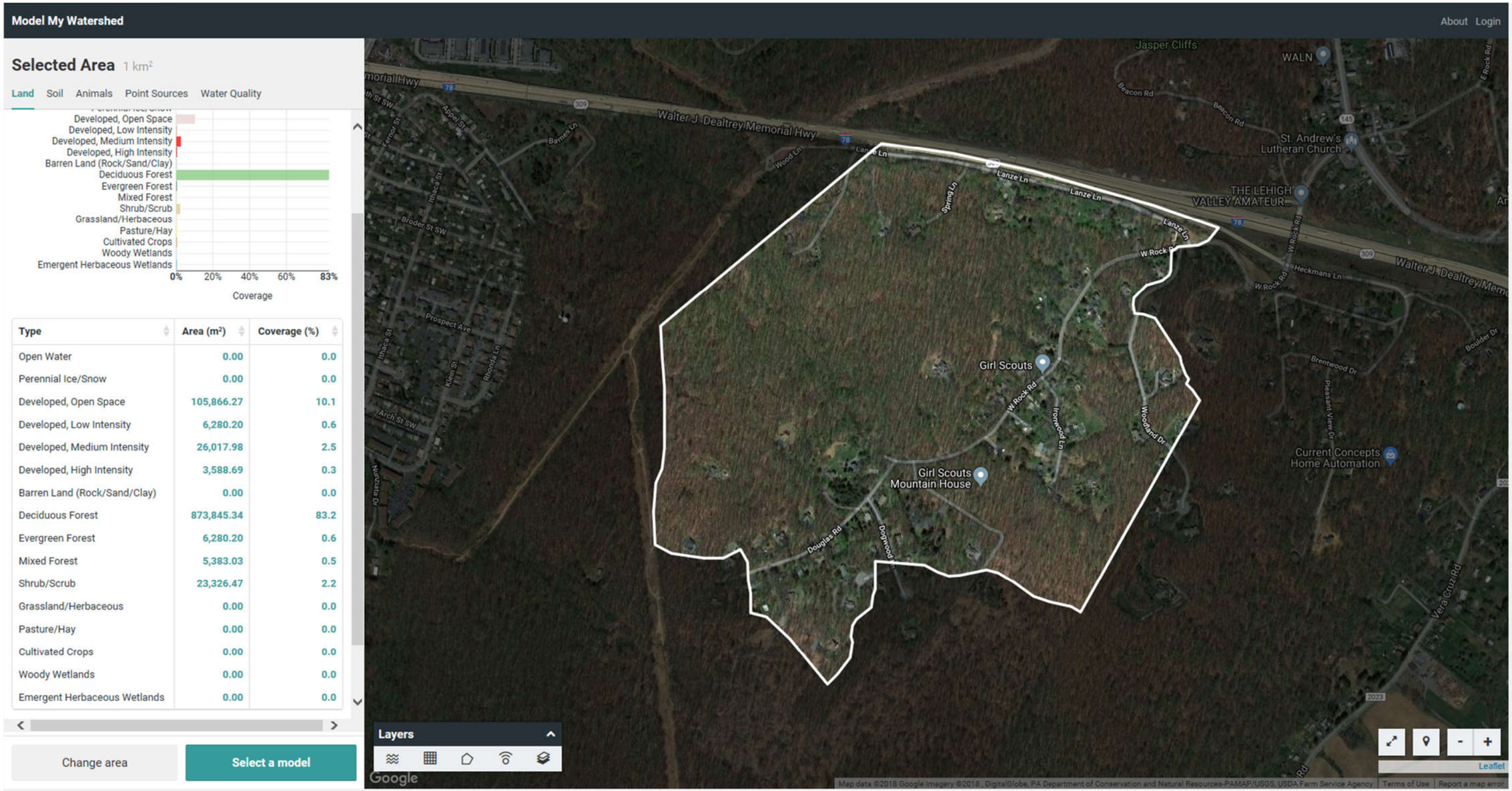
OUTFALL #043E - TROUT CREEK WATERSHED:



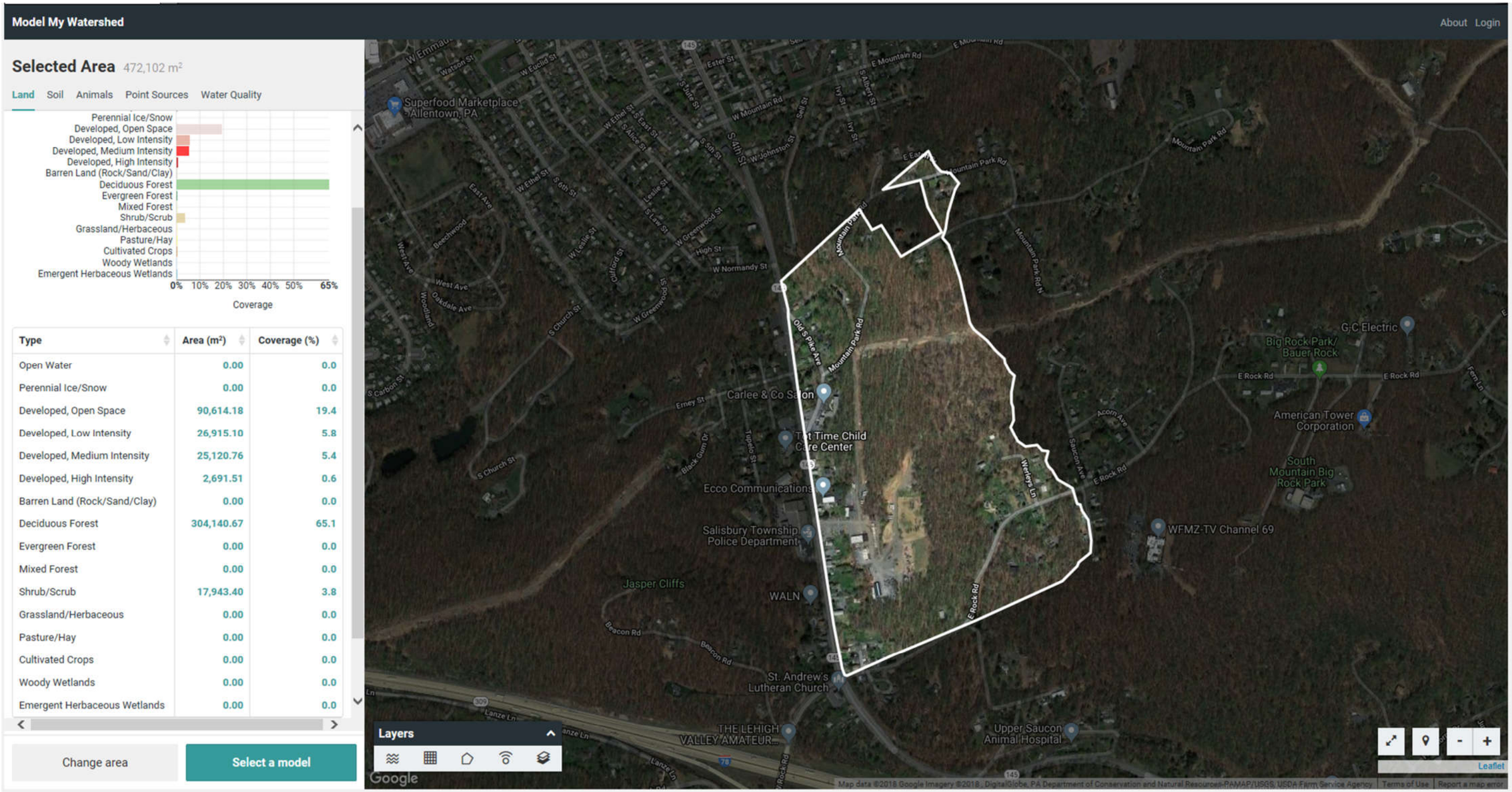
CONTRIBUTING AREA G-1 - TROUT CREEK WATERSHED:



CONTRIBUTING AREA G-2 - TROUT CREEK WATERSHED:



CONTRIBUTING AREA H - TROUT CREEK WATERSHED:



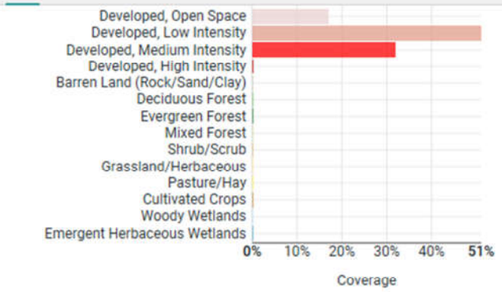
CONTRIBUTING AREA I - TROUT CREEK WATERSHED:

Model My Watershed

About Login

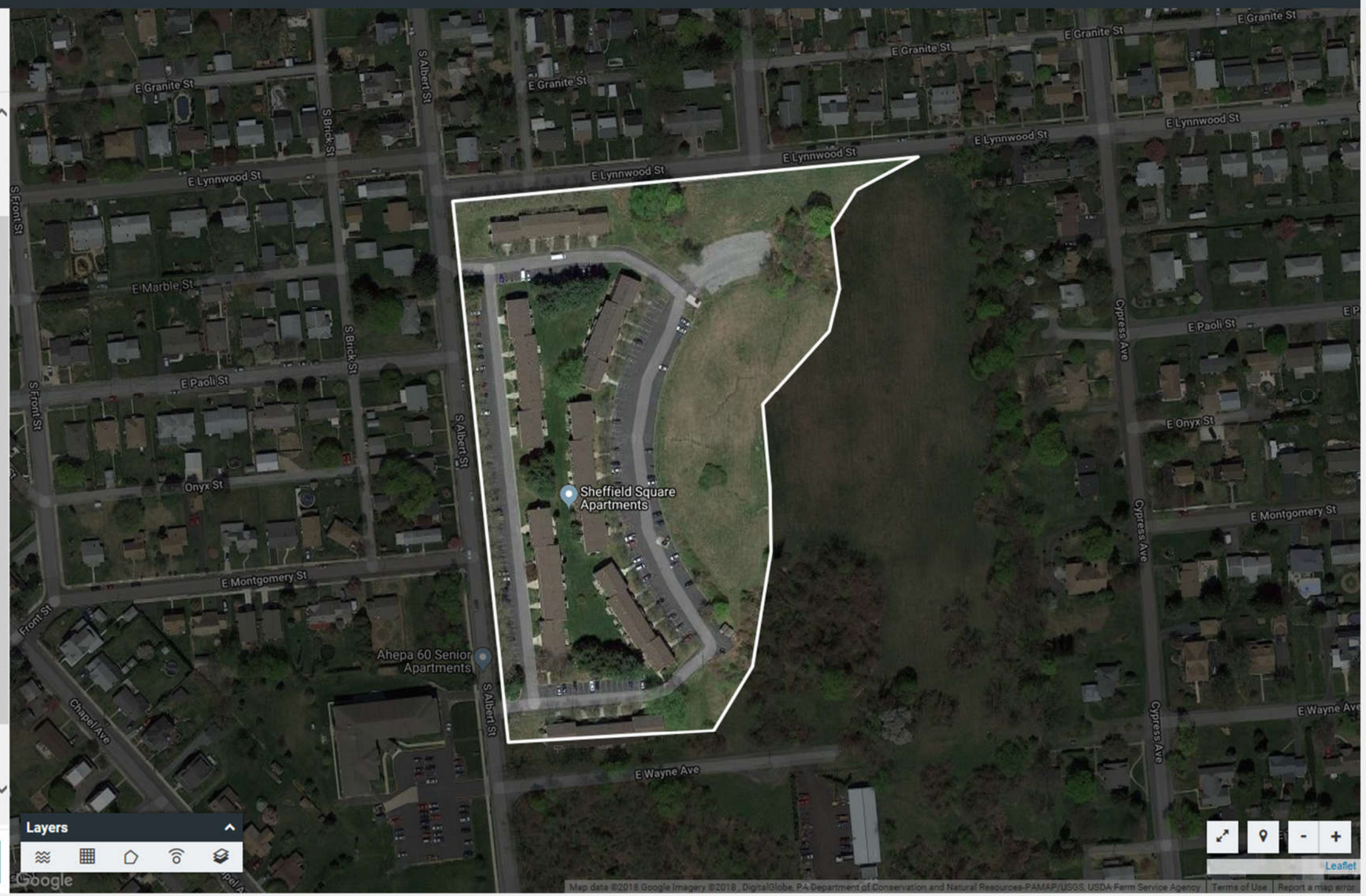
Selected Area 41,046 m²

Land Soil Animals Point Sources Water Quality

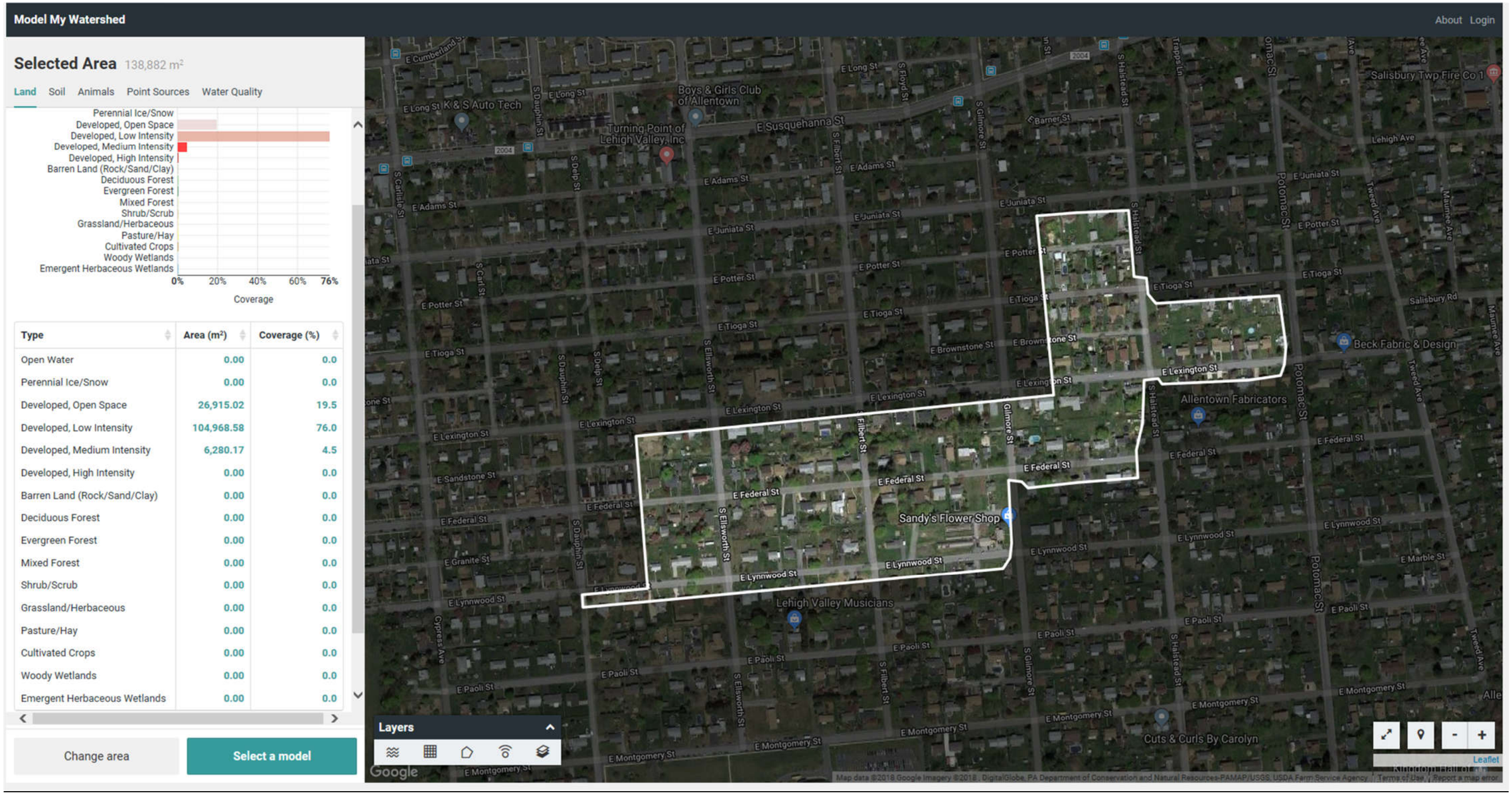


Type	Area (m²)	Coverage (%)
Open Water	0.00	0.0
Perennial Ice/Snow	0.00	0.0
Developed, Open Space	7,177.34	17.0
Developed, Low Intensity	21,532.03	51.1
Developed, Medium Intensity	13,457.52	31.9
Developed, High Intensity	0.00	0.0
Barren Land (Rock/Sand/Clay)	0.00	0.0
Deciduous Forest	0.00	0.0
Evergreen Forest	0.00	0.0
Mixed Forest	0.00	0.0
Shrub/Scrub	0.00	0.0
Grassland/Herbaceous	0.00	0.0
Pasture/Hay	0.00	0.0
Cultivated Crops	0.00	0.0
Woody Wetlands	0.00	0.0
Emergent Herbaceous Wetlands	0.00	0.0

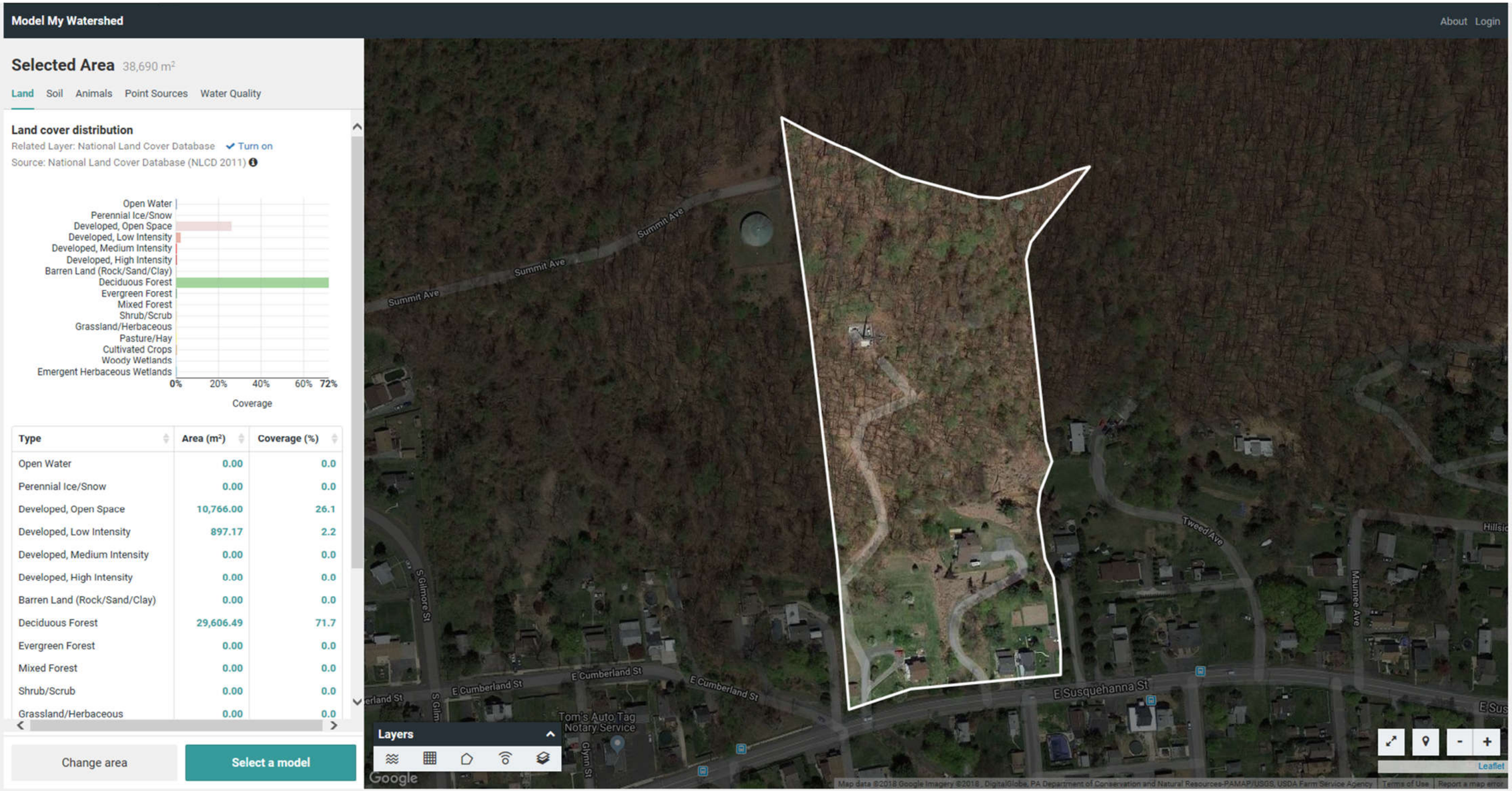
Change area | Select a model



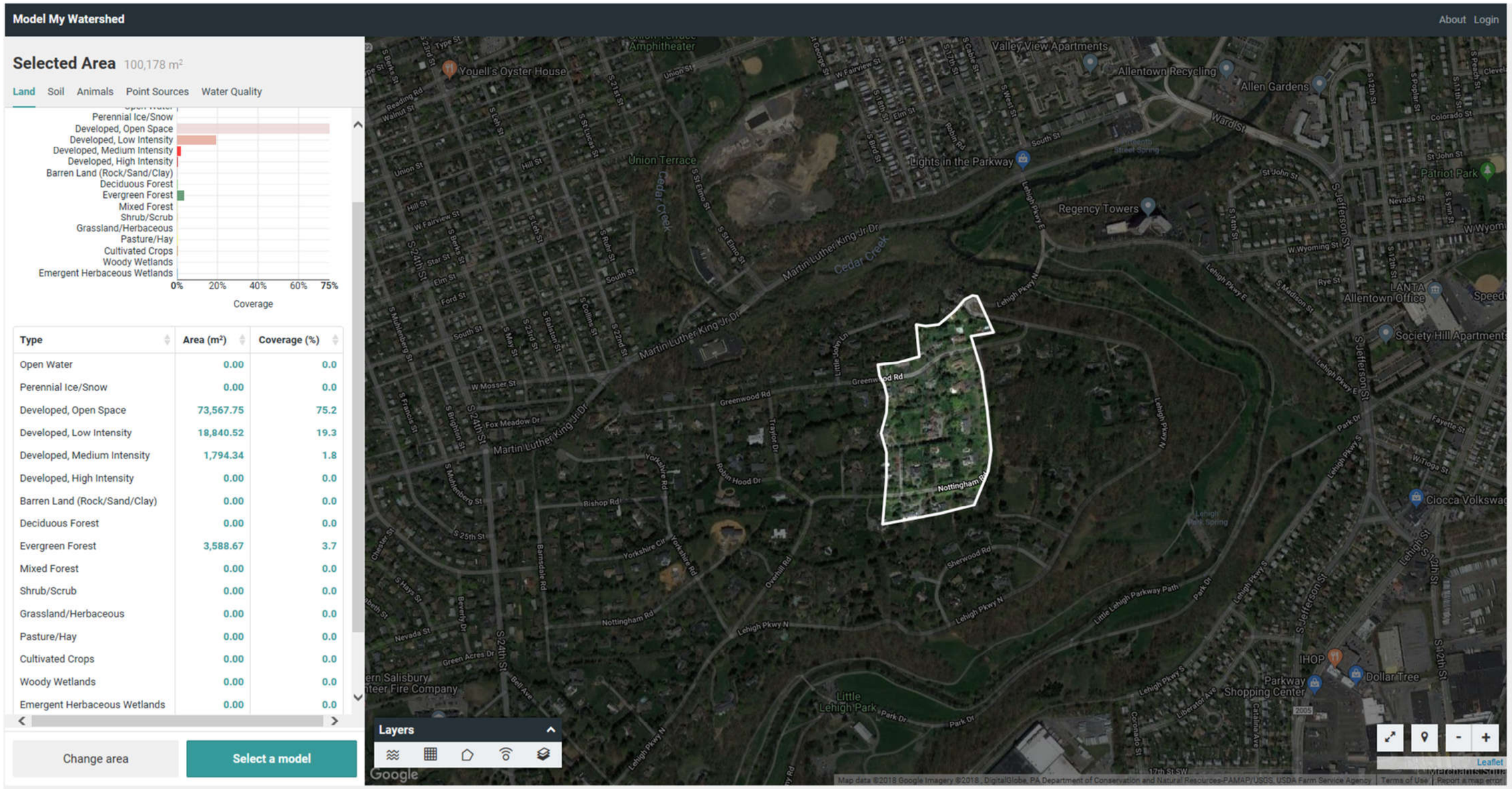
CONTRIBUTING AREA J - TROUT CREEK WATERSHED:



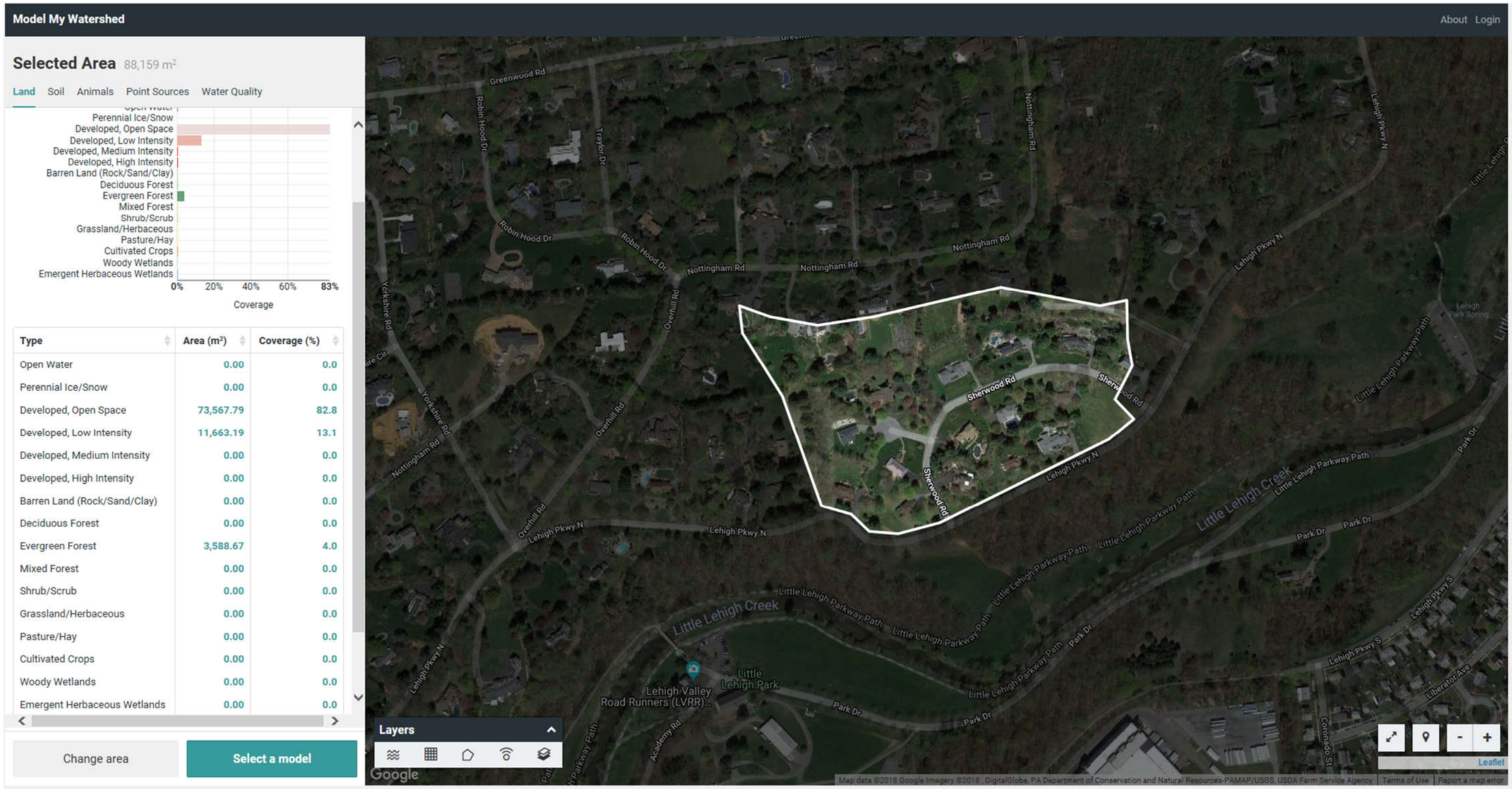
CONTRIBUTING AREA K - TROUT CREEK WATERSHED:



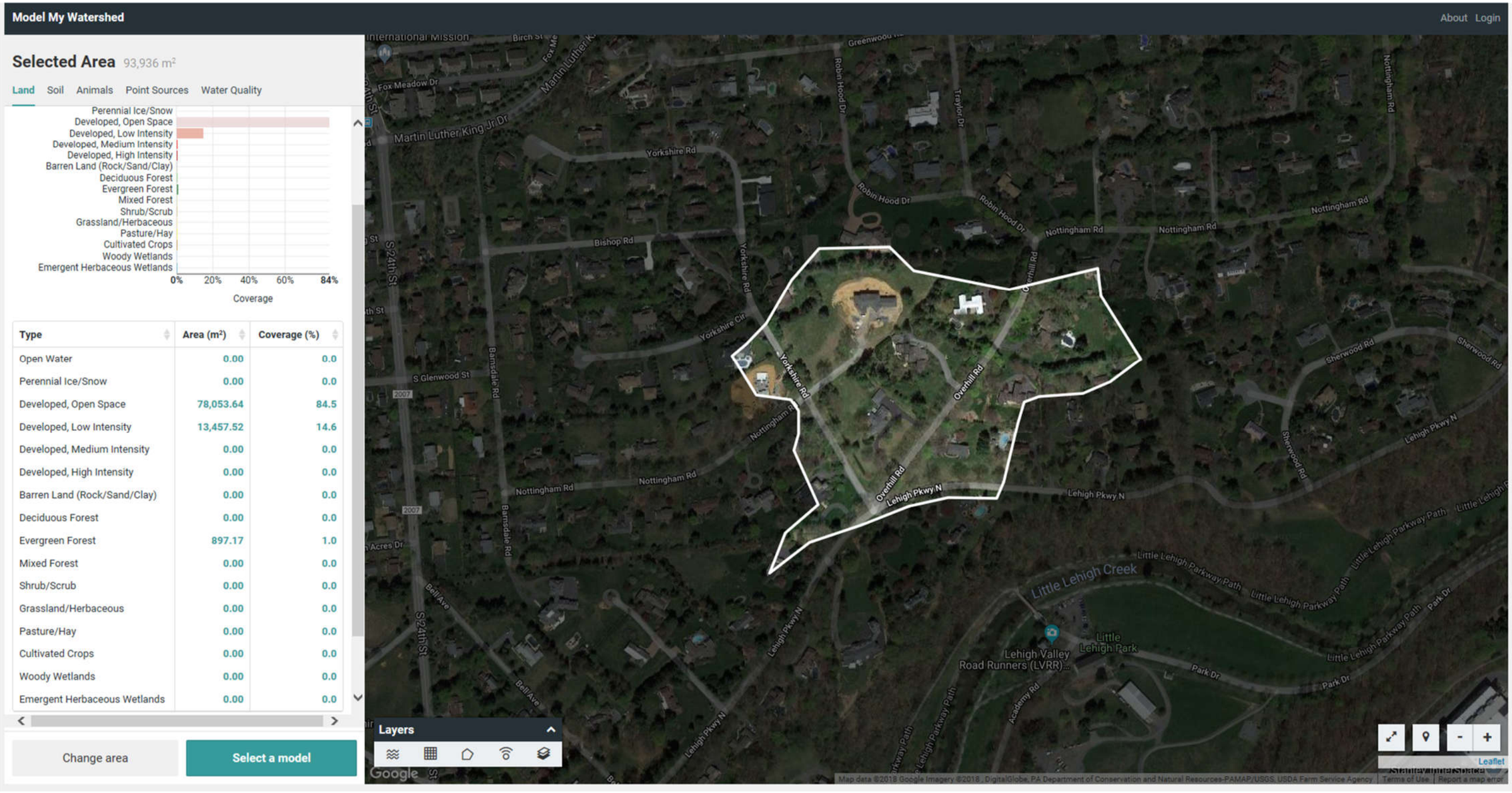
OBSERVATION POINT # 051 – LITTLE LEHIGH CREEK WATERSHED:



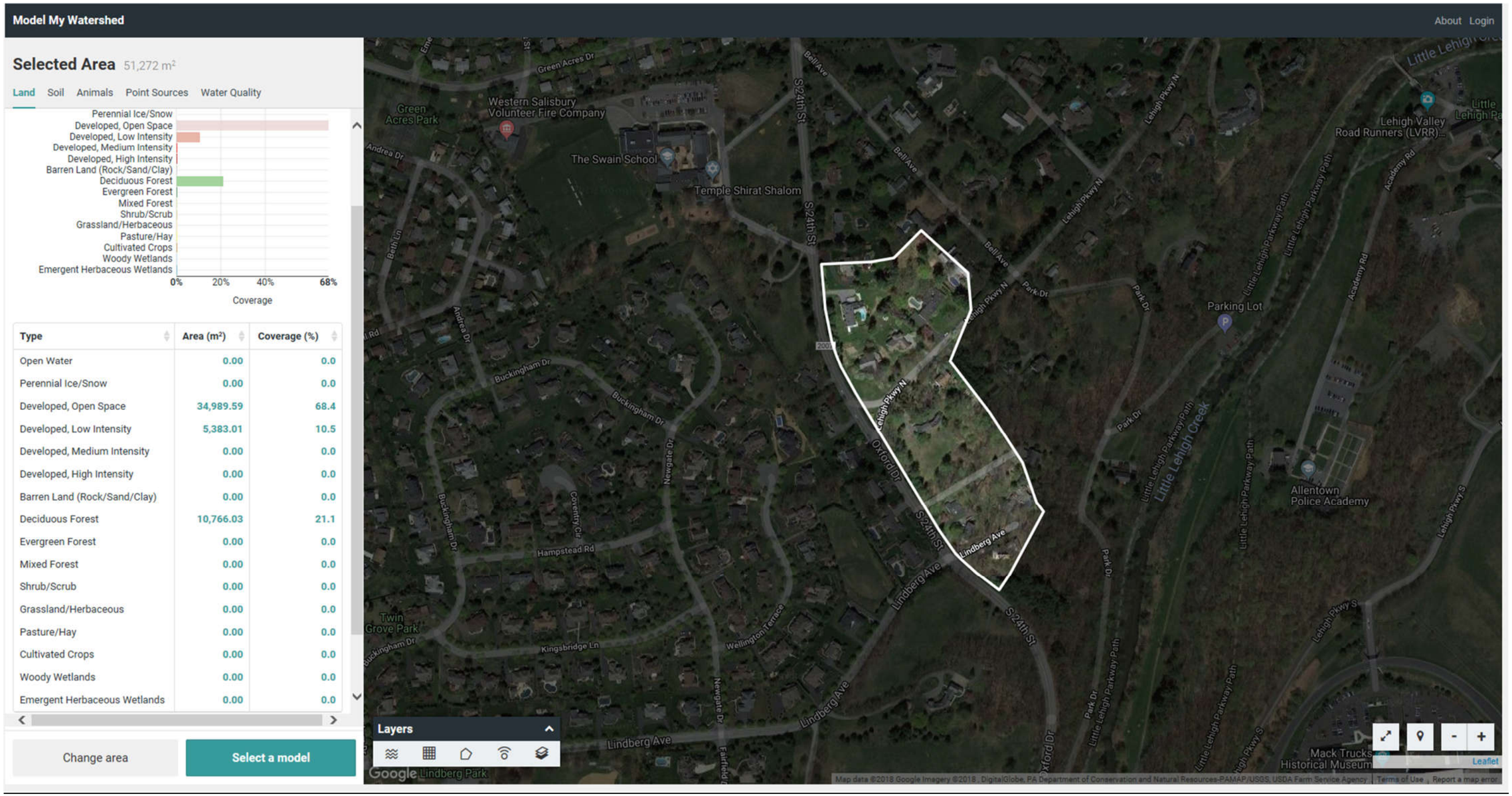
OBSERVATION POINT # 052 – LITTLE LEHIGH CREEK WATERSHED:



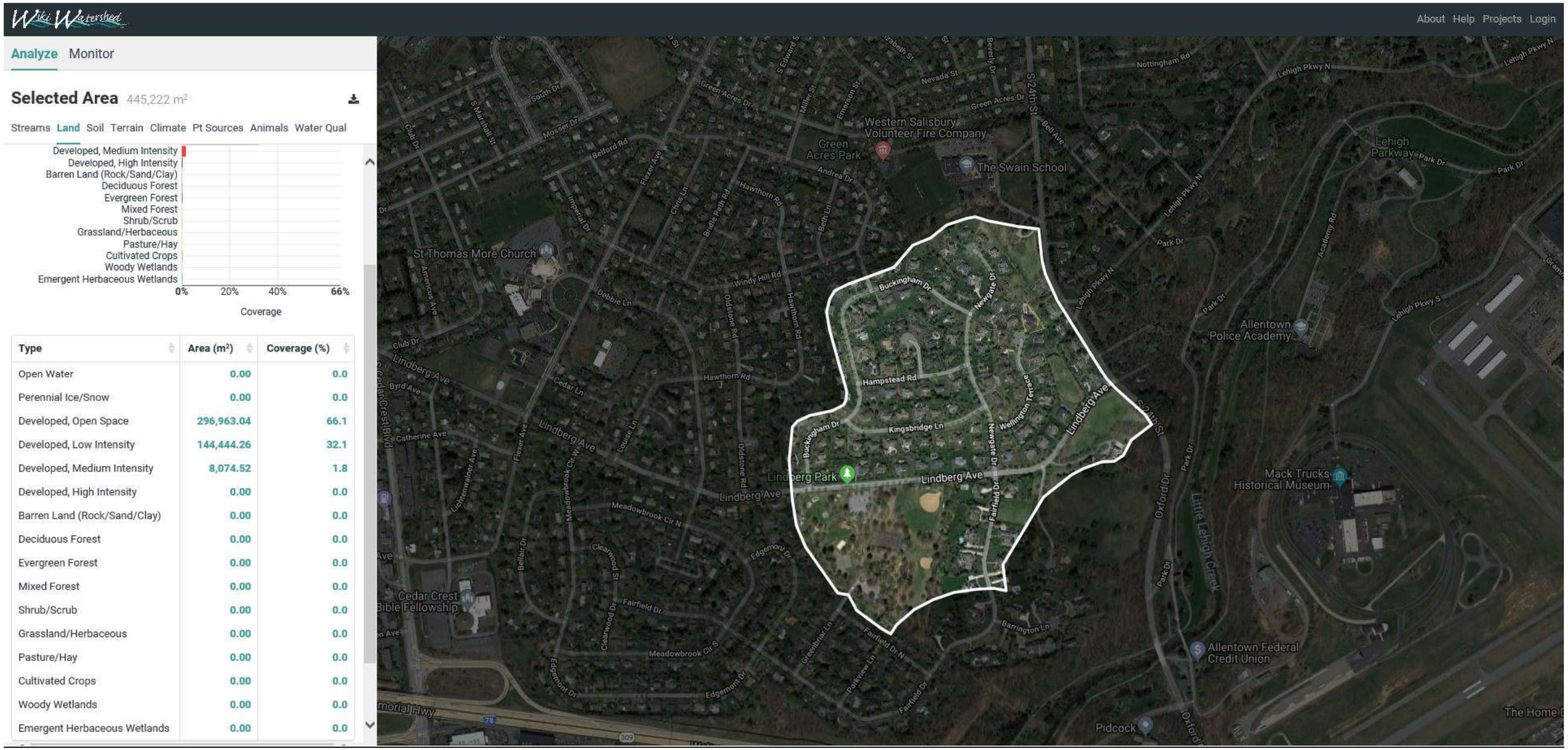
OBSERVATION POINT # 053 – LITTLE LEHIGH CREEK WATERSHED:



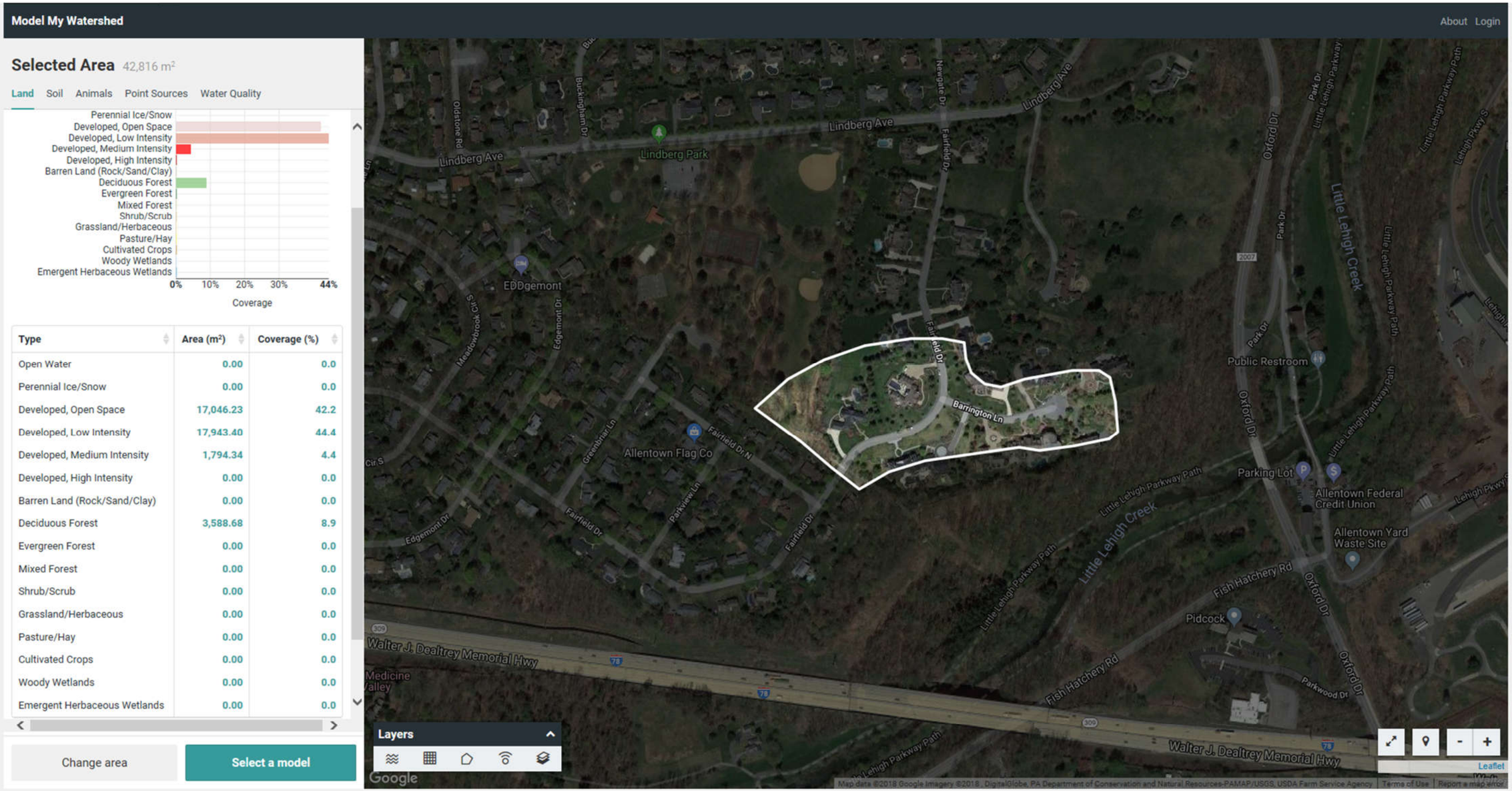
OBSERVATION POINT # 054A – LITTLE LEHIGH CREEK WATERSHED:



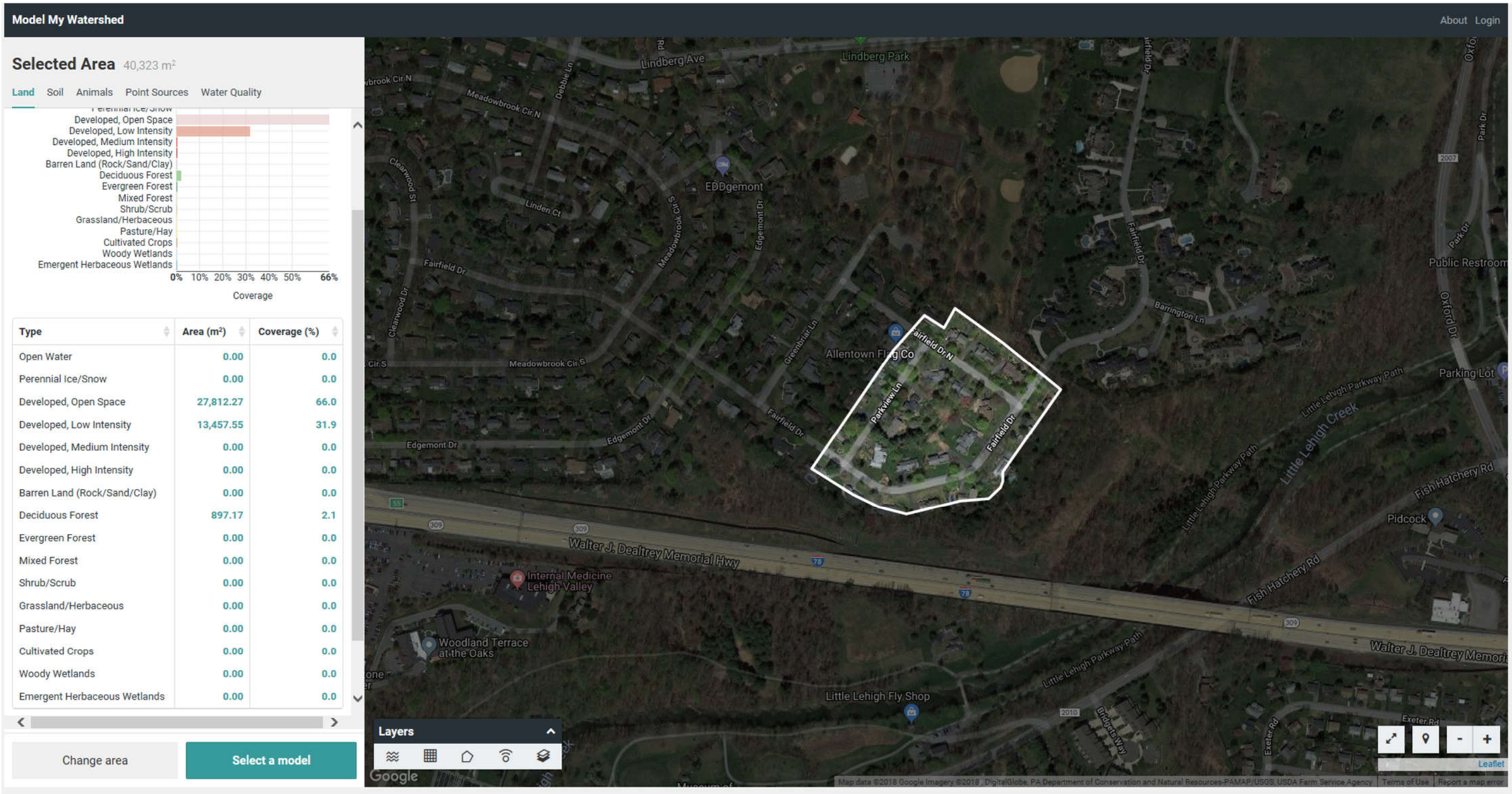
OBSERVATION POINT # 054B – LITTLE LEHIGH CREEK WATERSHED:



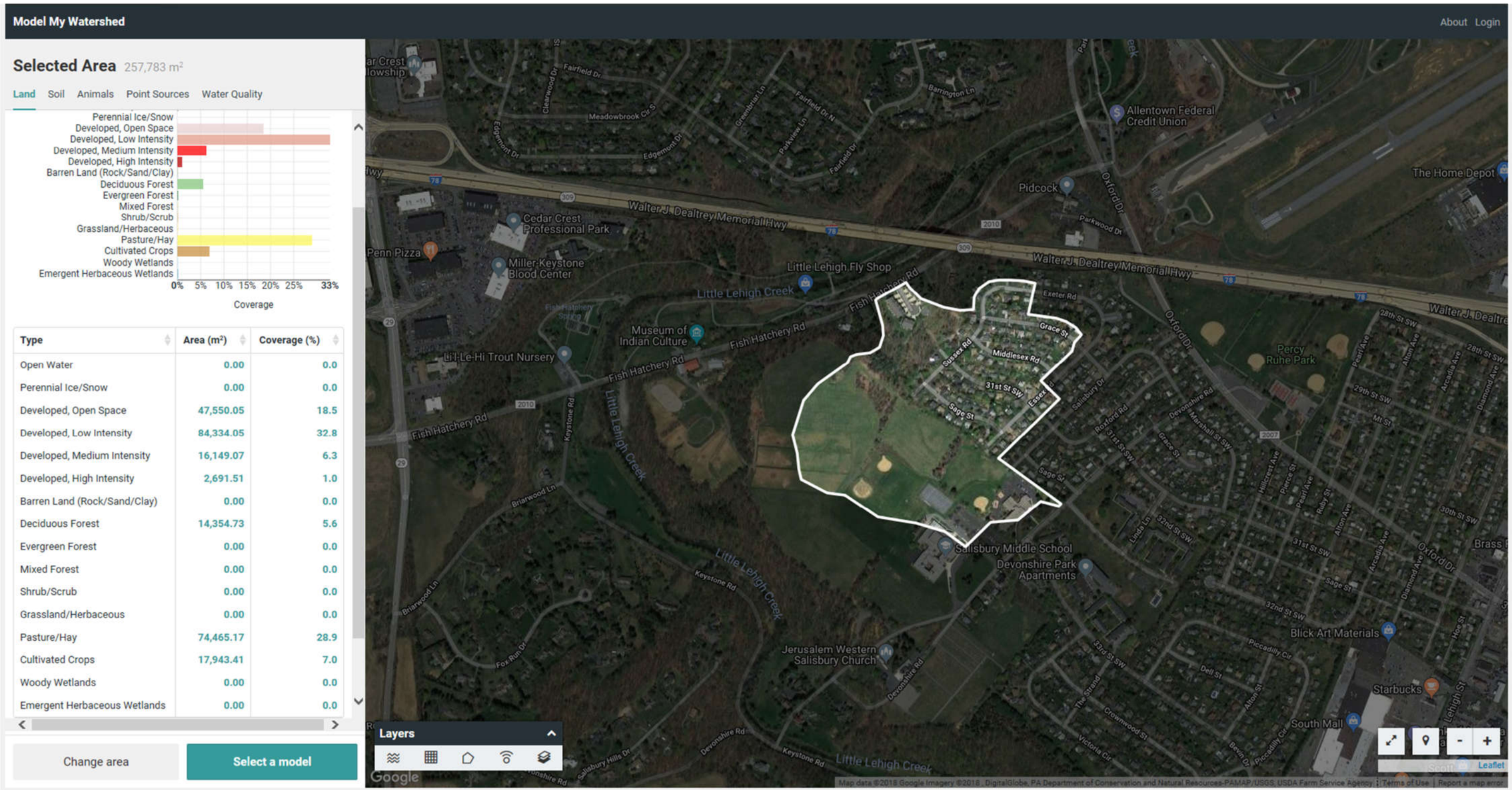
OBSERVATION POINT # 055 – LITTLE LEHIGH CREEK WATERSHED:



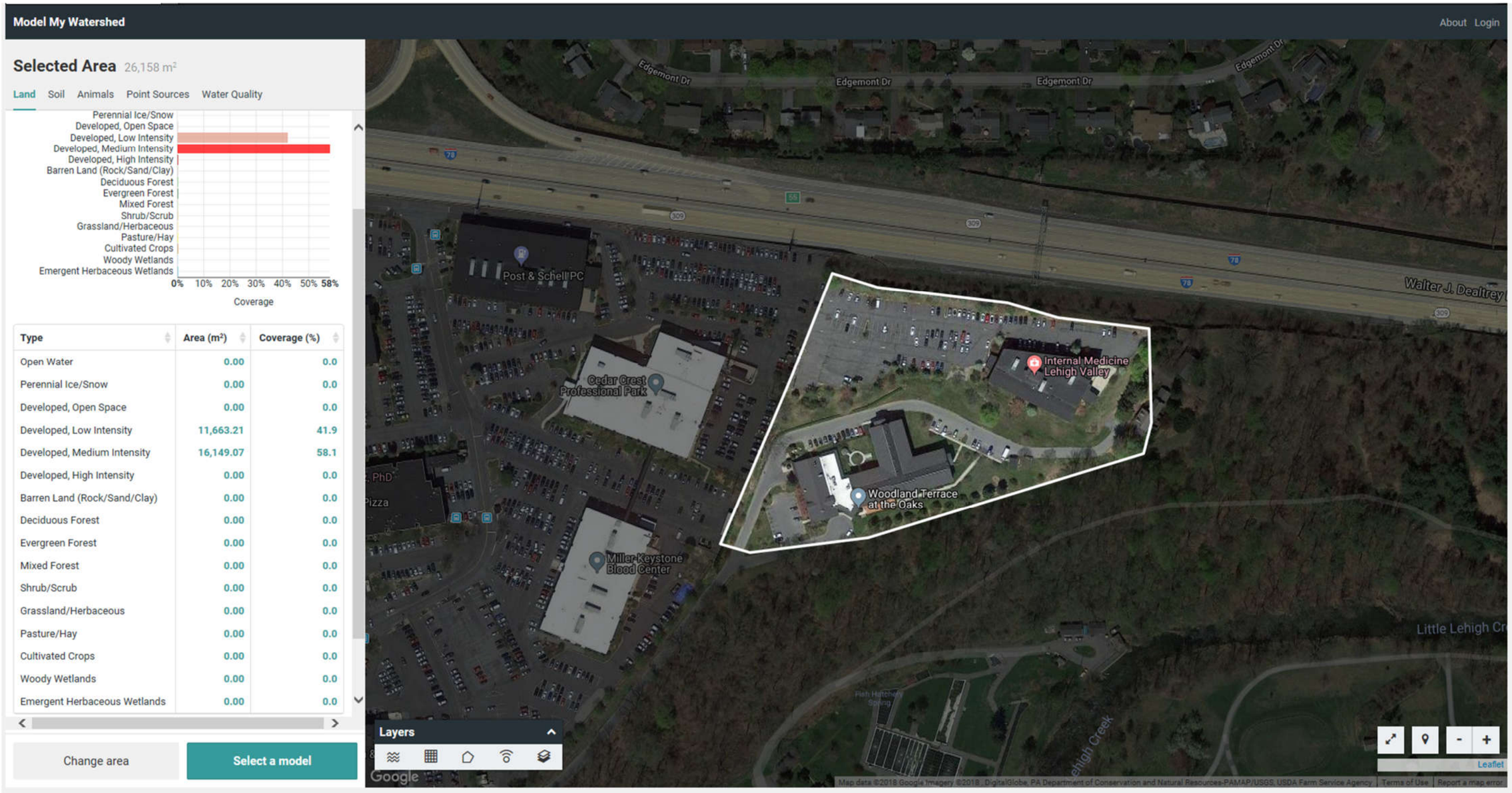
OBSERVATION POINT # 056 – LITTLE LEHIGH CREEK WATERSHED:



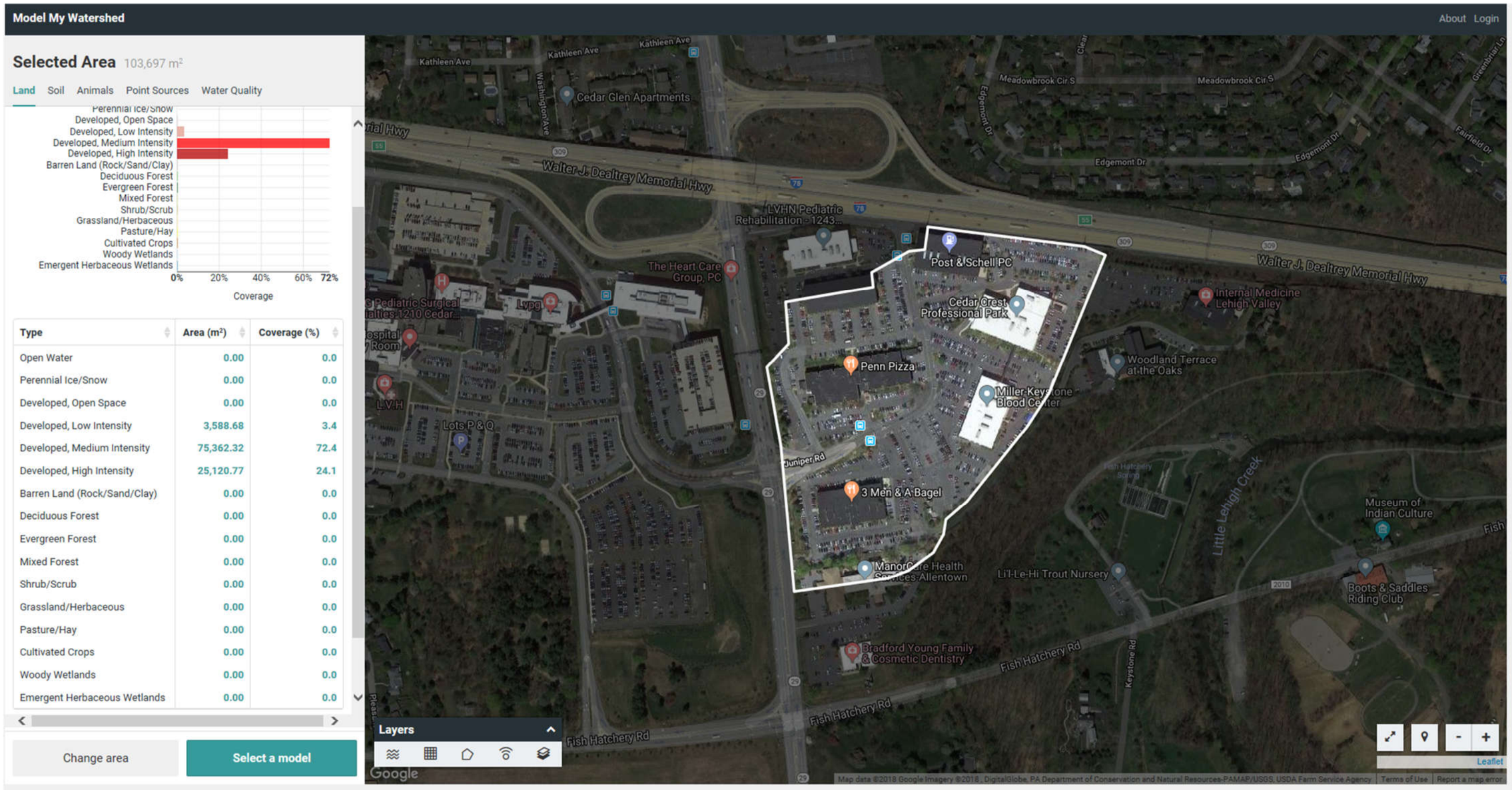
OBSERVATION POINT # 057 – LITTLE LEHIGH CREEK WATERSHED:



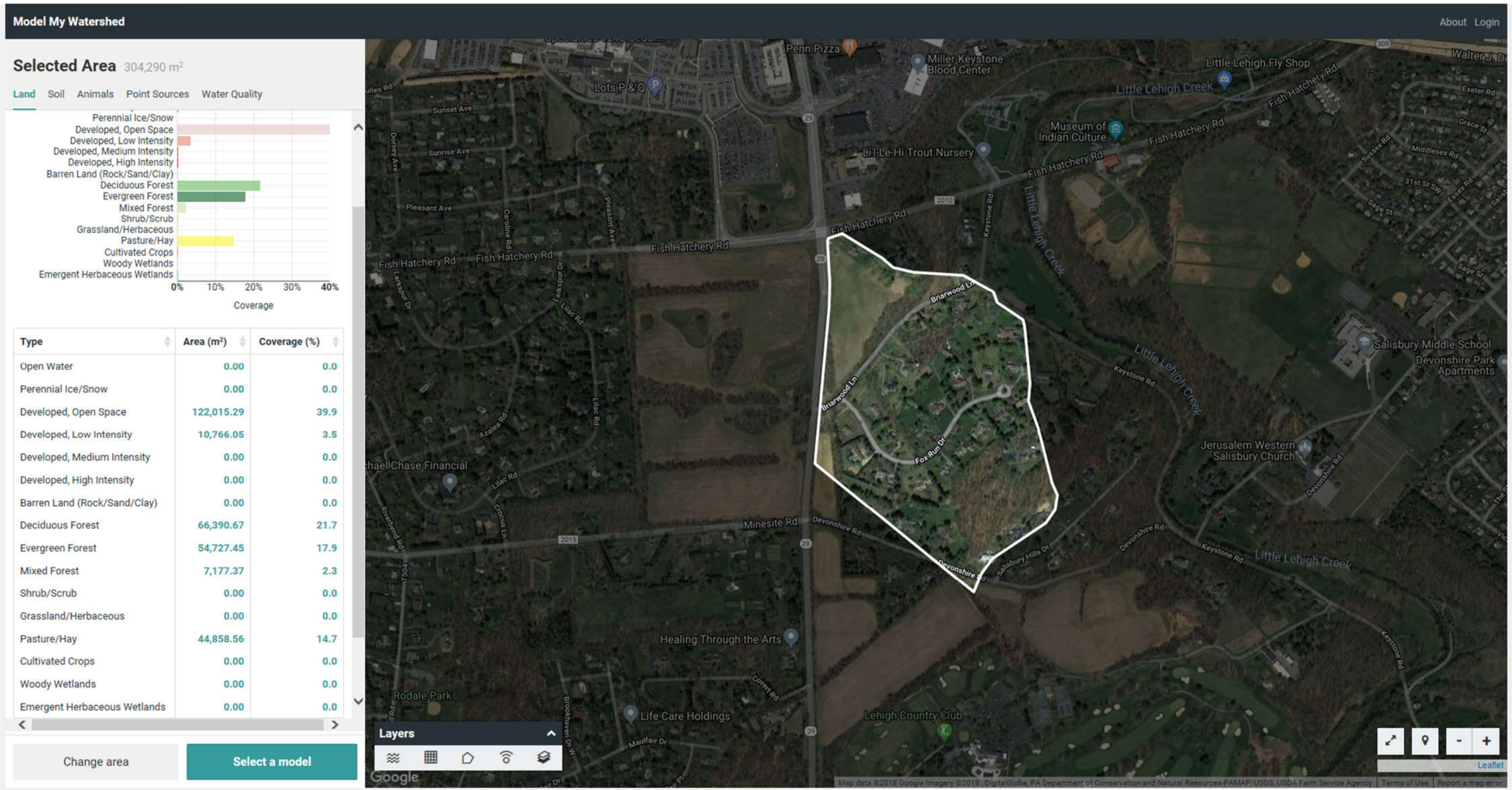
OBSERVATION POINT # 058 – LITTLE LEHIGH CREEK WATERSHED:



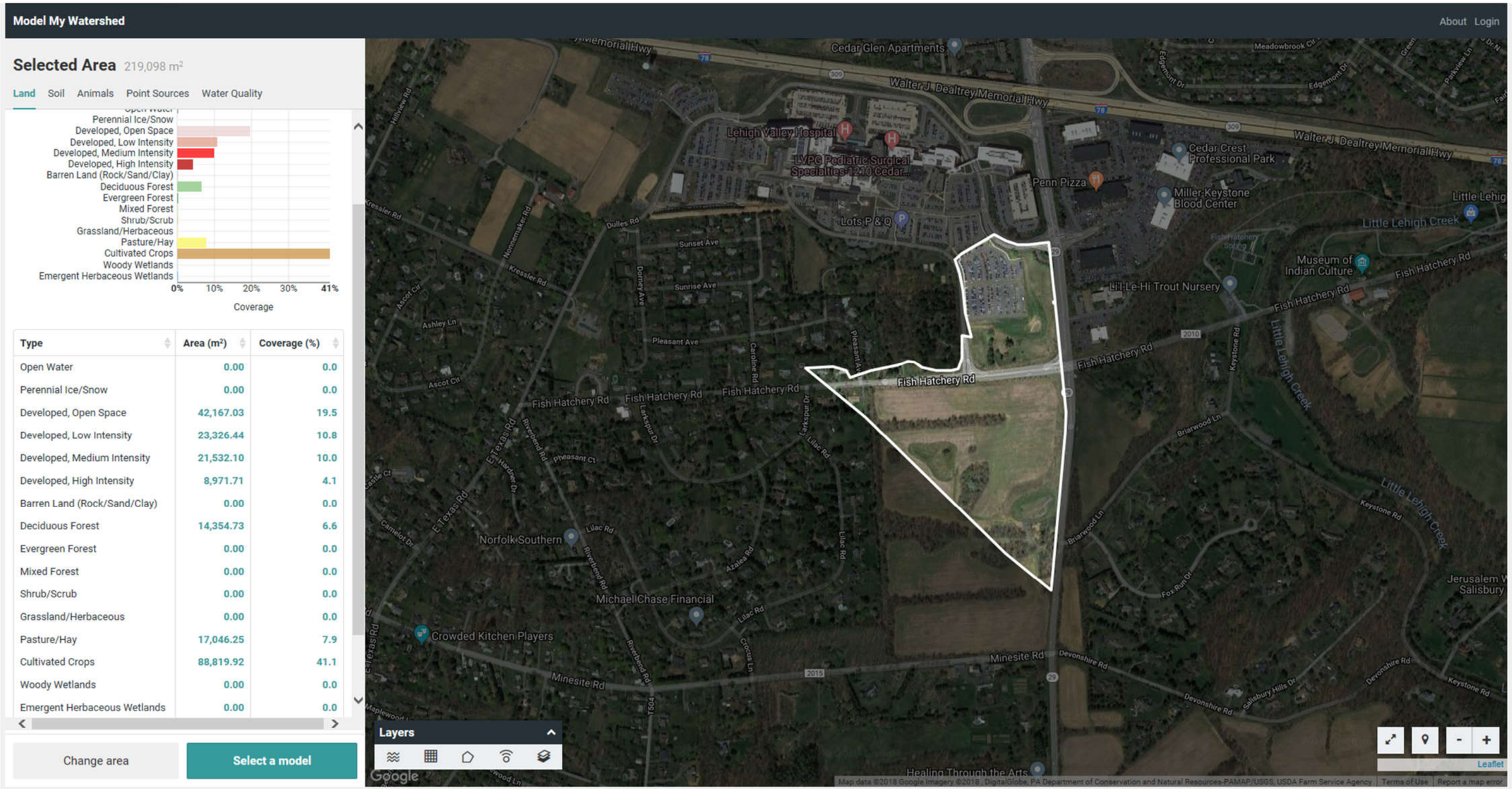
OBSERVATION POINT # 059 – LITTLE LEHIGH CREEK WATERSHED:



OBSERVATION POINT # 060A – LITTLE LEHIGH CREEK WATERSHED:

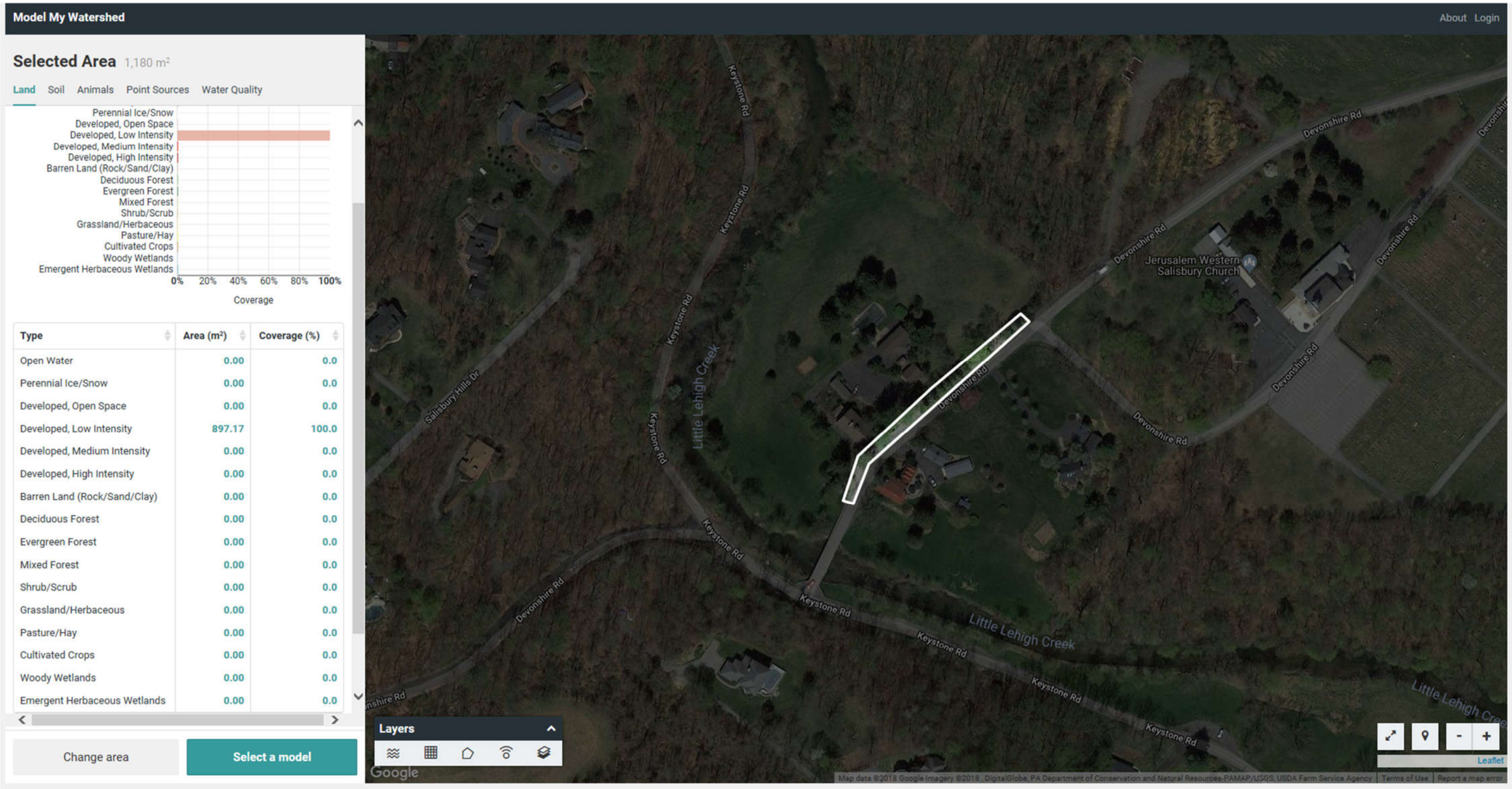


OBSERVATION POINT # 060B – LITTLE LEHIGH CREEK WATERSHED:

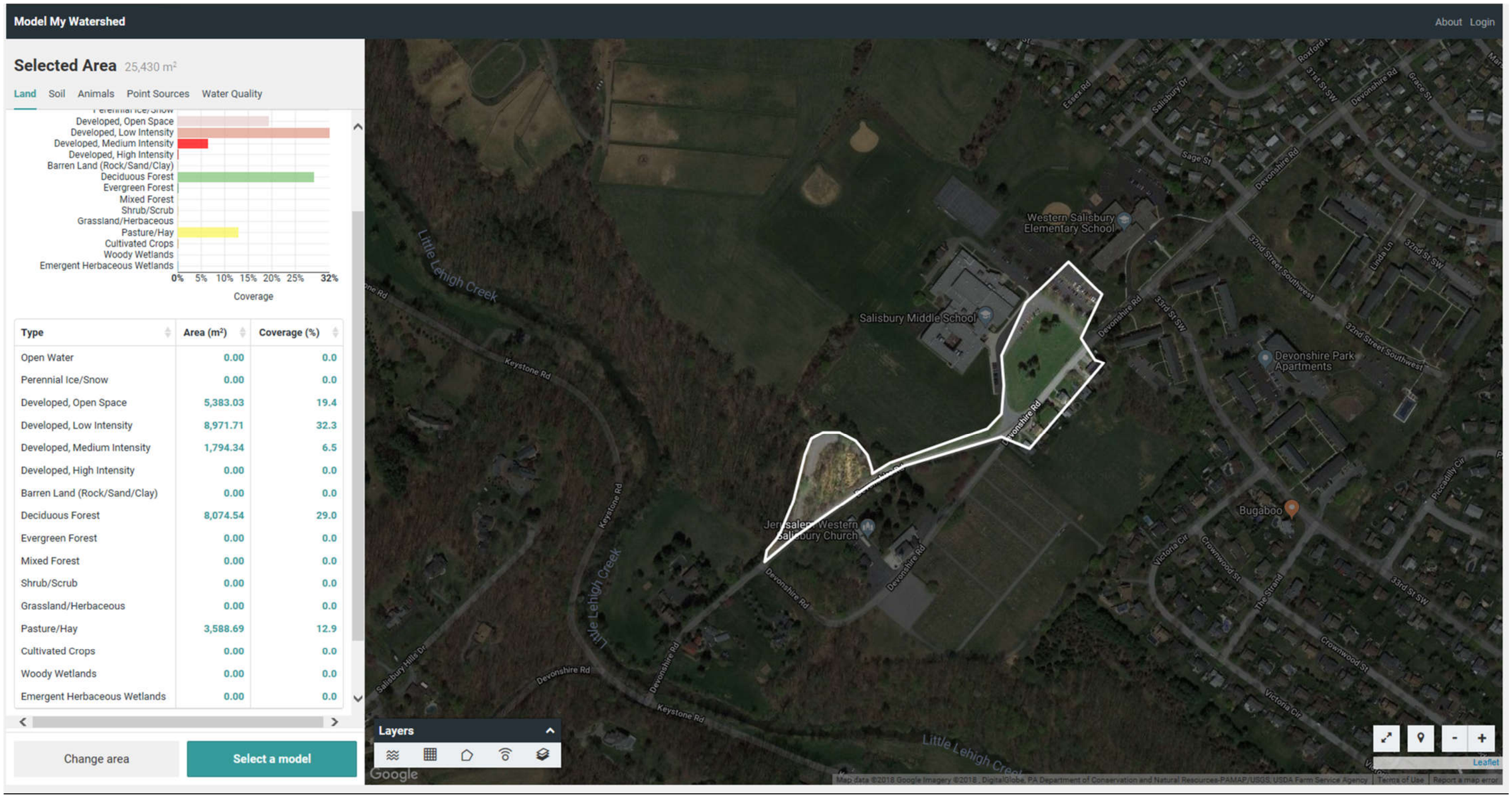


OBSERVATION POINT # 061 – LITTLE LEHIGH CREEK WATERSHED:

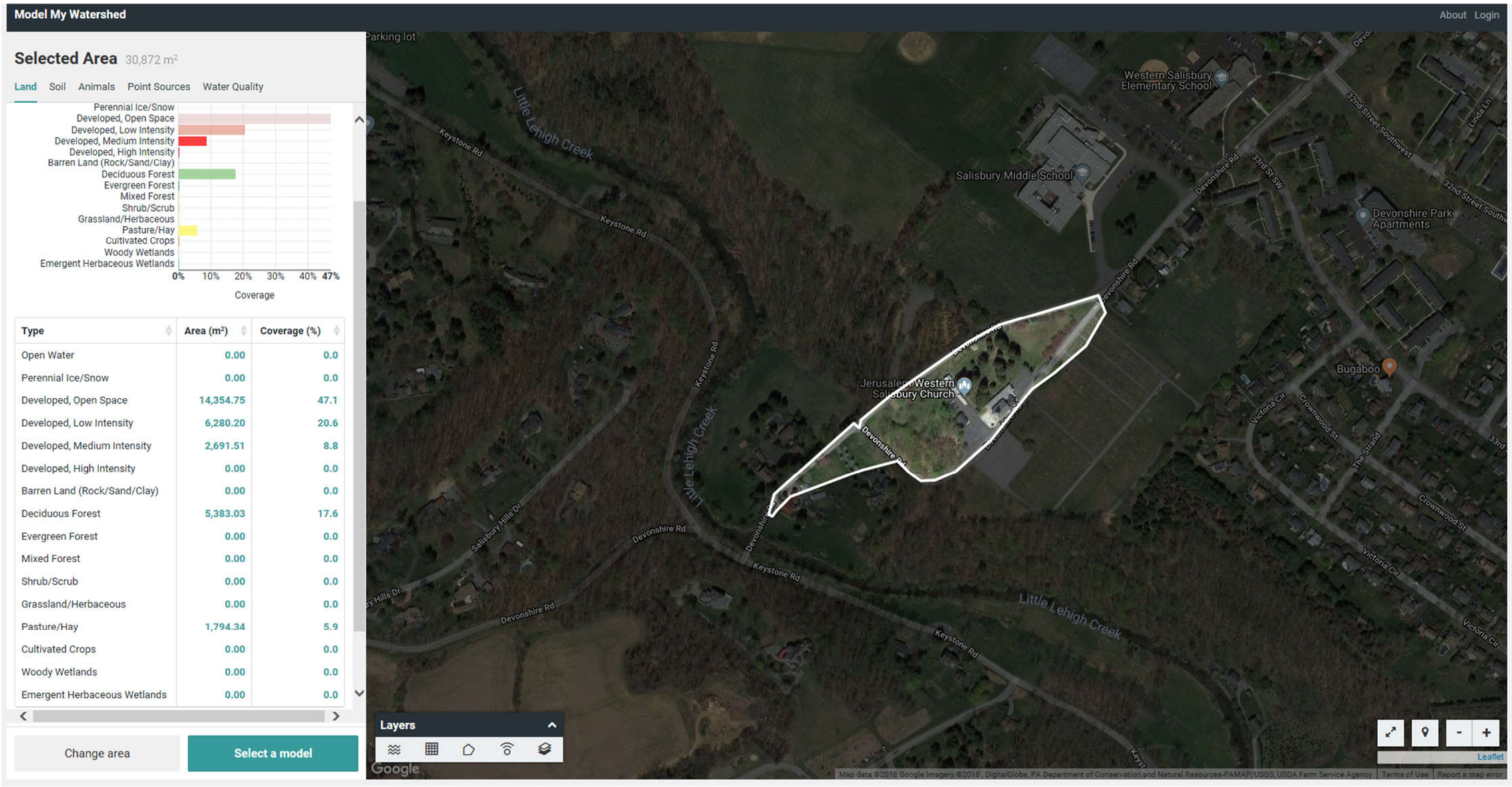
OBSERVATION POINT # 062A – LITTLE LEHIGH CREEK WATERSHED:



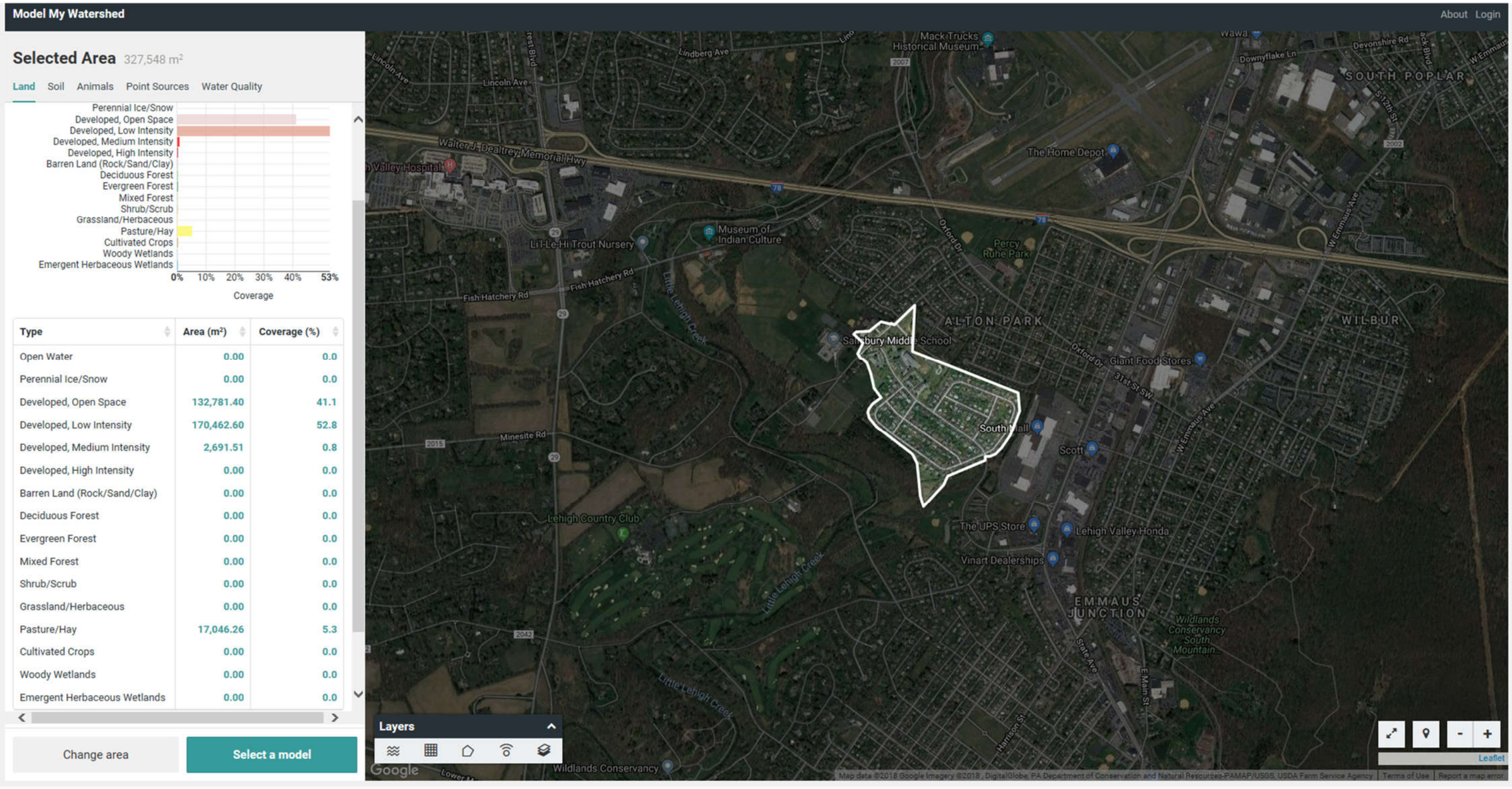
OBSERVATION POINT # 062B – LITTLE LEHIGH CREEK WATERSHED:



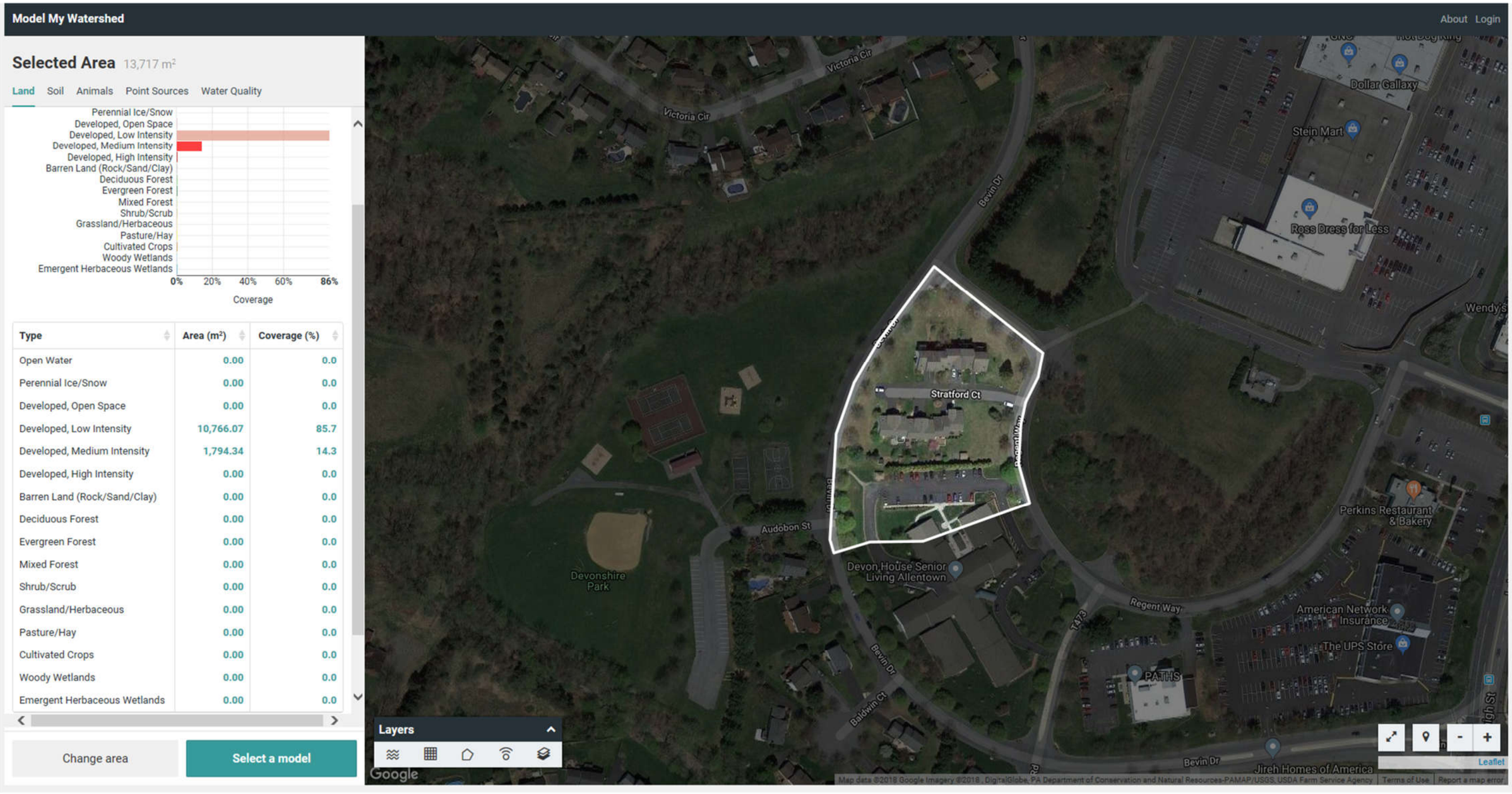
OBSERVATION POINT # 063 – LITTLE LEHIGH CREEK WATERSHED:



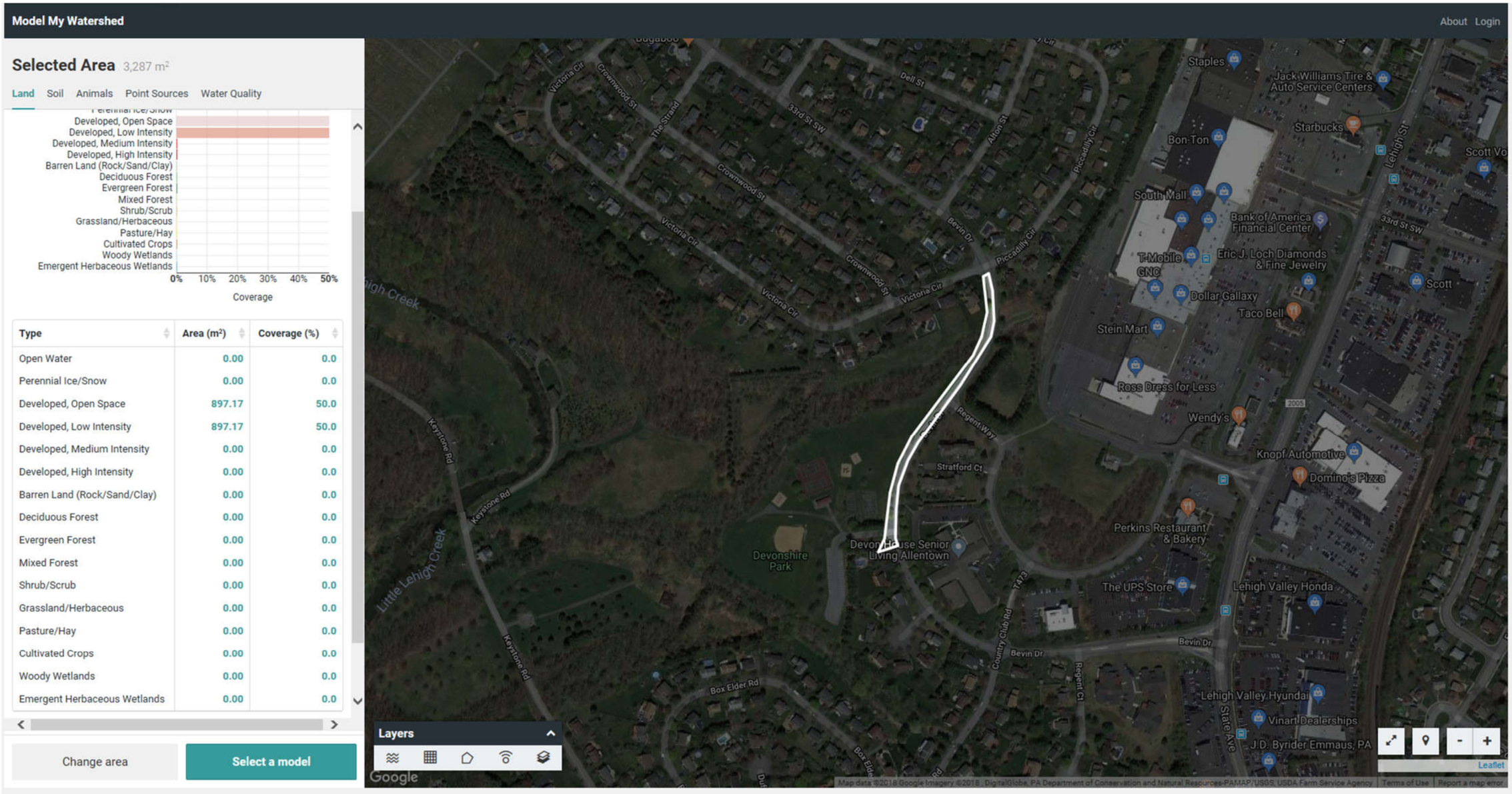
OUTFALL # 064 – LITTLE LEHIGH CREEK WATERSHED:



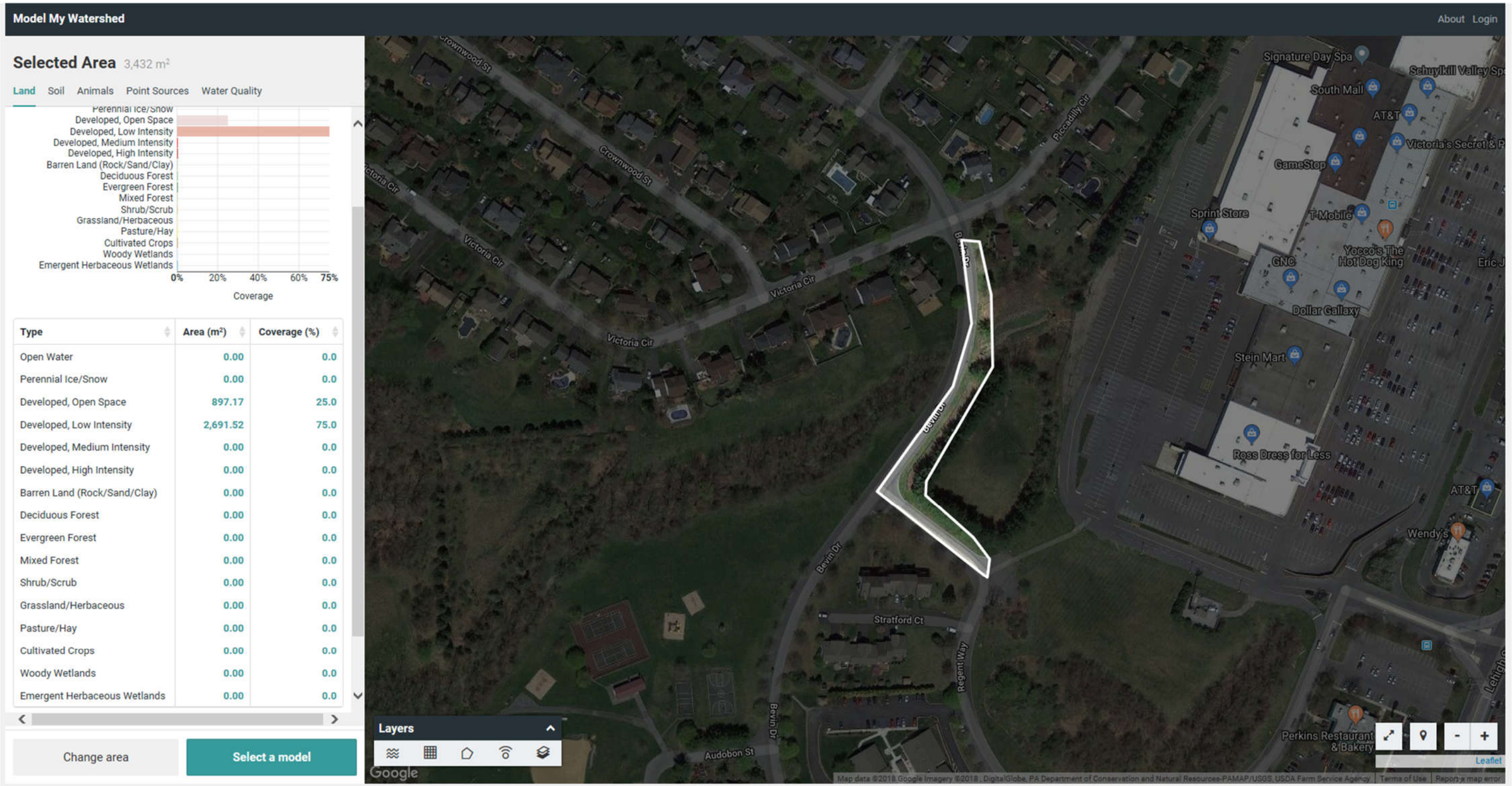
OUTFALL # 065 – LITTLE LEHIGH CREEK WATERSHED:



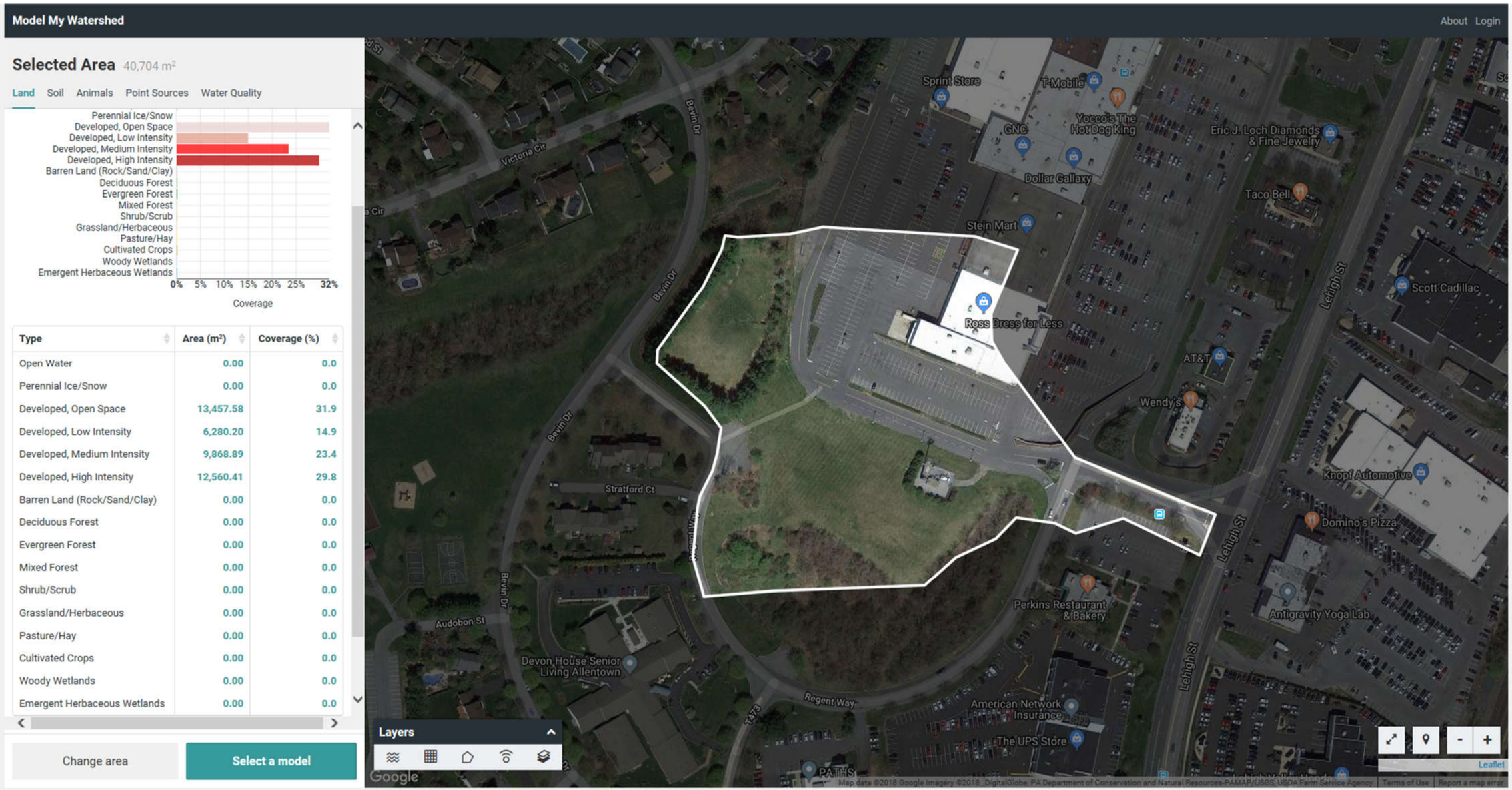
OUTFALL # 066 – LITTLE LEHIGH CREEK WATERSHED:



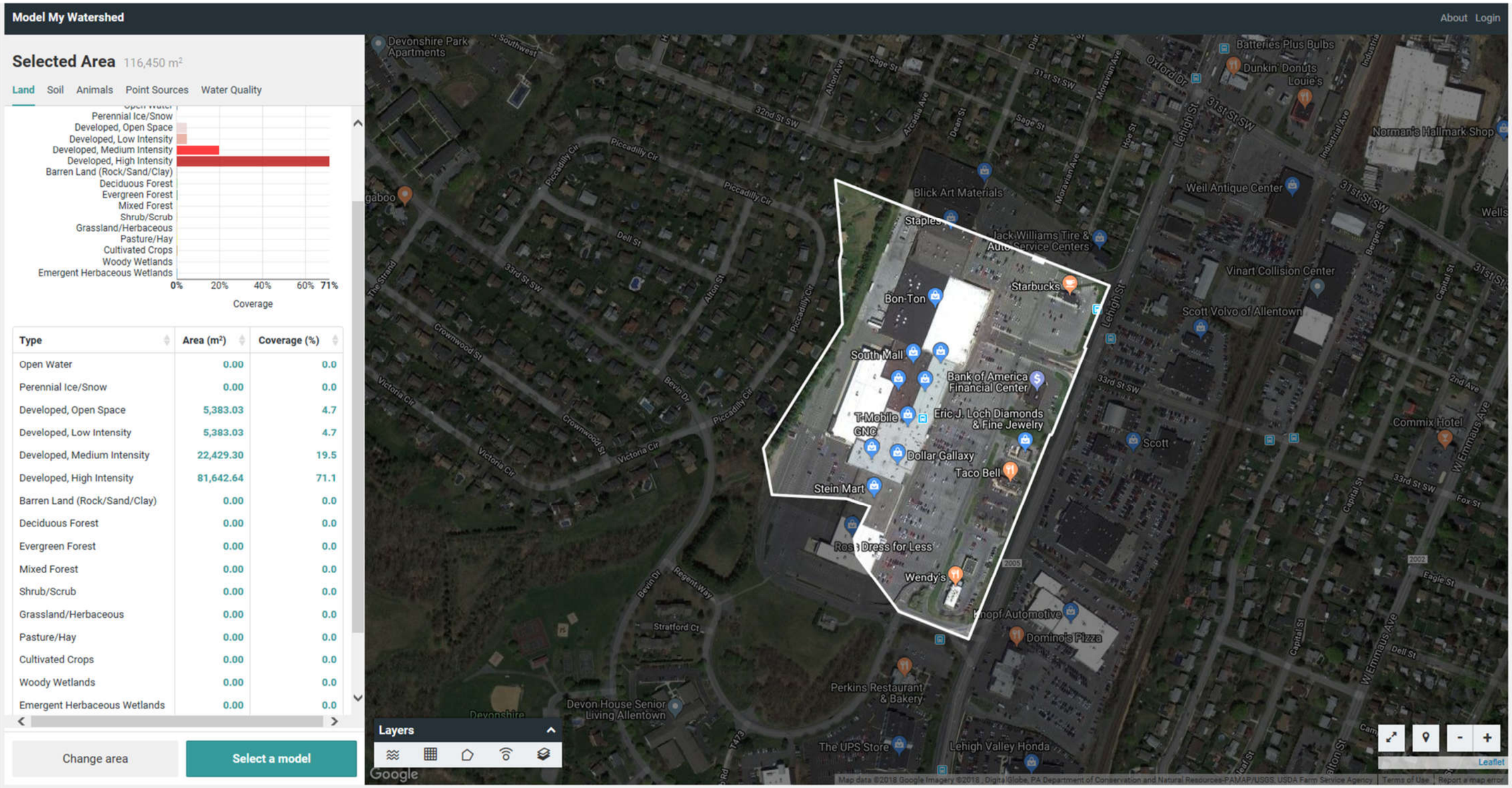
OUTFALL # 067 – LITTLE LEHIGH CREEK WATERSHED:



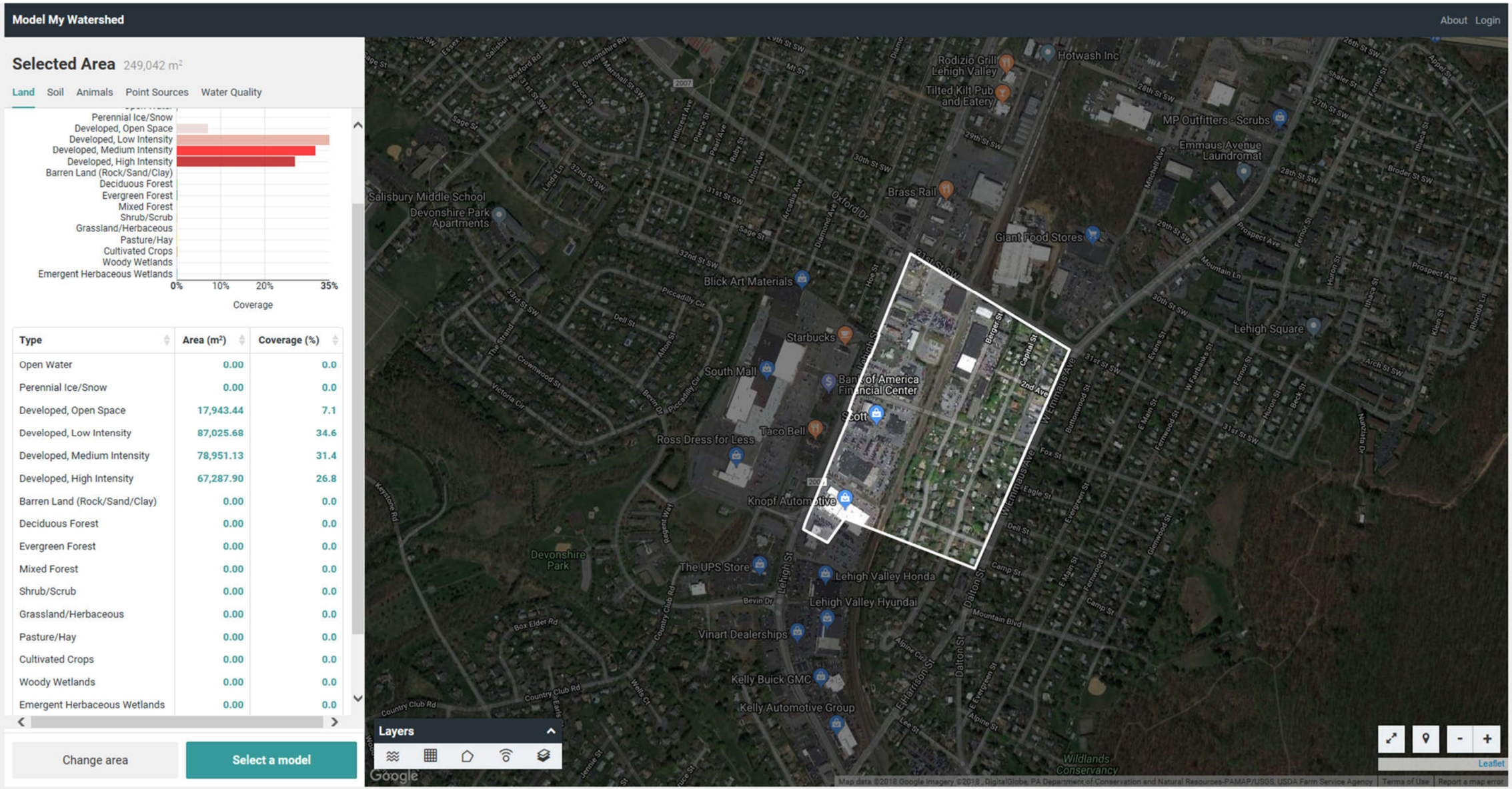
OUTFALL # 068 – LITTLE LEHIGH CREEK WATERSHED:



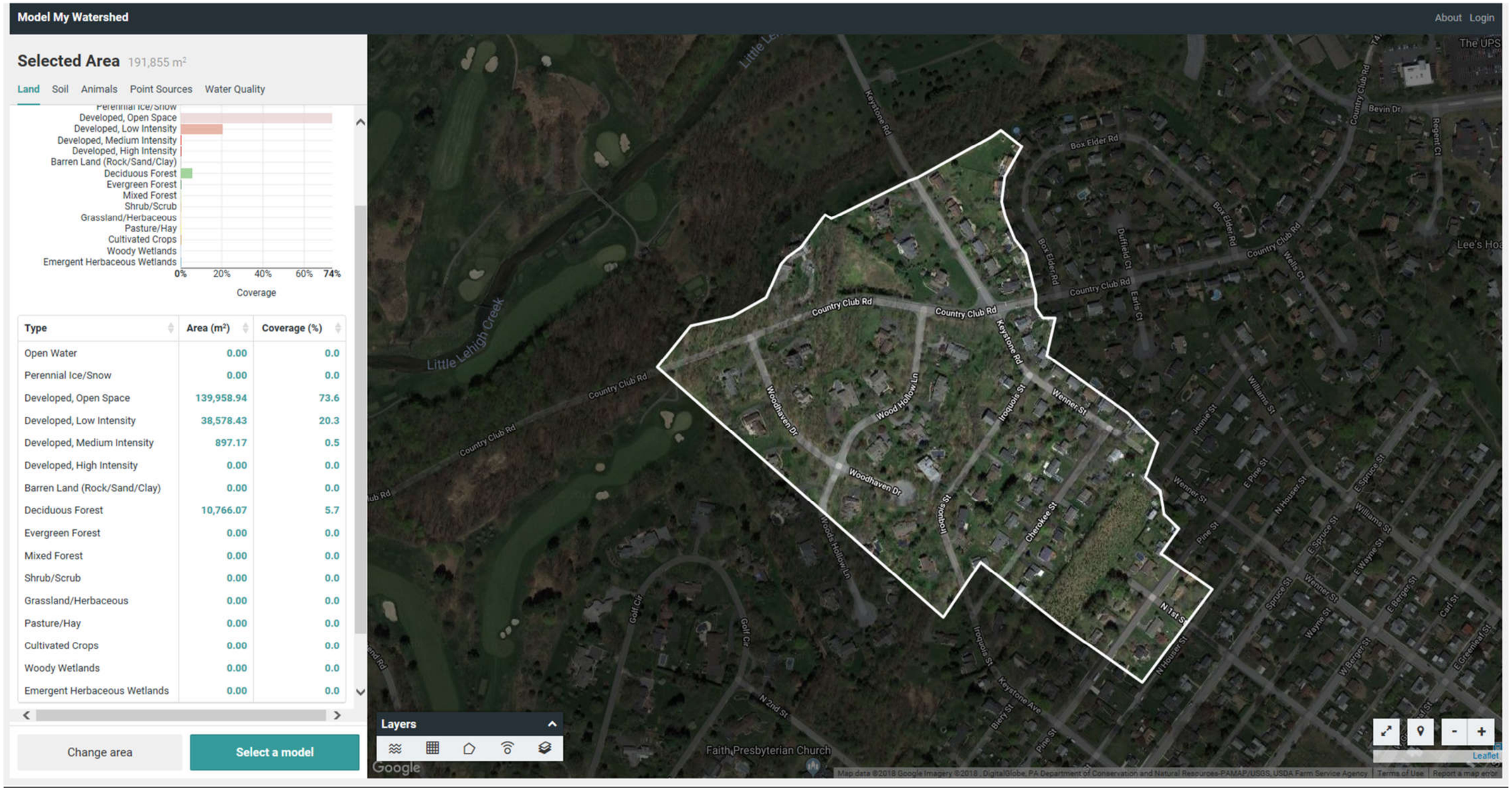
OUTFALL # 069A – LITTLE LEHIGH CREEK WATERSHED:



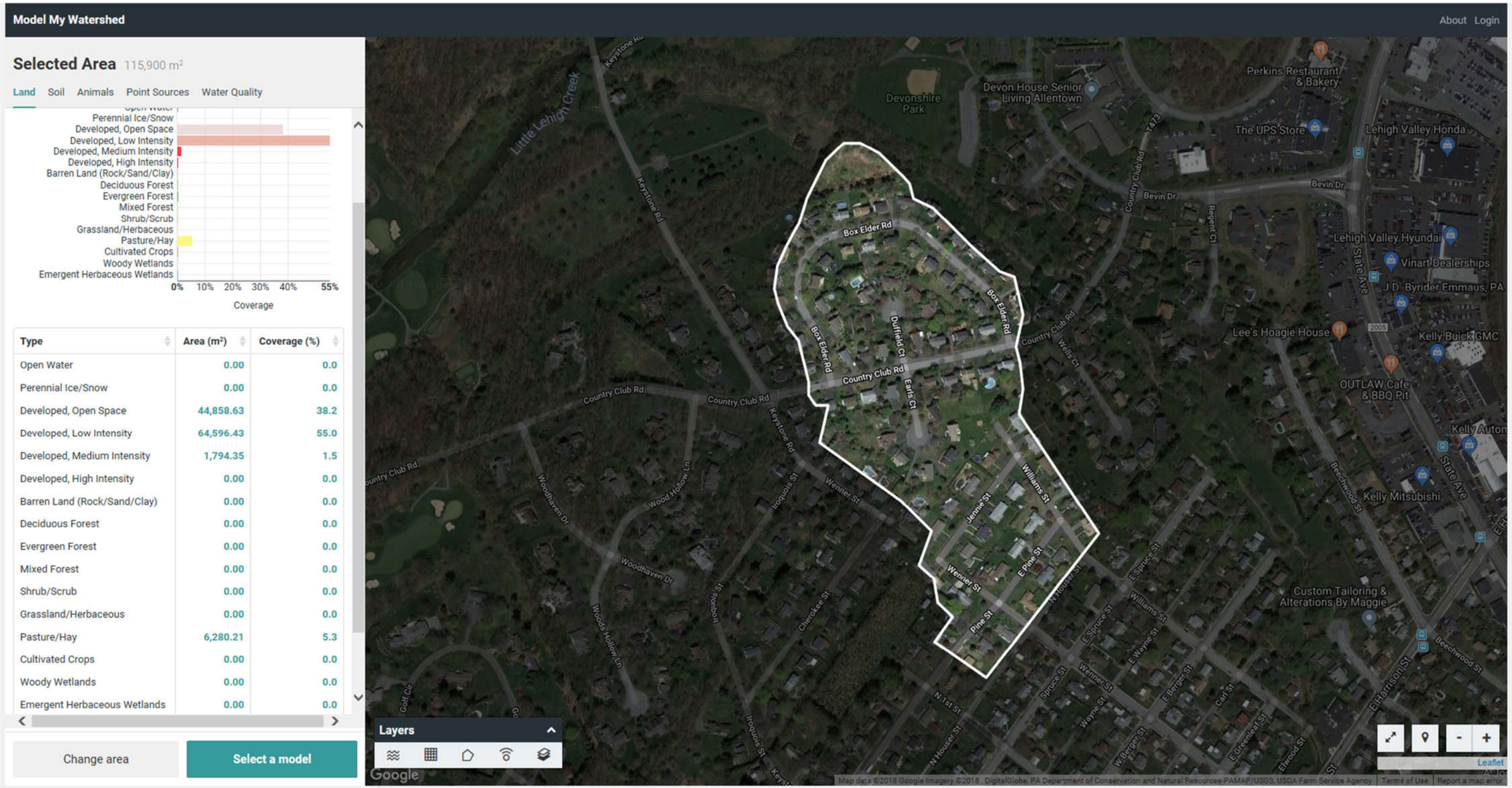
OUTFALL # 069B – LITTLE LEHIGH CREEK WATERSHED:



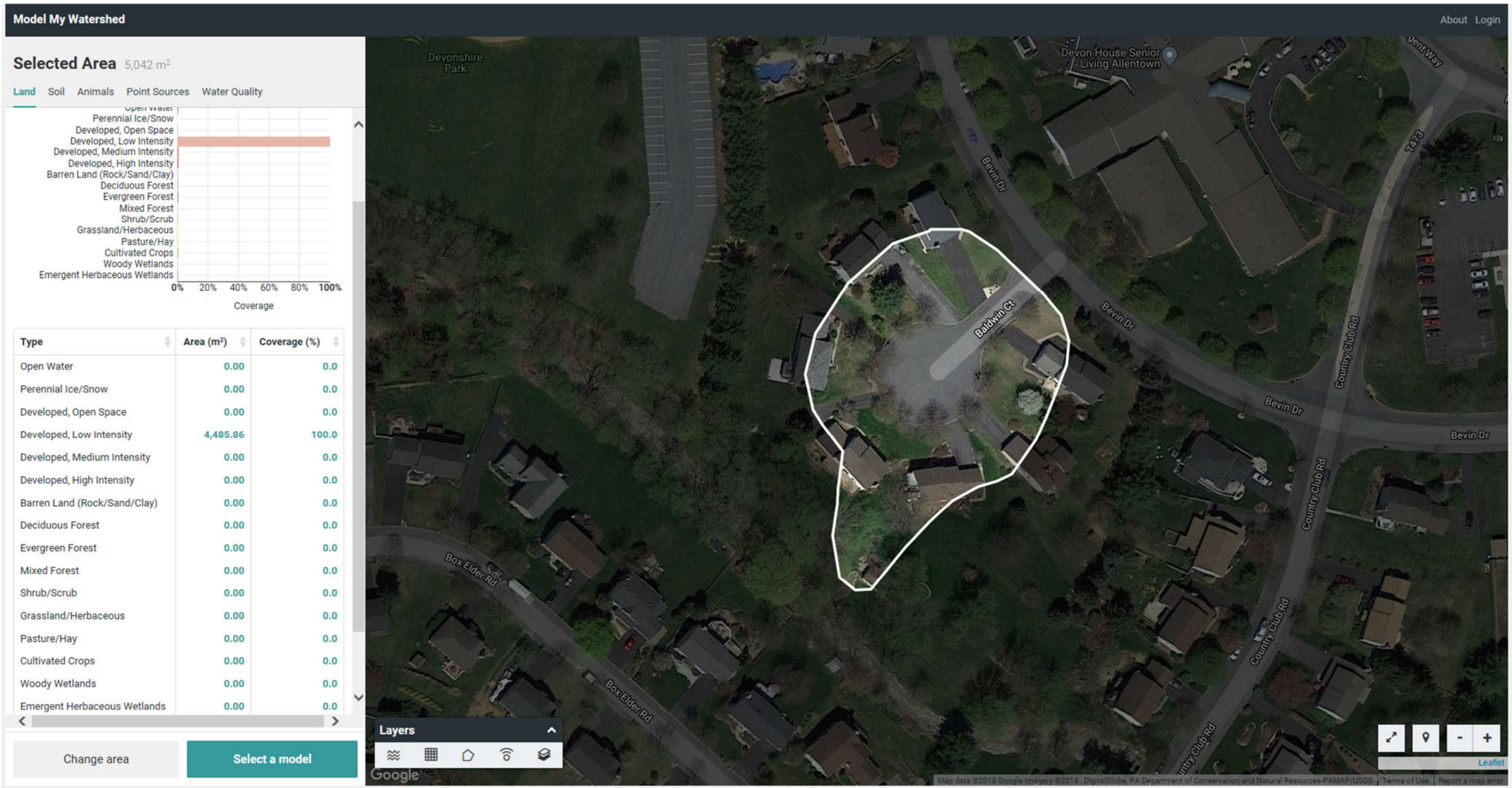
OBSERVATION POINT # 070 – LITTLE LEHIGH CREEK WATERSHED:



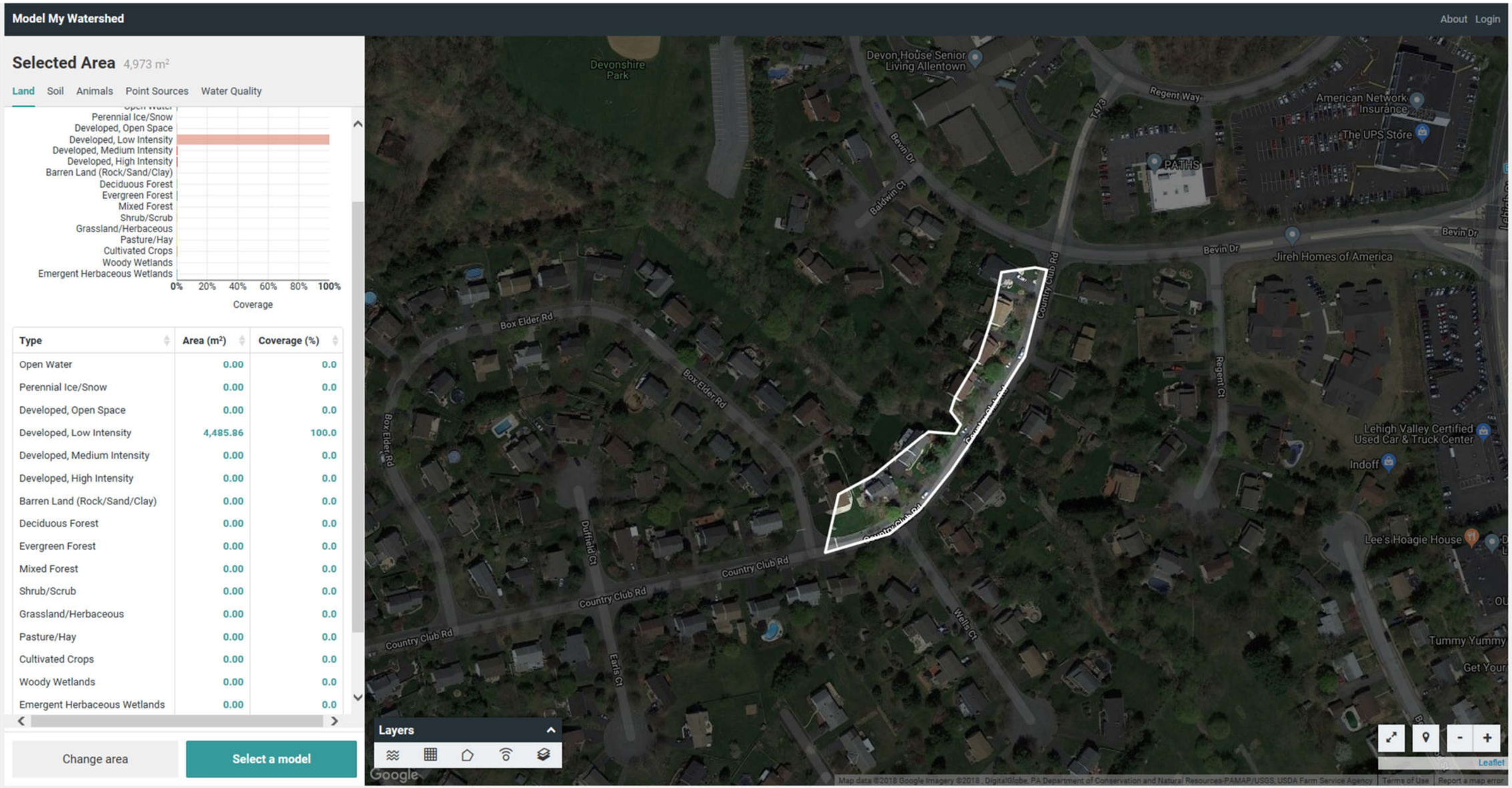
OBSERVATION POINT # 071 – LITTLE LEHIGH CREEK WATERSHED:



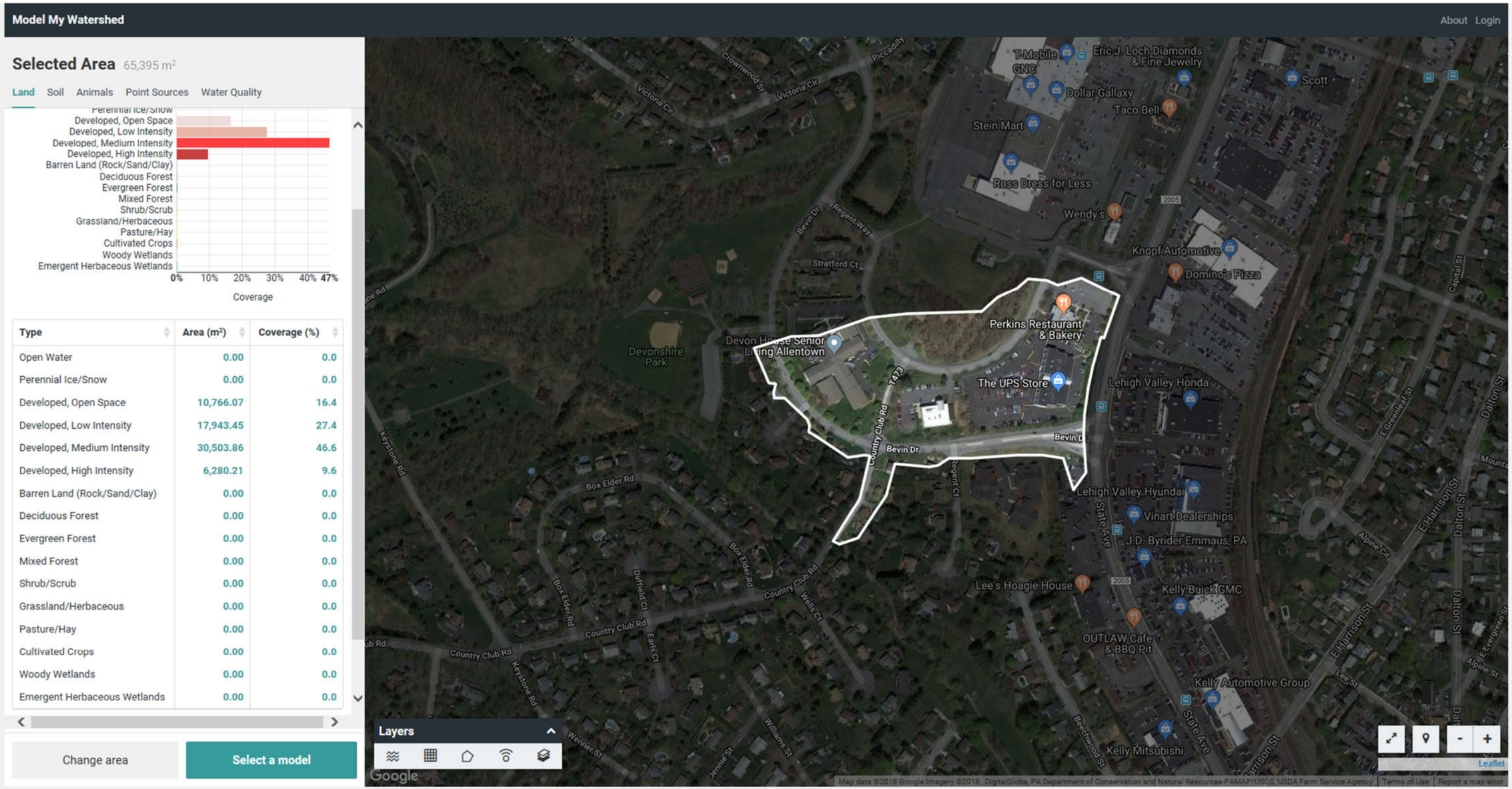
OUTFALL # 072 – LITTLE LEHIGH CREEK WATERSHED:



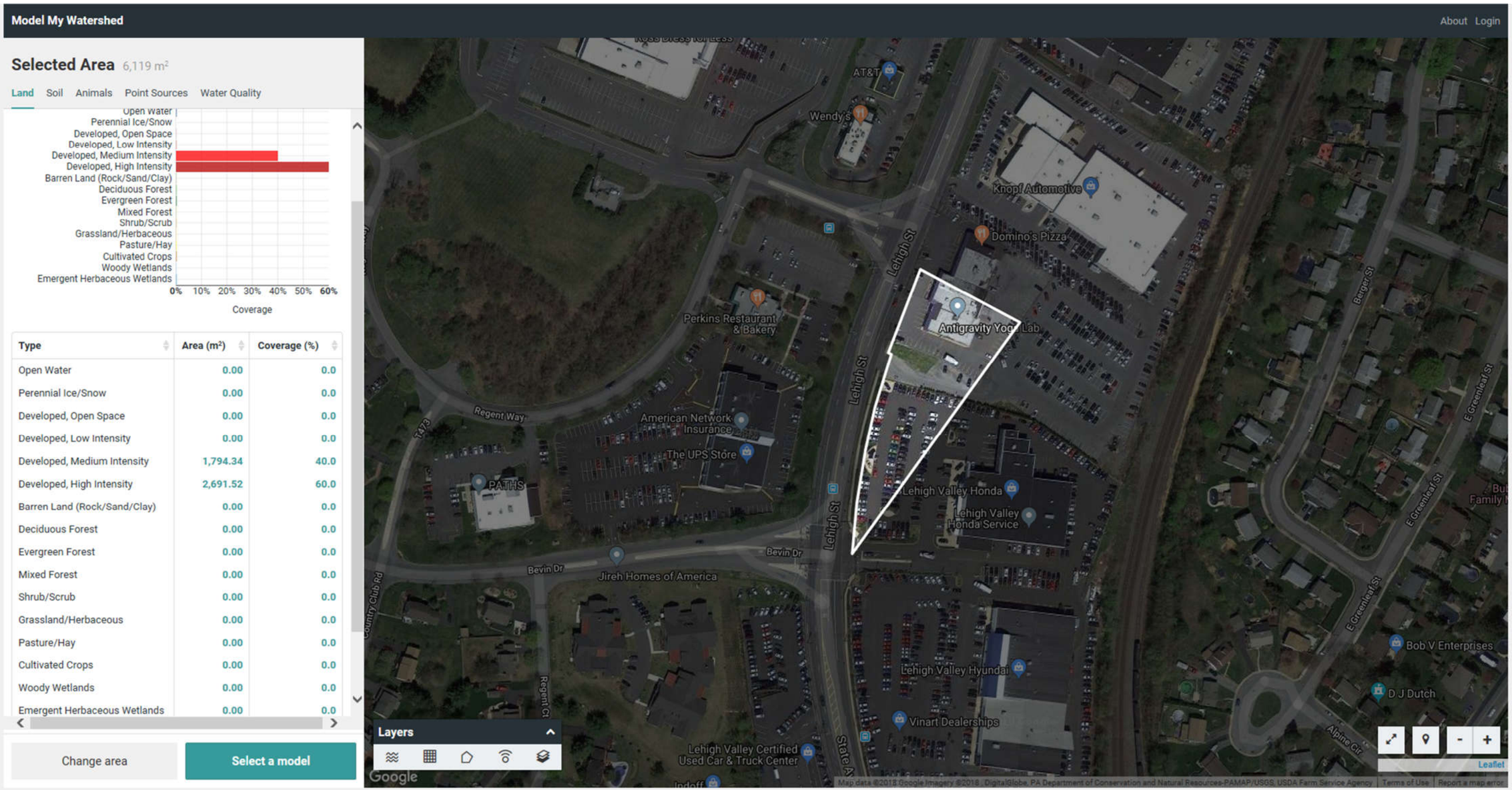
OUTFALL # 073 – LITTLE LEHIGH CREEK WATERSHED:



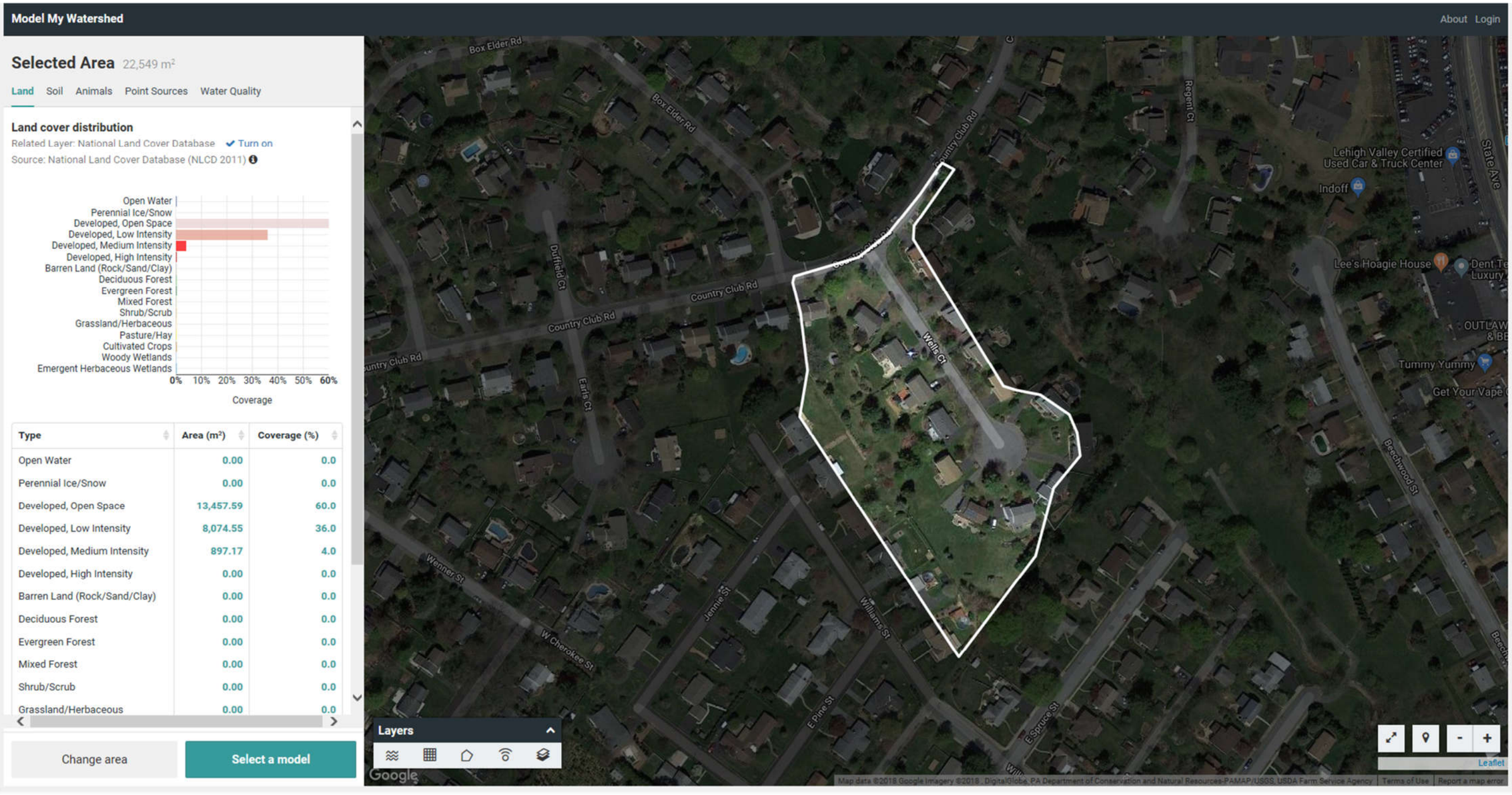
OUTFALL # 074A – LITTLE LEHIGH CREEK WATERSHED:



OUTFALL # 074B – LITTLE LEHIGH CREEK WATERSHED:

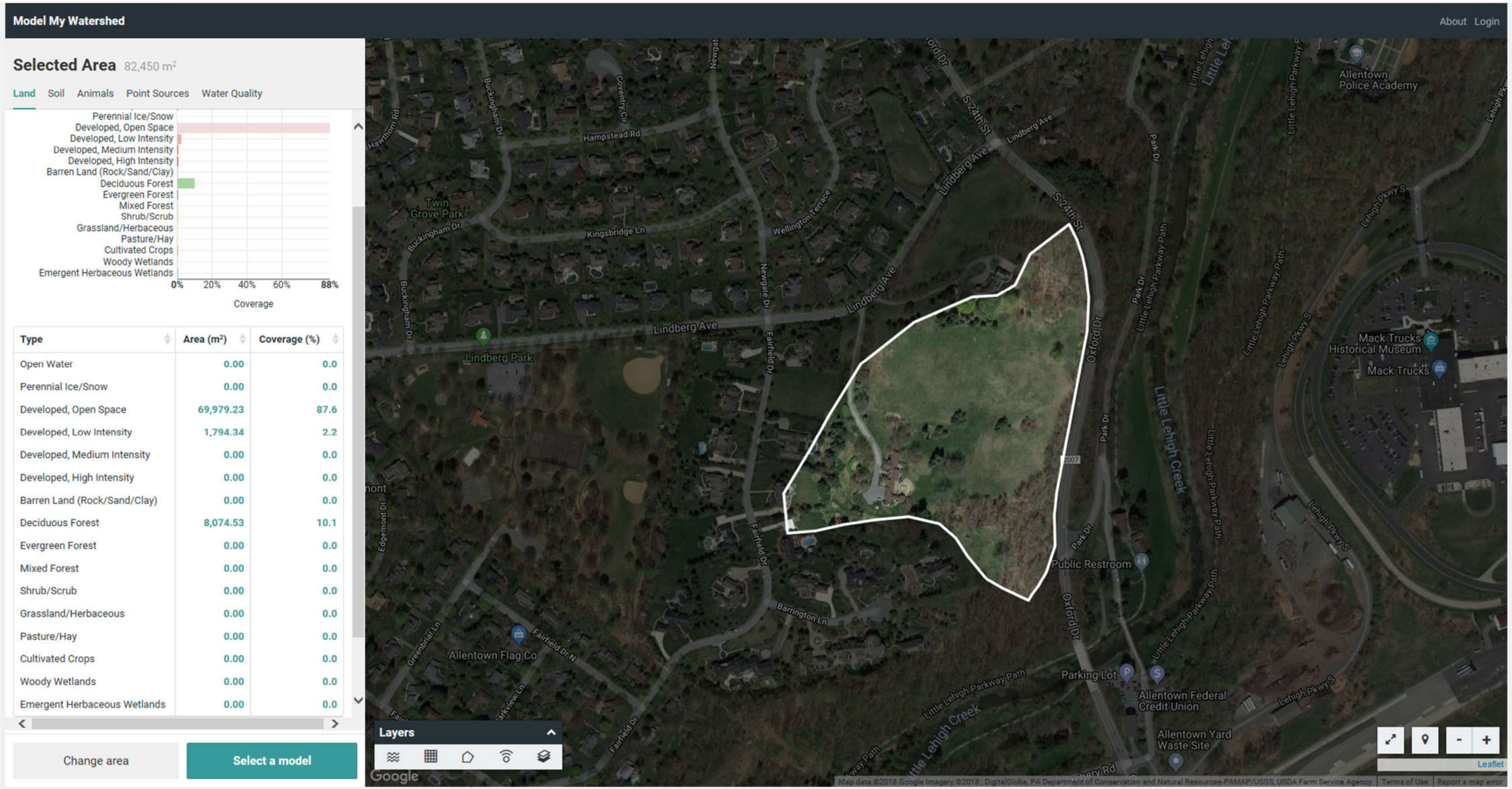


OUTFALL # 075 – LITTLE LEHIGH CREEK WATERSHED:

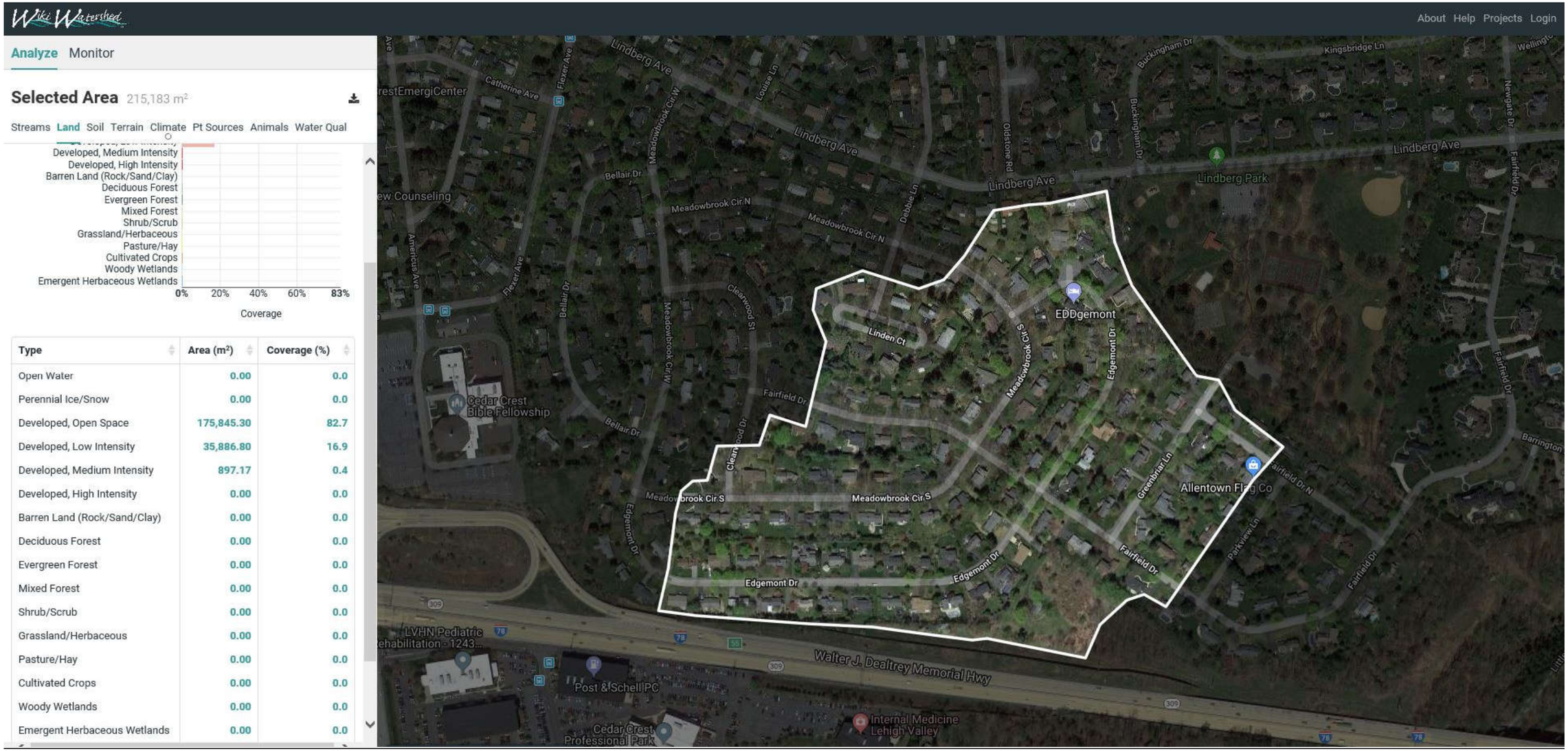


OUTFALL # 076 – LITTLE LEHIGH CREEK WATERSHED:

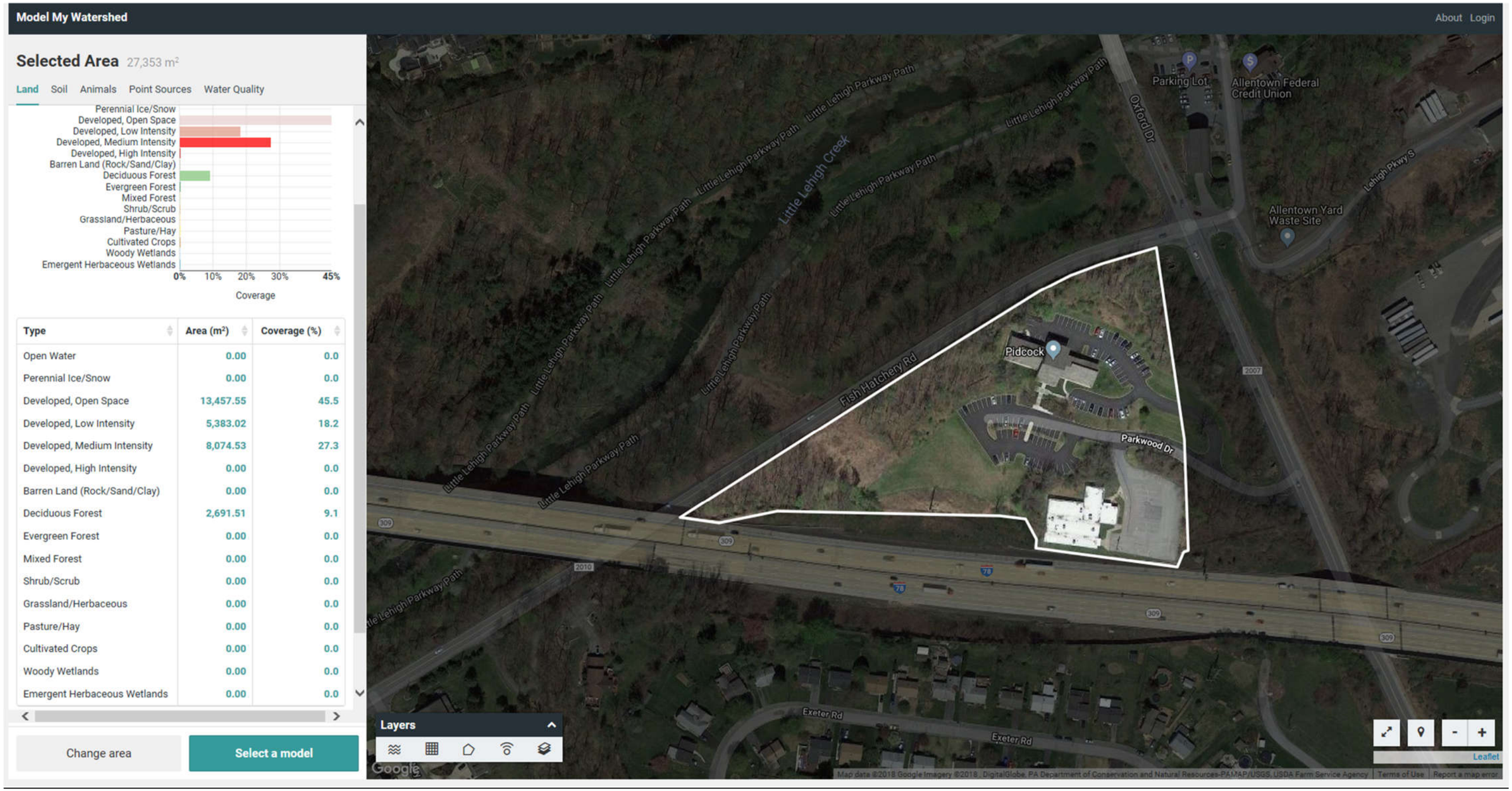
CONTRIBUTING AREA L – LITTLE LEHIGH CREEK WATERSHED:



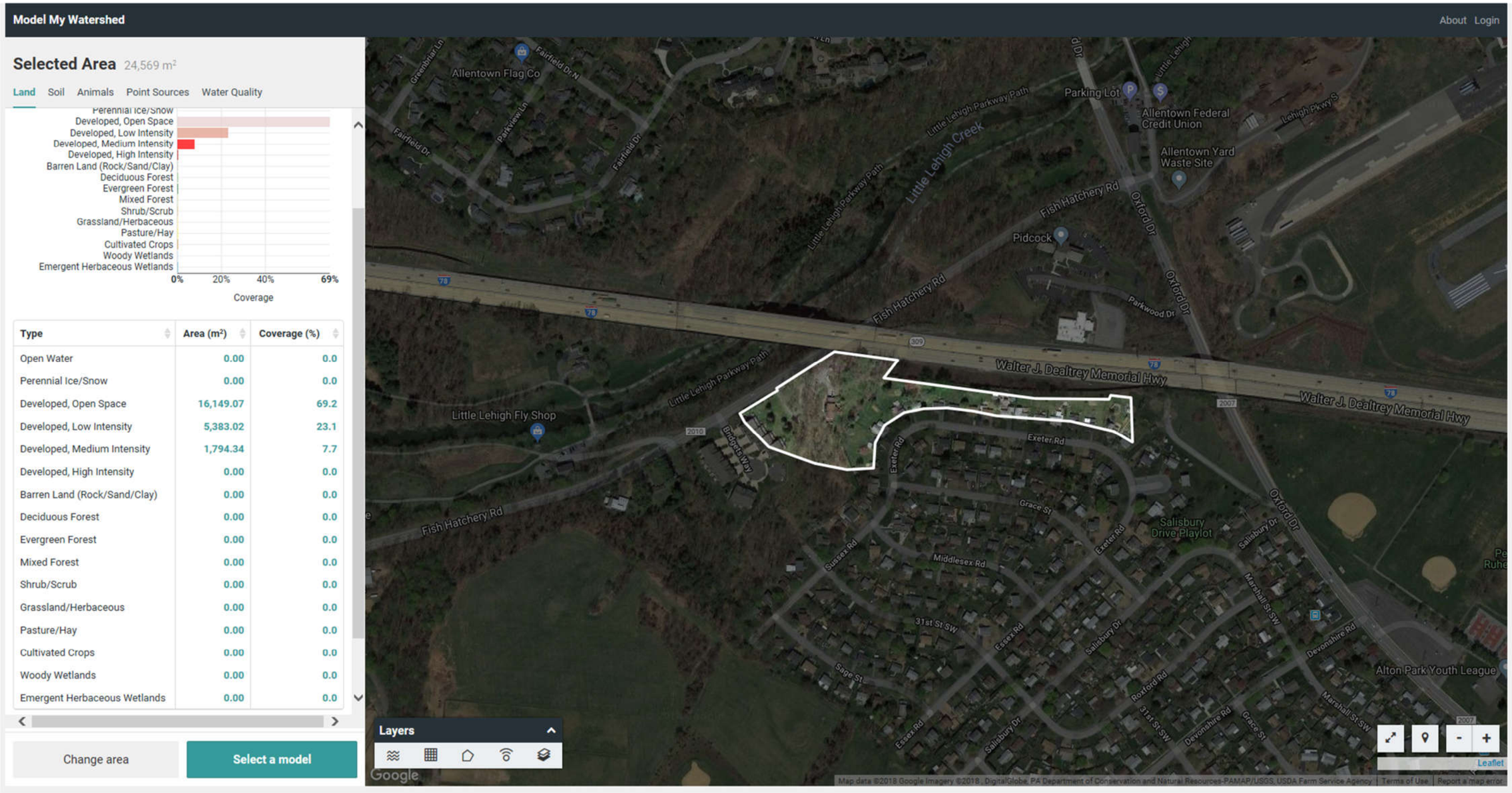
CONTRIBUTING AREA M – LITTLE LEHIGH CREEK WATERSHED:



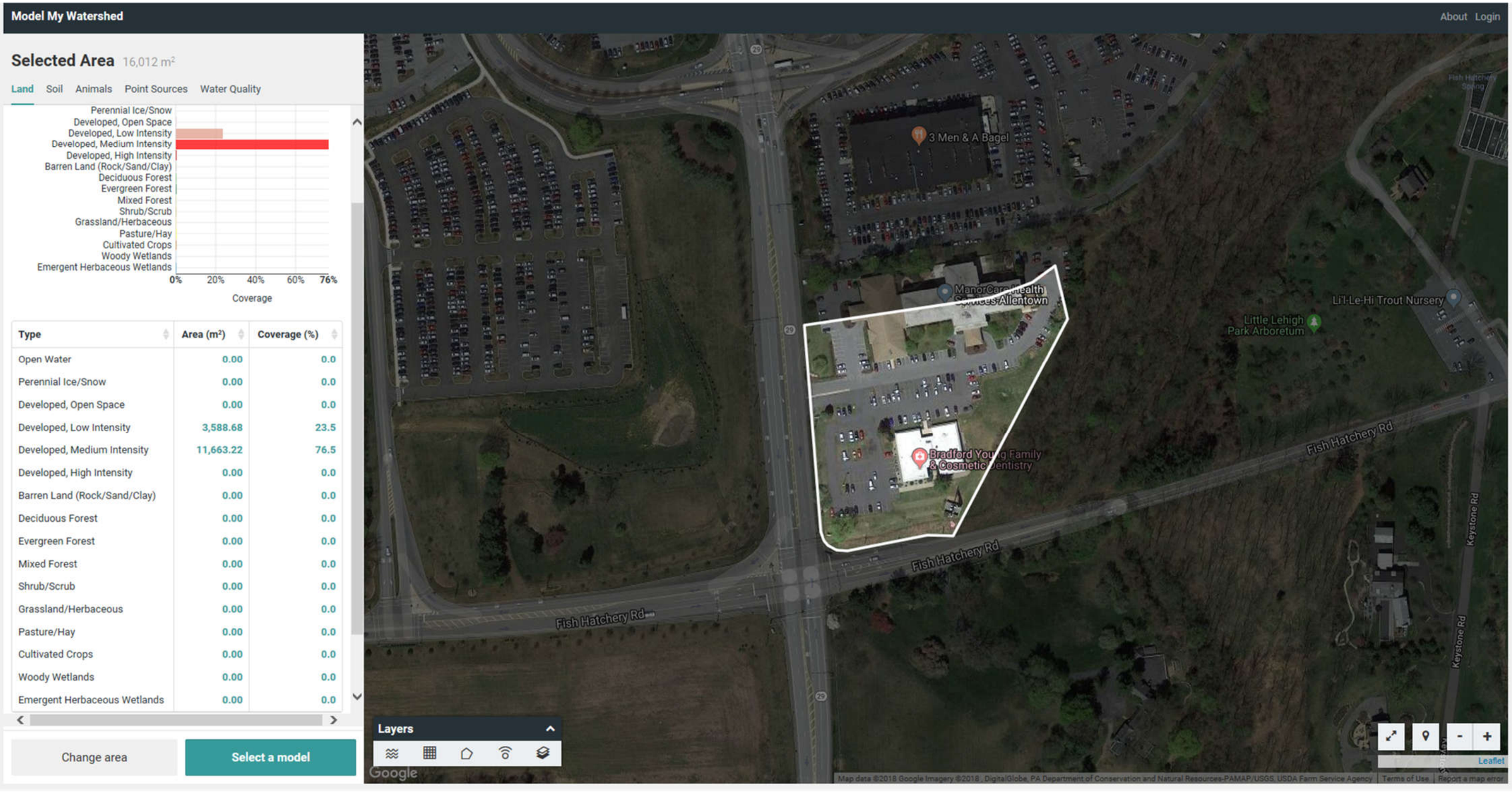
CONTRIBUTING AREA N – LITTLE LEHIGH CREEK WATERSHED:



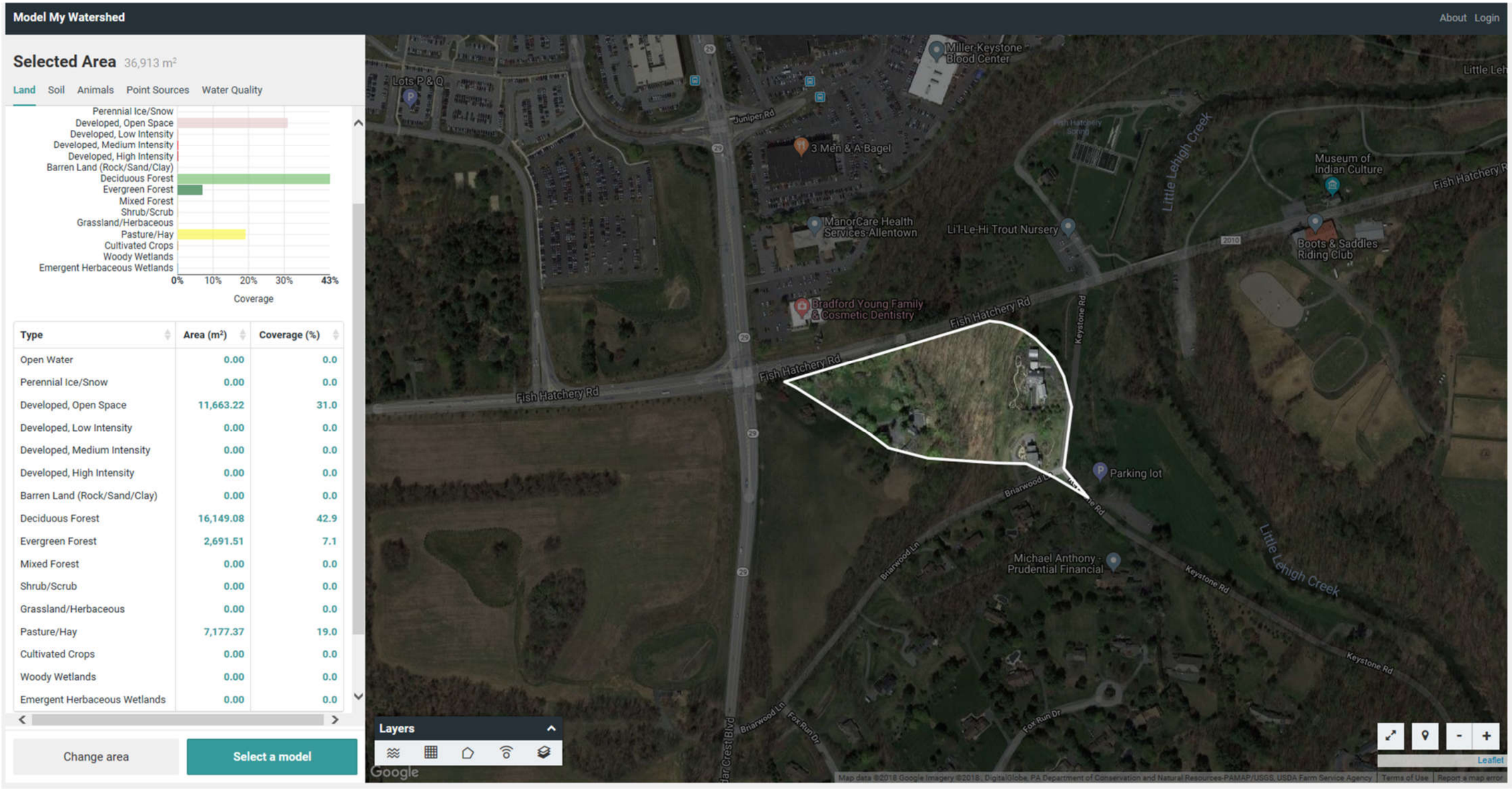
CONTRIBUTING AREA O – LITTLE LEHIGH CREEK WATERSHED:



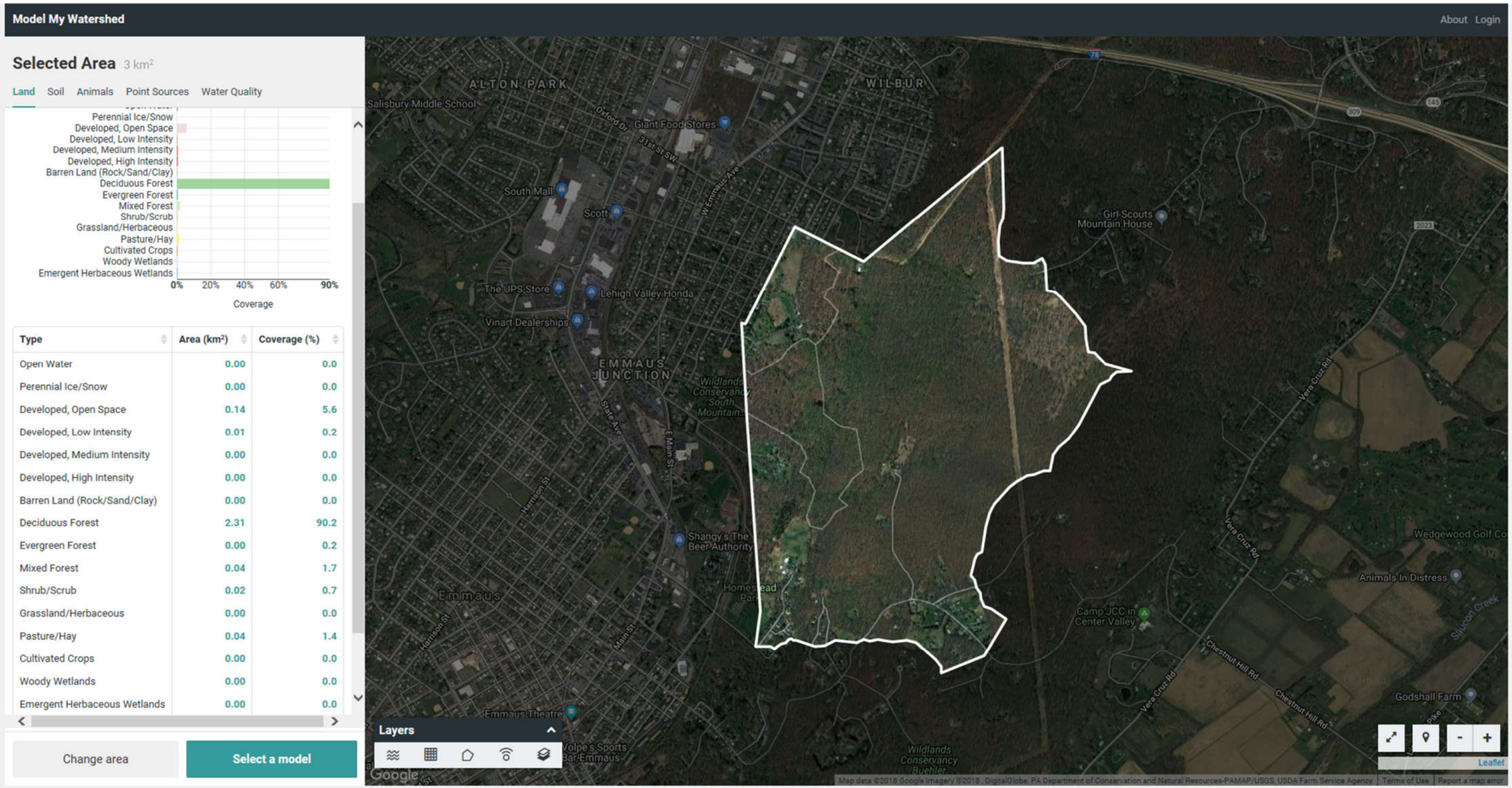
CONTRIBUTING AREA P – LITTLE LEHIGH CREEK WATERSHED:



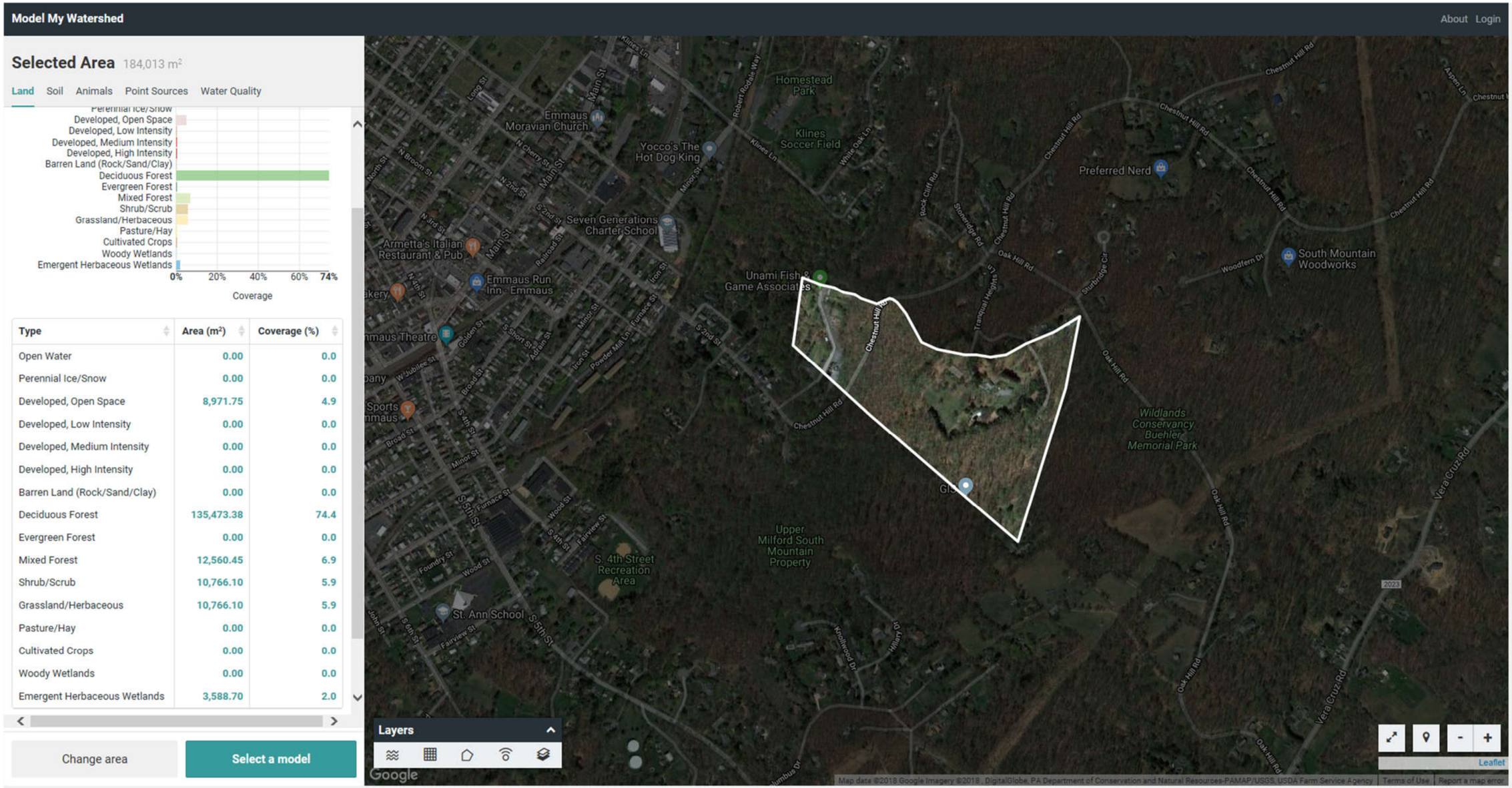
CONTRIBUTING AREA Q – LITTLE LEHIGH CREEK WATERSHED:



CONTRIBUTING AREA R – LITTLE LEHIGH CREEK WATERSHED:

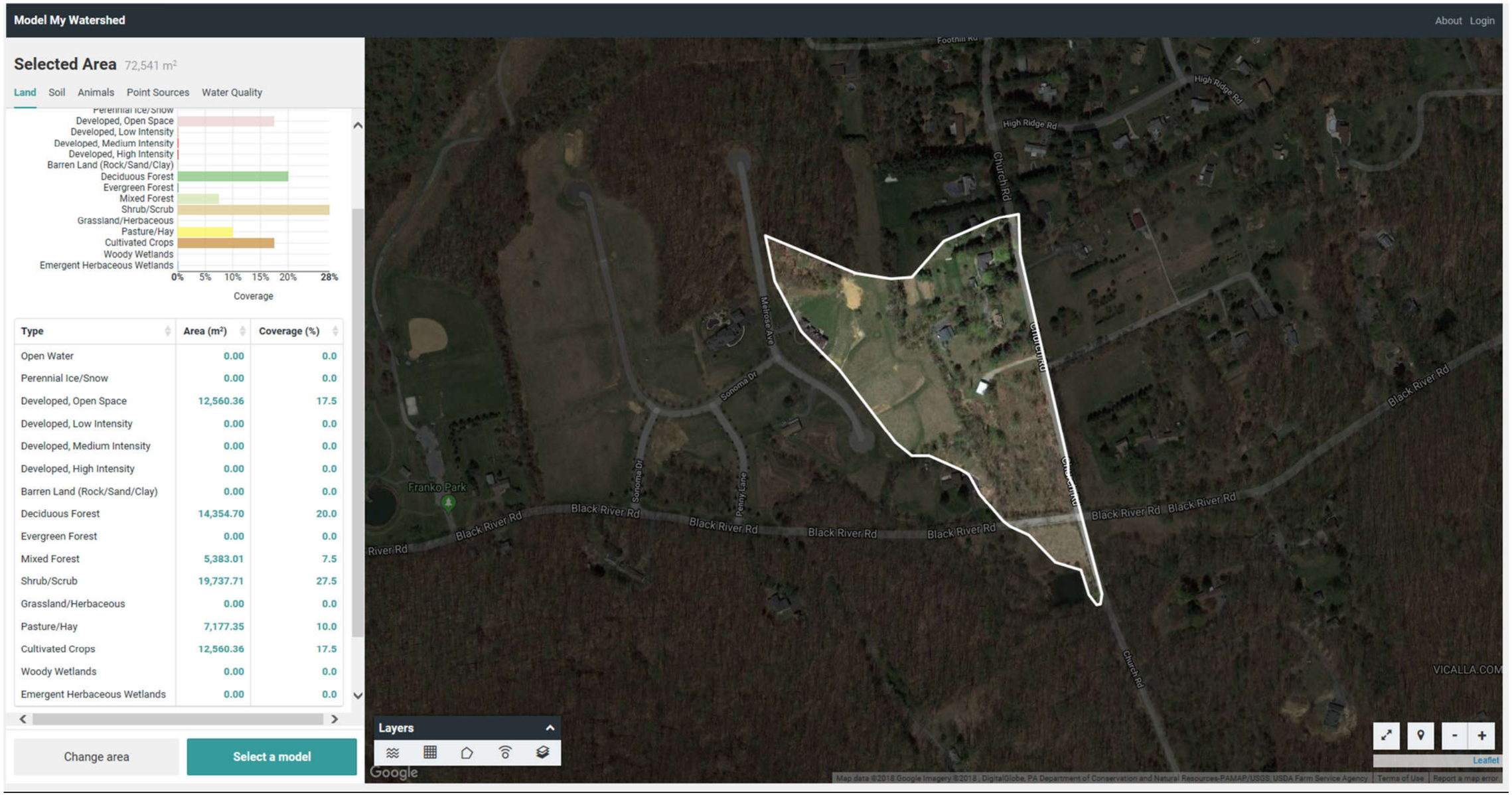


CONTRIBUTING AREA S – LITTLE LEHIGH CREEK WATERSHED:

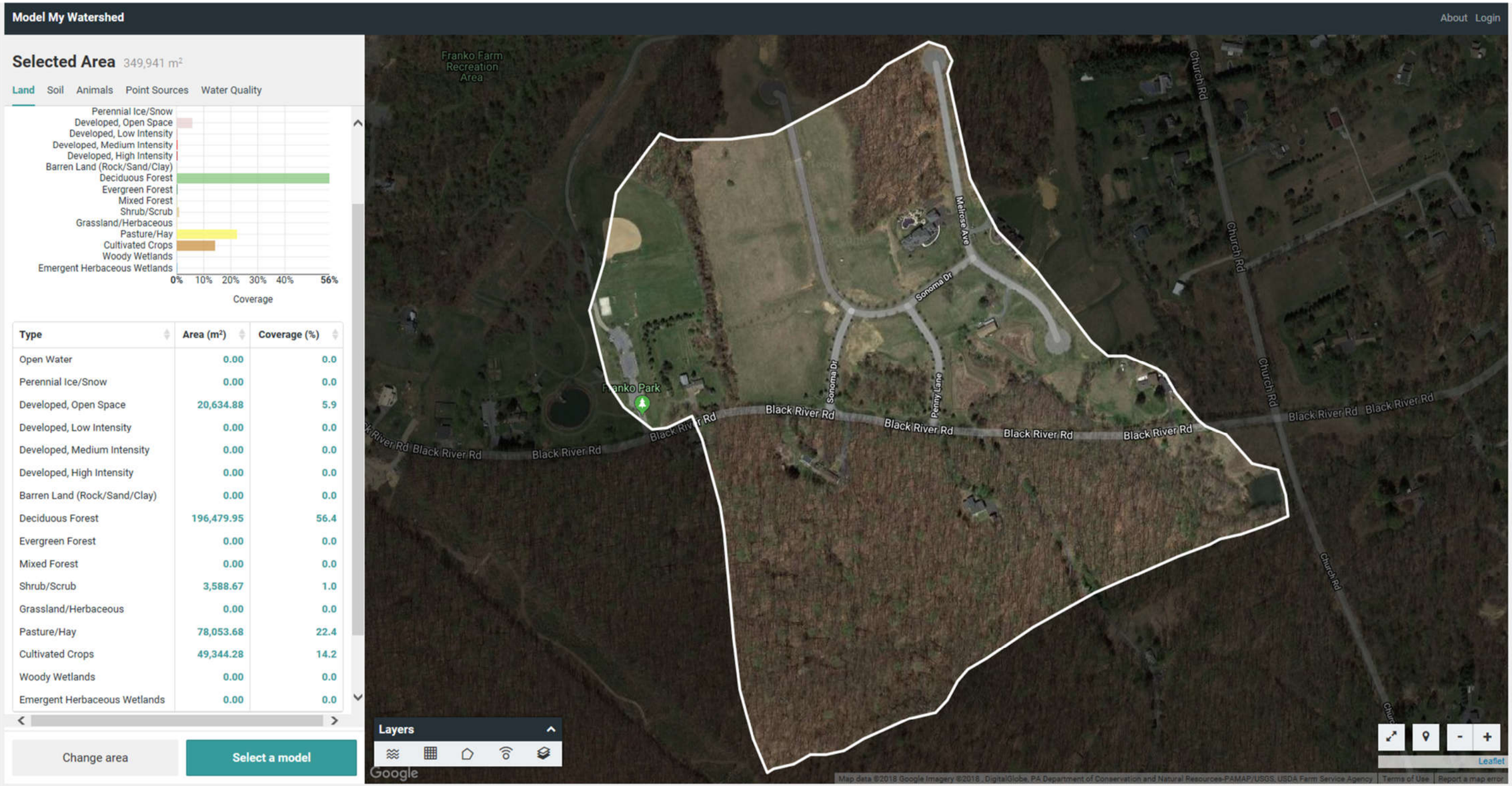


OUTFALL #77 – SAUCON CREEK/BLACK RIVER WATERSHED:

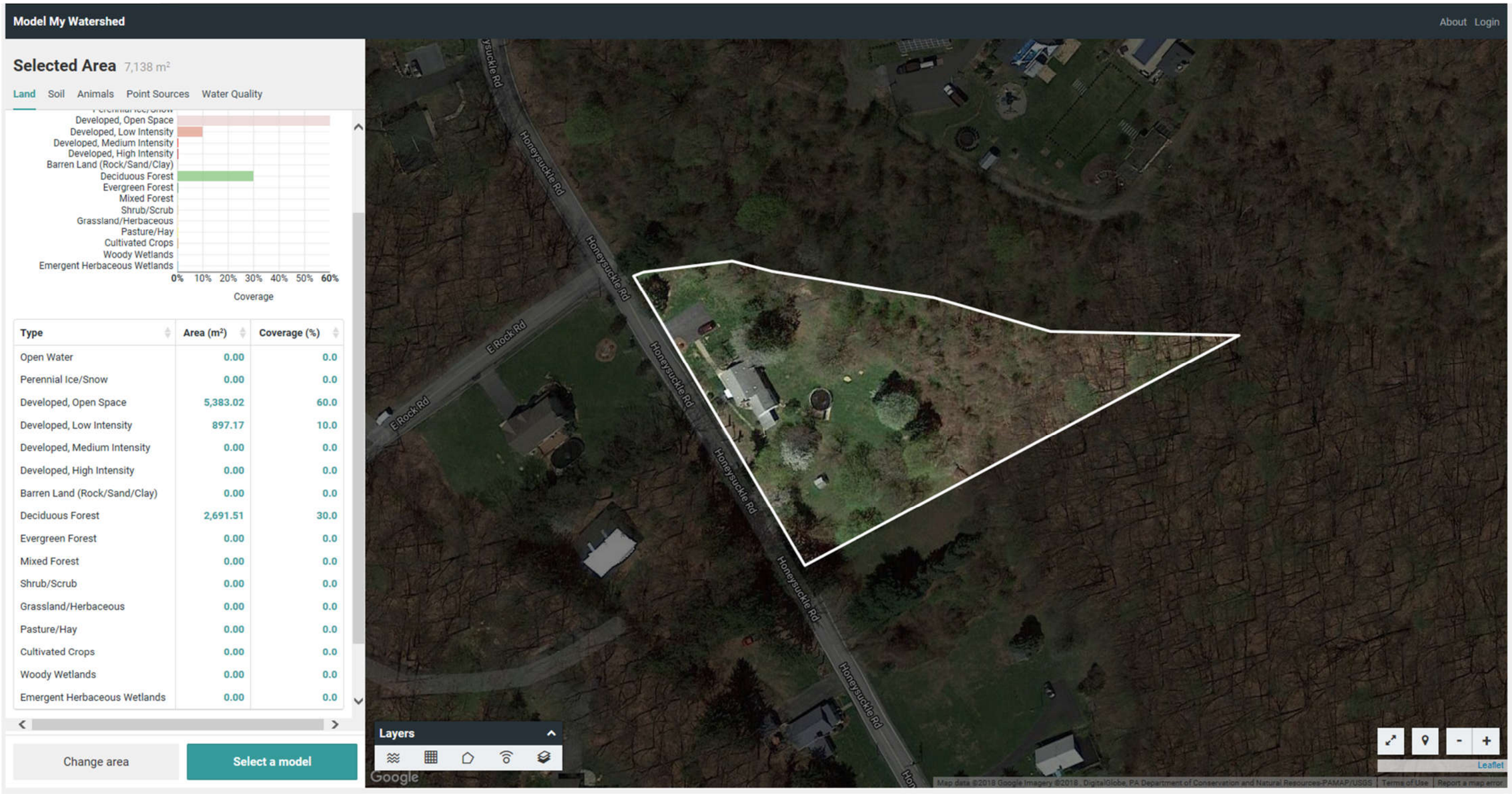
OUTFALL #78 – SAUCON CREEK/BLACK RIVER WATERSHED:



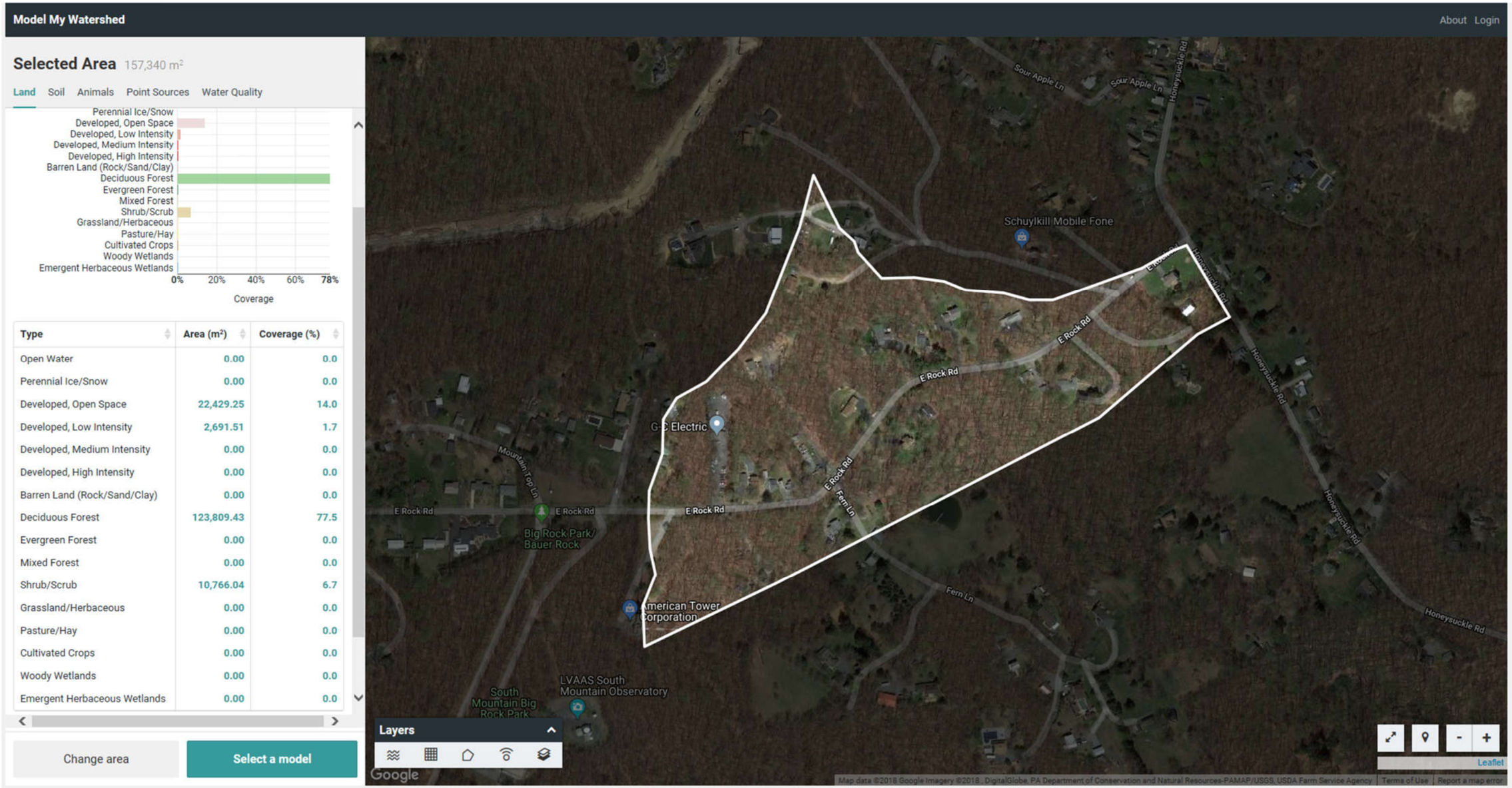
OUTFALL #79 – SAUCON CREEK/BLACK RIVER WATERSHED:



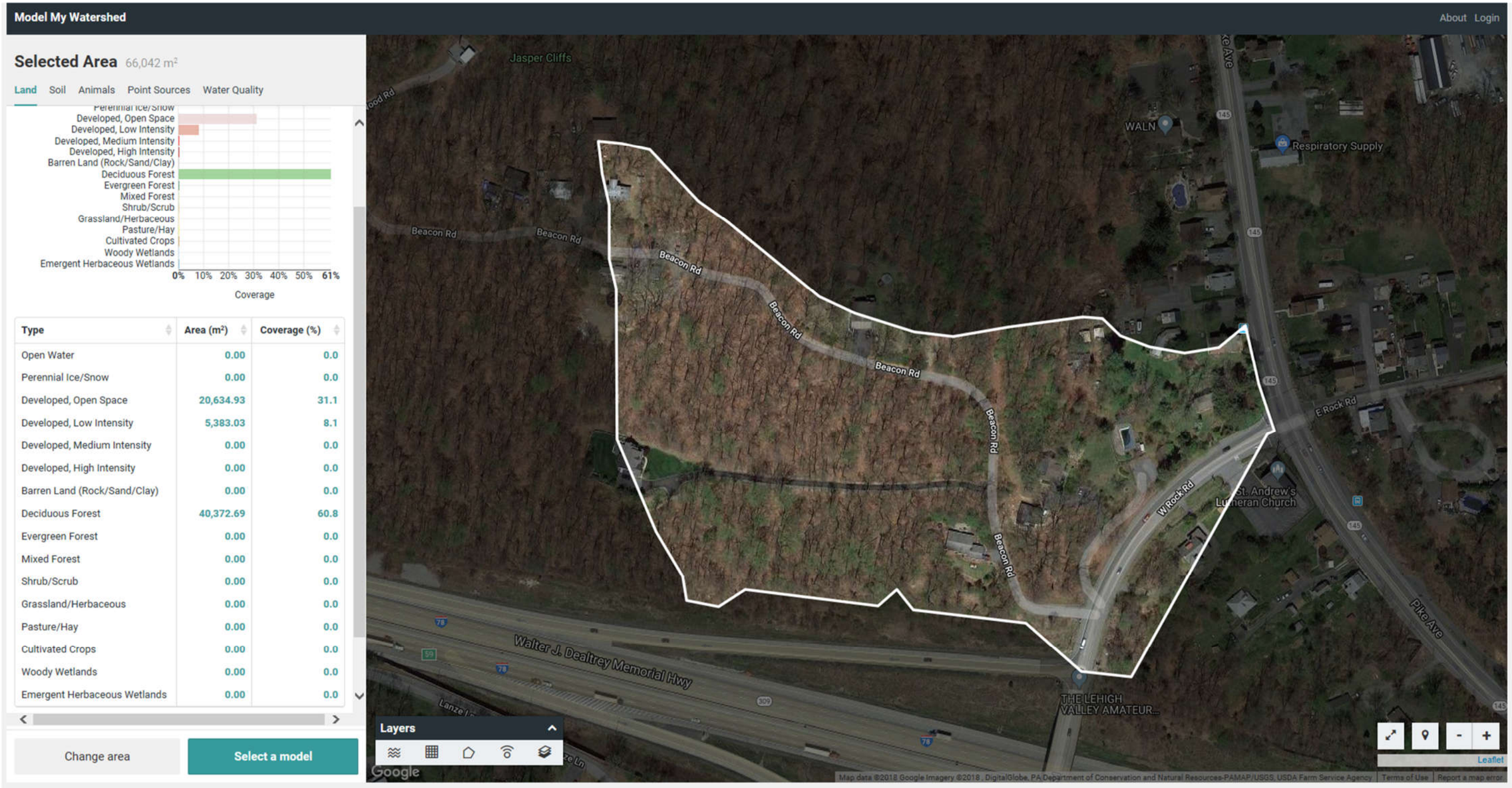
CONTRIBUTING AREA T - SAUCON CREEK/BLACK RIVER WATERSHED:



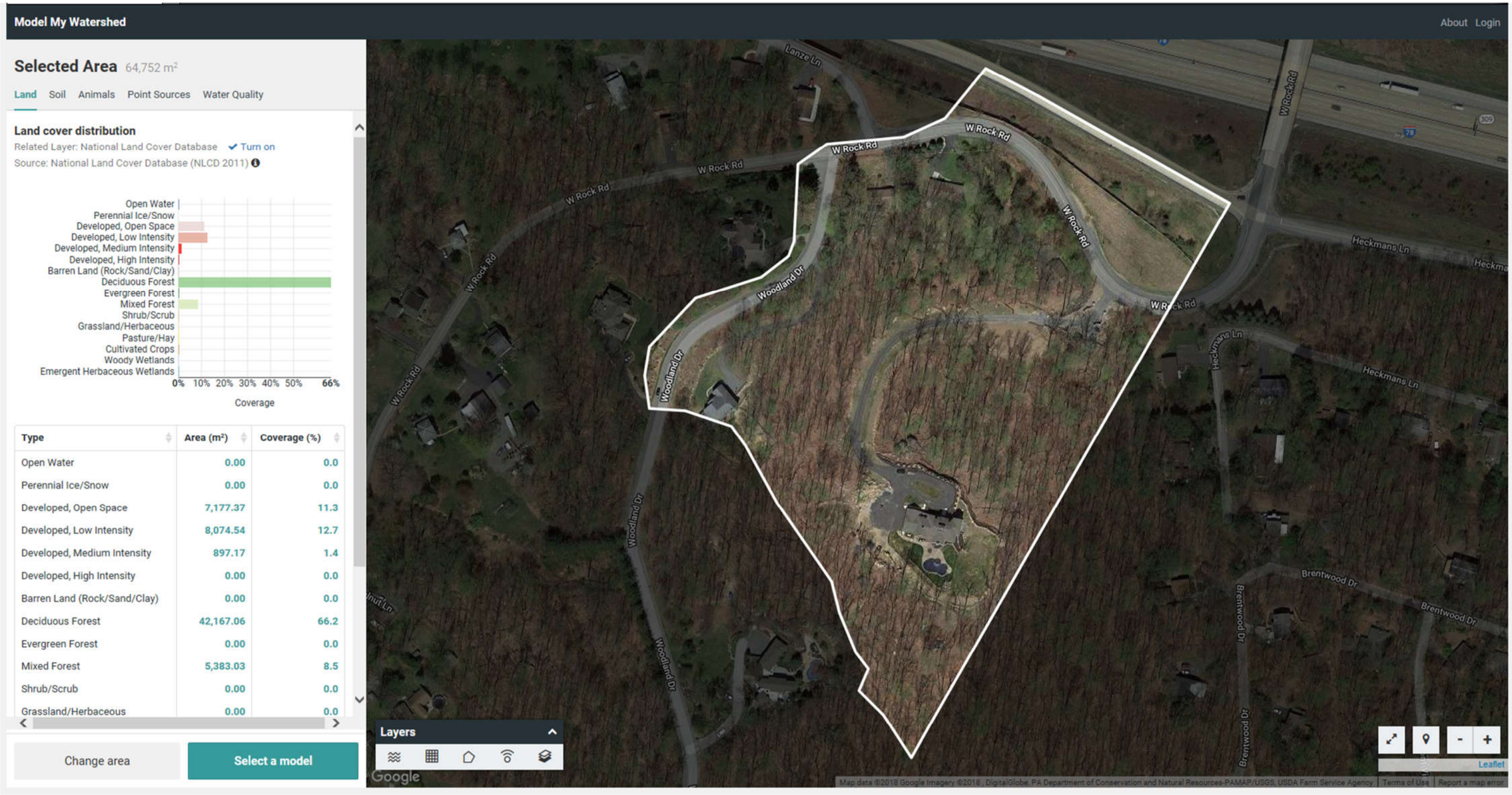
CONTRIBUTING AREA U - SAUCON CREEK/BLACK RIVER WATERSHED:



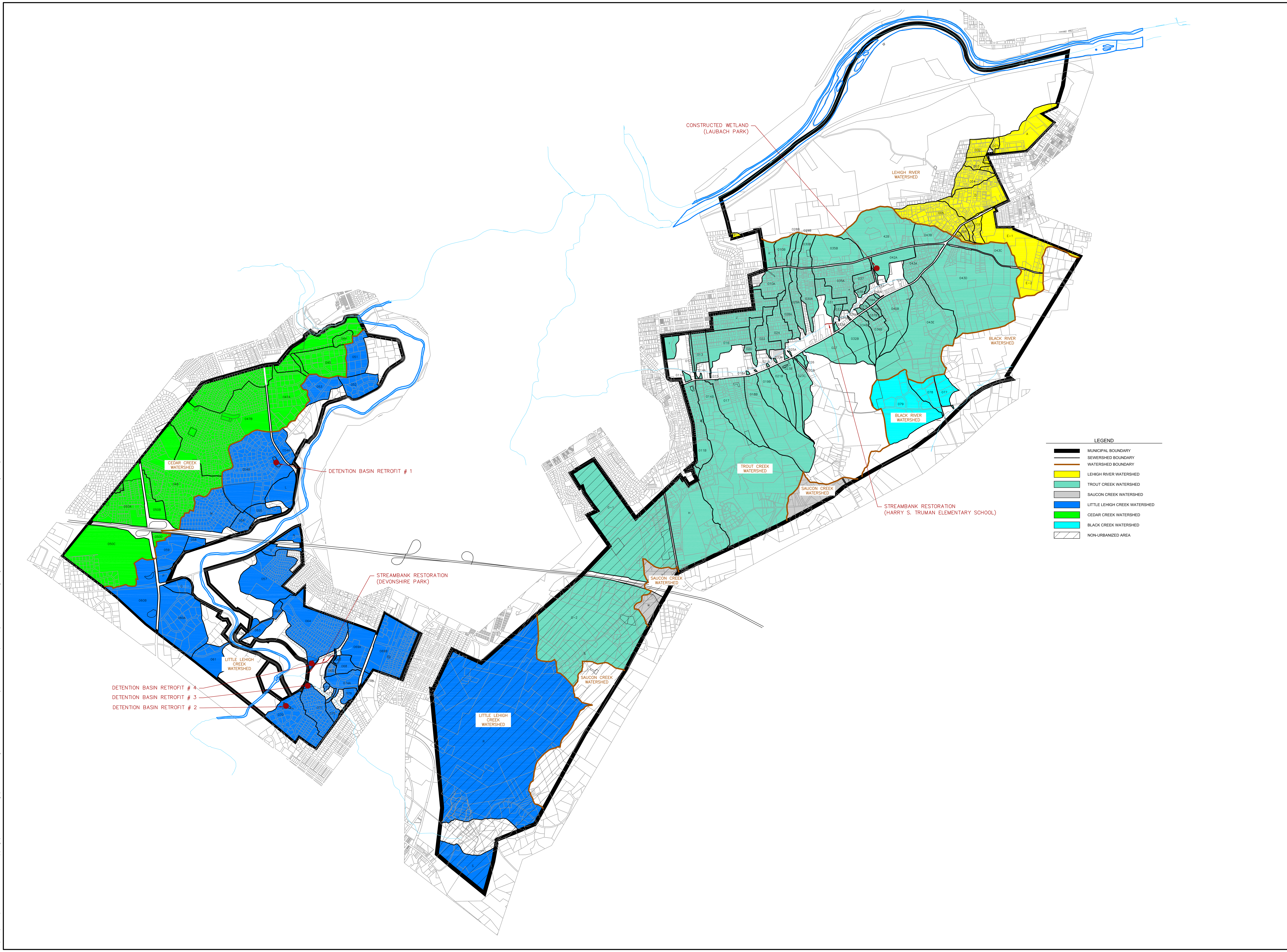
CONTRIBUTING AREA V - SAUCON CREEK/BLACK RIVER WATERSHED:



CONTRIBUTING AREA W - SAUCON CREEK/BLACK RIVER WATERSHED:



POLLUTANT REDUCTION PLAN MAP



xrefs:->|
P:\SAL\2014\SAL14-018 MS-4 Mapping\SAL14-018 dwg\SAL14-018.dwg-->30x42 Date: May 23,2018-4:10pm Keystone Consulting Engineers, Inc. West Office - USER: jschweyer

KEYSTONE CONSULTING ENGINEERS, INC.
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East Office: Bethlehem, *West Office:* Wescosville, *North Office:* Kresgeville
www.KCEinc.com

KCE KEYSTONE CONSULTING ENGINEERS

POLLUTANT REDUCTION PLAN MAP
SALISBURY TOWNSHIP

SALISBURY TOWNSHIP
LEHIGH COUNTY, PENNSYLVANIA

REVISIONS		
NO.	DATE	DESCRIPTION

DESIGNED BY: JLS
DRAWN BY: GJG
CHECKED BY: DJT
DATE: 5/24/18
SCALE: 1"=1250'
JOB NUMBER: SAL14-018
SHEET: 1 OF 1

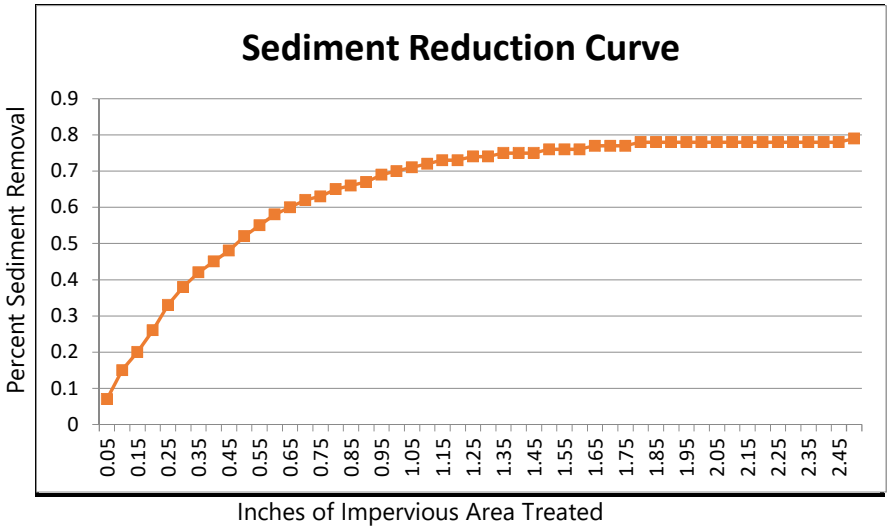
PROPOSED BMP REDUCTION CALCULATIONS

SALISBURY TOWNSHIP - PROPOSED BMP REDUCTION CALCULATIONS		
STORM SEWER SHED NUMBER	PROPOSED BMP	PROPOSED SEDIMENT REDUCTION (A*B) (LBS/YR)
031	*Streambank Restoration (Harry S. Truman school) 350 l.f.	15708.00
042	Constructed Wetland (Laubach Park)	20337.71
054B	Detention Basin Retrofit #1	39645.35
064	Detention Basin Retrofit #4	39375.46
066	*Streambank Restoration (Devonshire Park) 1,255 l.f.	56324.40
070	Detention Basin Retrofit #2	11257.46
071	Detention Basin Retrofit #3	18285.40
TOTALS		**200,933.79**

*Note: Stream Restoration is calculated by the length of the reach of stream to be restored by 44.88 lbs/yr.

SALISBURY TOWNSHIP - SEDIMENT LOADING TO PROPOSED BMP'S

BMP NAME: 042 - Constructed Wetland (Laubach Park)



TOTAL DRAINAGE AREA (Acres):	**96.44**
TOTAL IMPERVIOUS AREA (Acres):	**11.45**

BMP SEDIMENT LOAD (lbs/yr):	**42,370.23**

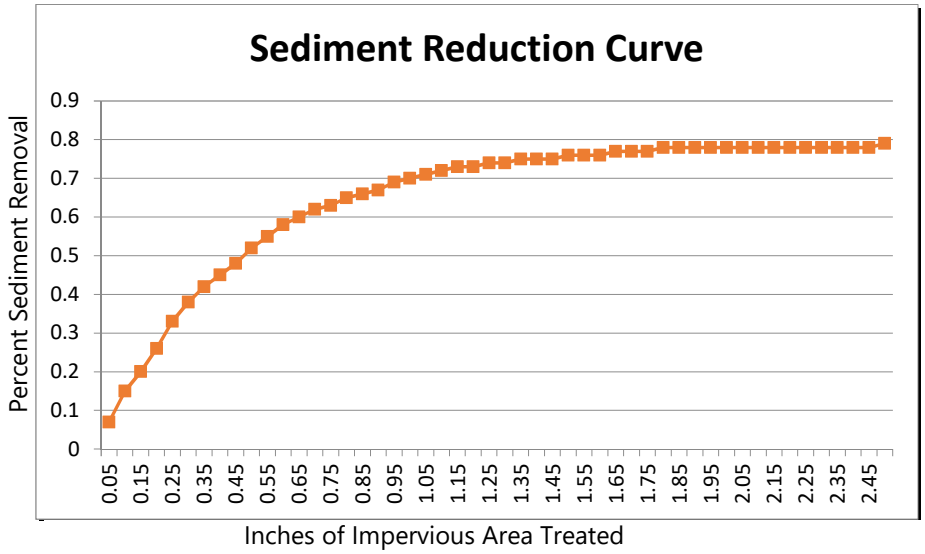
EXISTING SEDIMENT REMOVAL REDUCTIONS

PROPOSED SEDIMENT REMOVAL REDUCTIONS	
Volume Treated (ac-ft.)	**0.441**
Inches of Impervious Area Treated:	**0.46**
Percent Reduction:	**48%**
Removed Sediment:	**20,337.71**

Wetland footprint (sf):	9600
Treated depth (in.):	24

SALISBURY TOWNSHIP - SEDIMENT LOADING TO PROPOSED BMP'S

BMP NAME: 054B - Detention Basin Retrofit # 1



TOTAL DRAINAGE AREA (Acres):	**79.81**
TOTAL IMPERVIOUS AREA (Acres):	**24.48**

BMP SEDIMENT LOAD (lbs/yr):	**60,992.85**

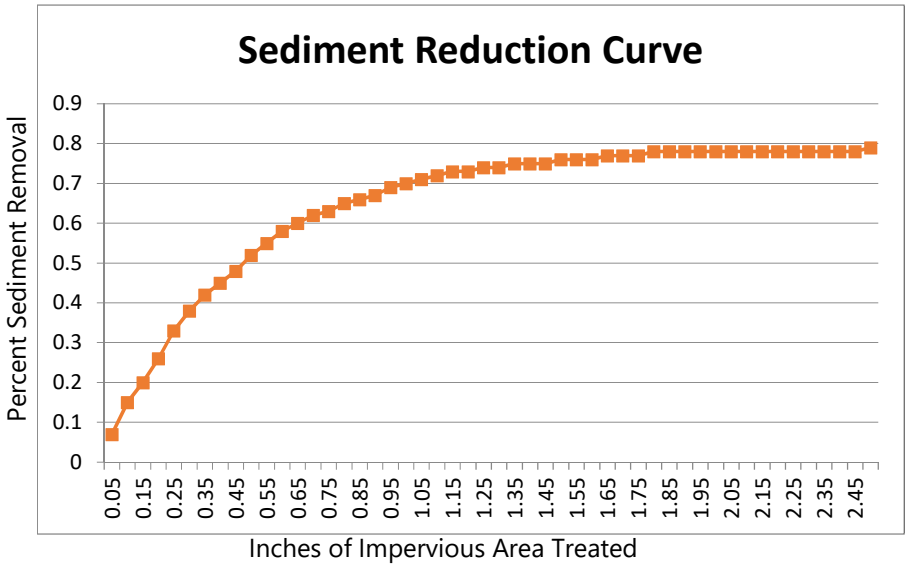
EXISTING SEDIMENT REMOVAL REDUCTIONS

PROPOSED SEDIMENT REMOVAL REDUCTIONS	
Volume Treated (ac-ft.)	**1.687**
Inches of Impervious Area Treated:	**0.83**
Percent Reduction:	**65%**
Removed Sediment:	**39,645.35**

Basin footprint (sf):	36733
Treated depth (in.):	24

SALISBURY TOWNSHIP - SEDIMENT LOADING TO PROPOSED BMP'S

BMP NAME: 064 - Detention Basin Retrofit # 4



TOTAL DRAINAGE AREA (Acres):	**79.81**
TOTAL IMPERVIOUS AREA (Acres):	**27.40**

BMP SEDIMENT LOAD (lbs/yr):	**65,625.77**

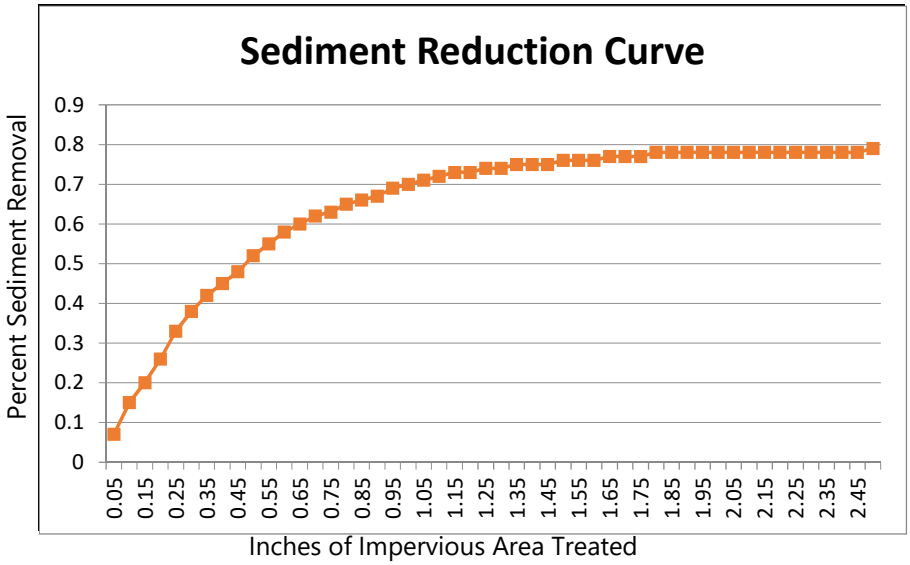
EXISTING SEDIMENT REMOVAL REDUCTIONS

PROPOSED SEDIMENT REMOVAL REDUCTIONS	
Volume Treated (ac-ft.)	**1.563**
Inches of Impervious Area Treated:	**0.68**
Percent Reduction:	**60%**
Removed Sediment:	**39,375.46**

Basin footprint (sf):	34045
Treated depth (in.):	24

SALISBURY TOWNSHIP - SEDIMENT LOADING TO PROPOSED BMP'S

BMP NAME: 070 - Detention Basin Retrofit # 2



TOTAL DRAINAGE AREA (Acres):	**23.50**
TOTAL IMPERVIOUS AREA (Acres):	**5.09**
BMP SEDIMENT LOAD (lbs/yr):	**14,432.64**

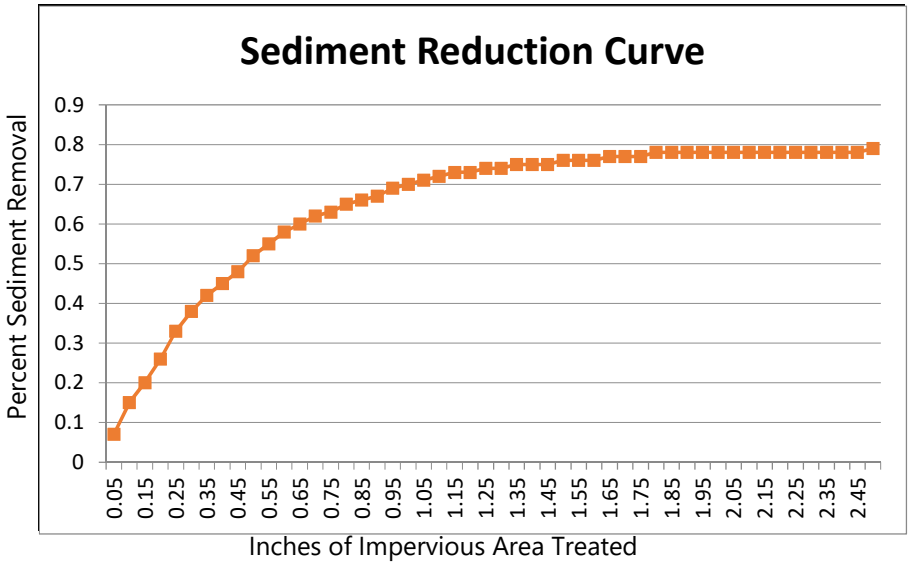
EXISTING SEDIMENT REMOVAL REDUCTIONS

PROPOSED SEDIMENT REMOVAL REDUCTIONS	
Volume Treated (ac-ft.)	**0.941**
Inches of Impervious Area Treated:	**2.22**
Percent Reduction:	**78%**
Removed Sediment:	**11,257.46**

Basin footprint (sf):	20491
Treated depth (in.):	24

SALISBURY TOWNSHIP - SEDIMENT LOADING TO PROPOSED BMP'S

BMP NAME: 071 - Detention Basin Retrofit # 3



TOTAL DRAINAGE AREA (Acres):	**29.04**
TOTAL IMPERVIOUS AREA (Acres):	**10.28**

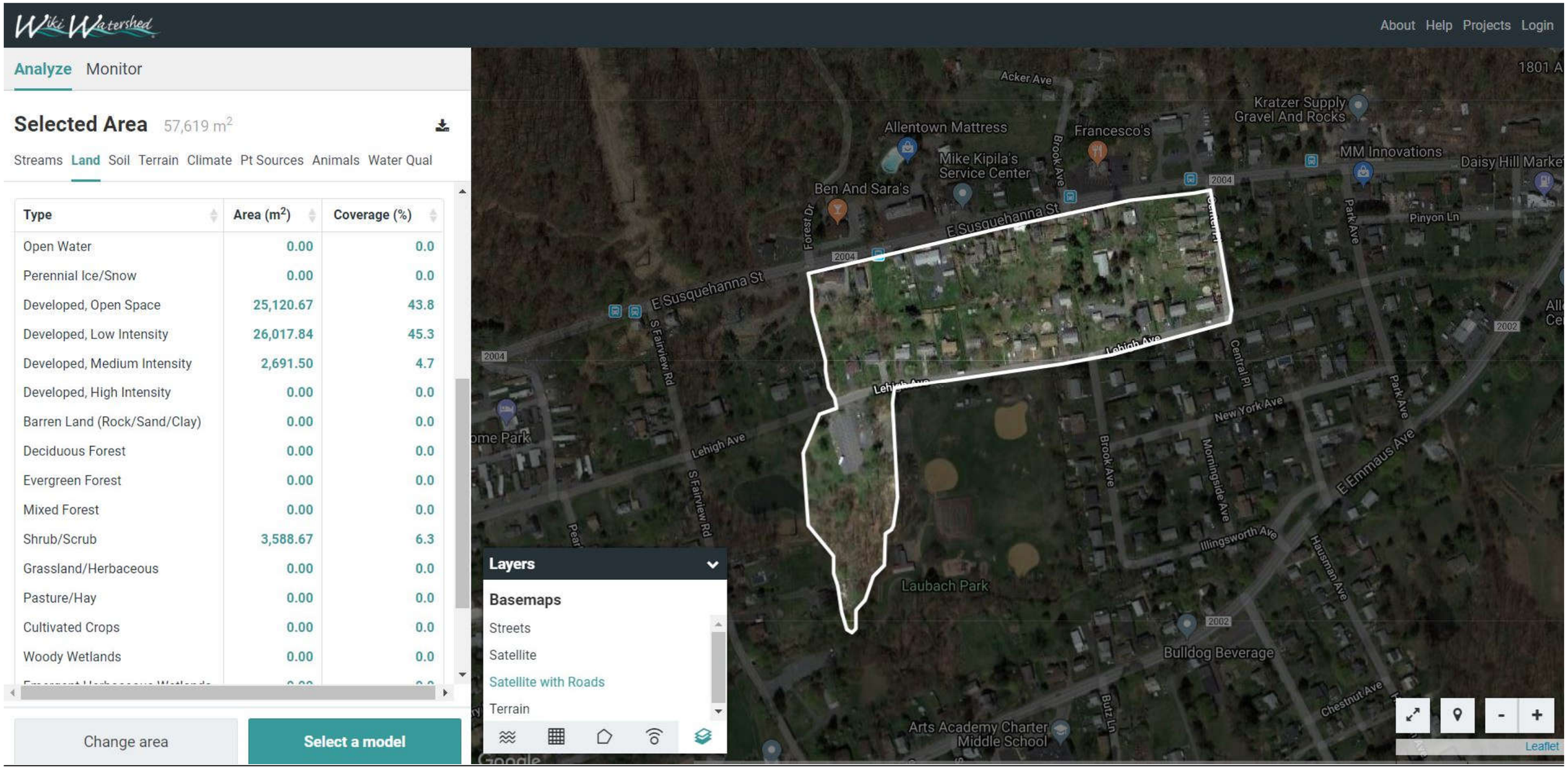
BMP SEDIMENT LOAD (lbs/yr):	**24,380.54**

EXISTING SEDIMENT REMOVAL REDUCTIONS

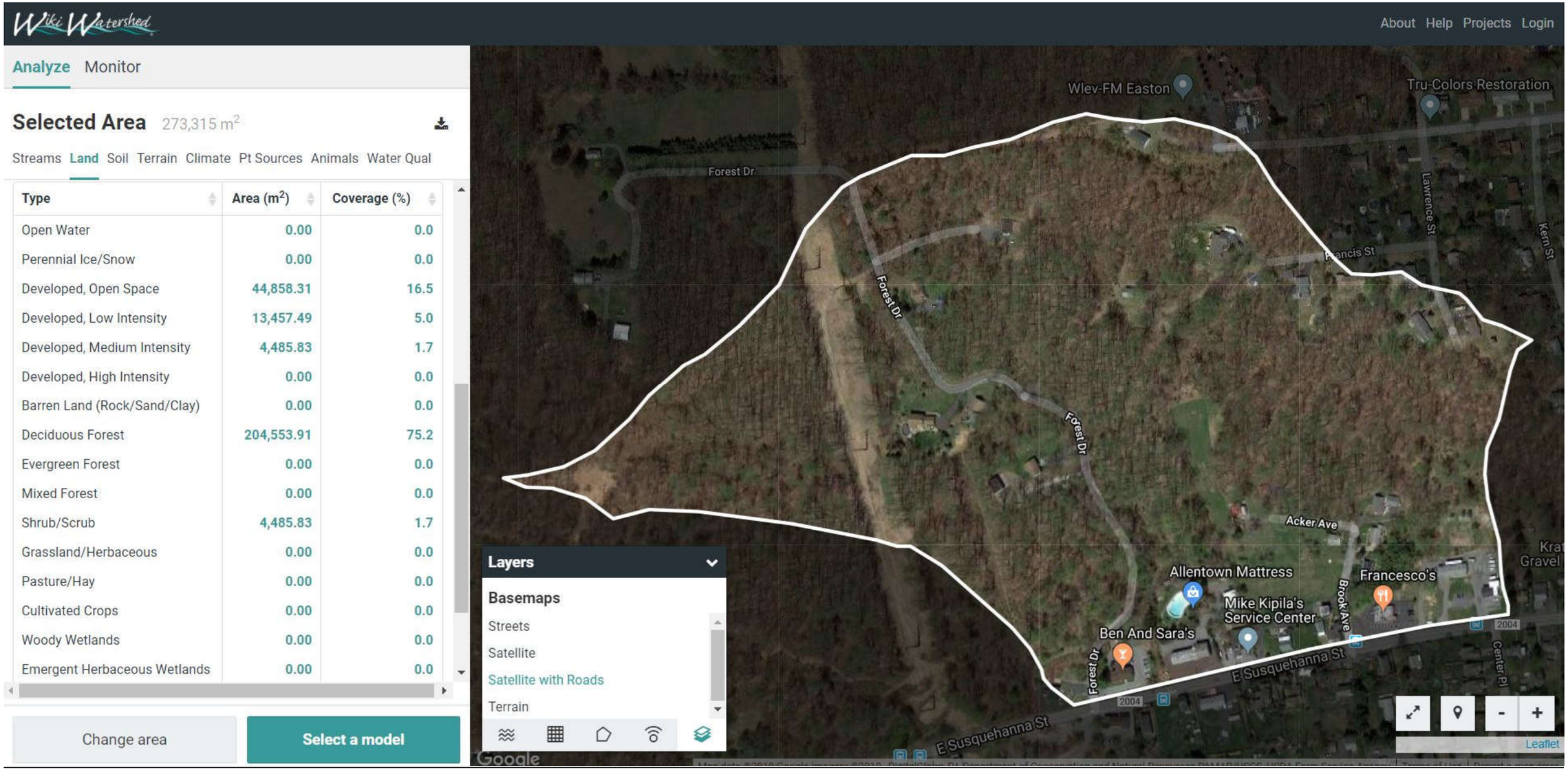
PROPOSED SEDIMENT REMOVAL REDUCTIONS	
Volume Treated (ac-ft.)	**1.157**
Inches of Impervious Area Treated:	**1.35**
Percent Reduction:	**75%**
Removed Sediment:	**18,285.40**

Basin footprint (sf):	25198
Treated depth (in.):	24

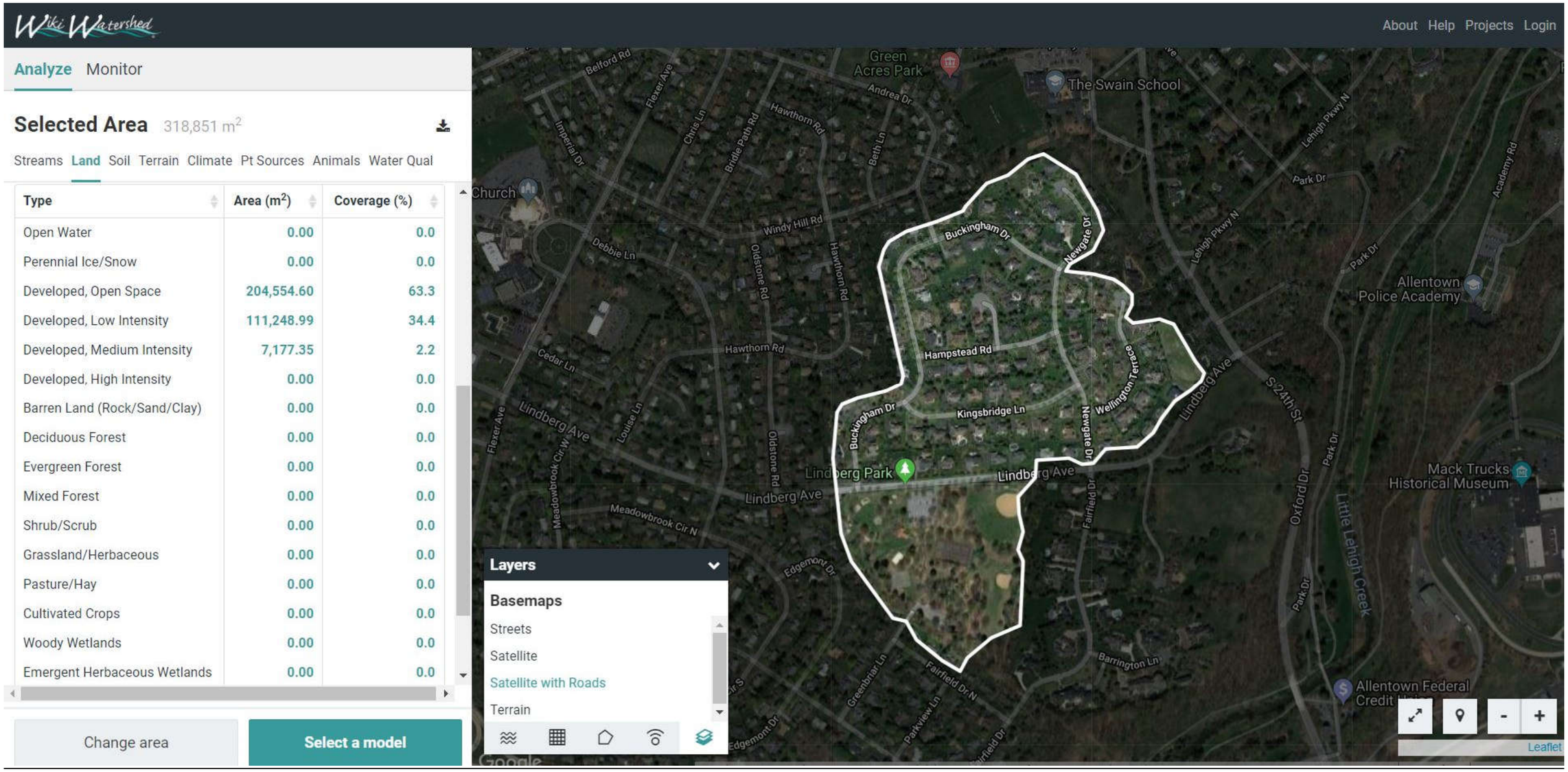
SEWERSHED 042A – CONSTRUCTED WETLAND TRIBUTARY:



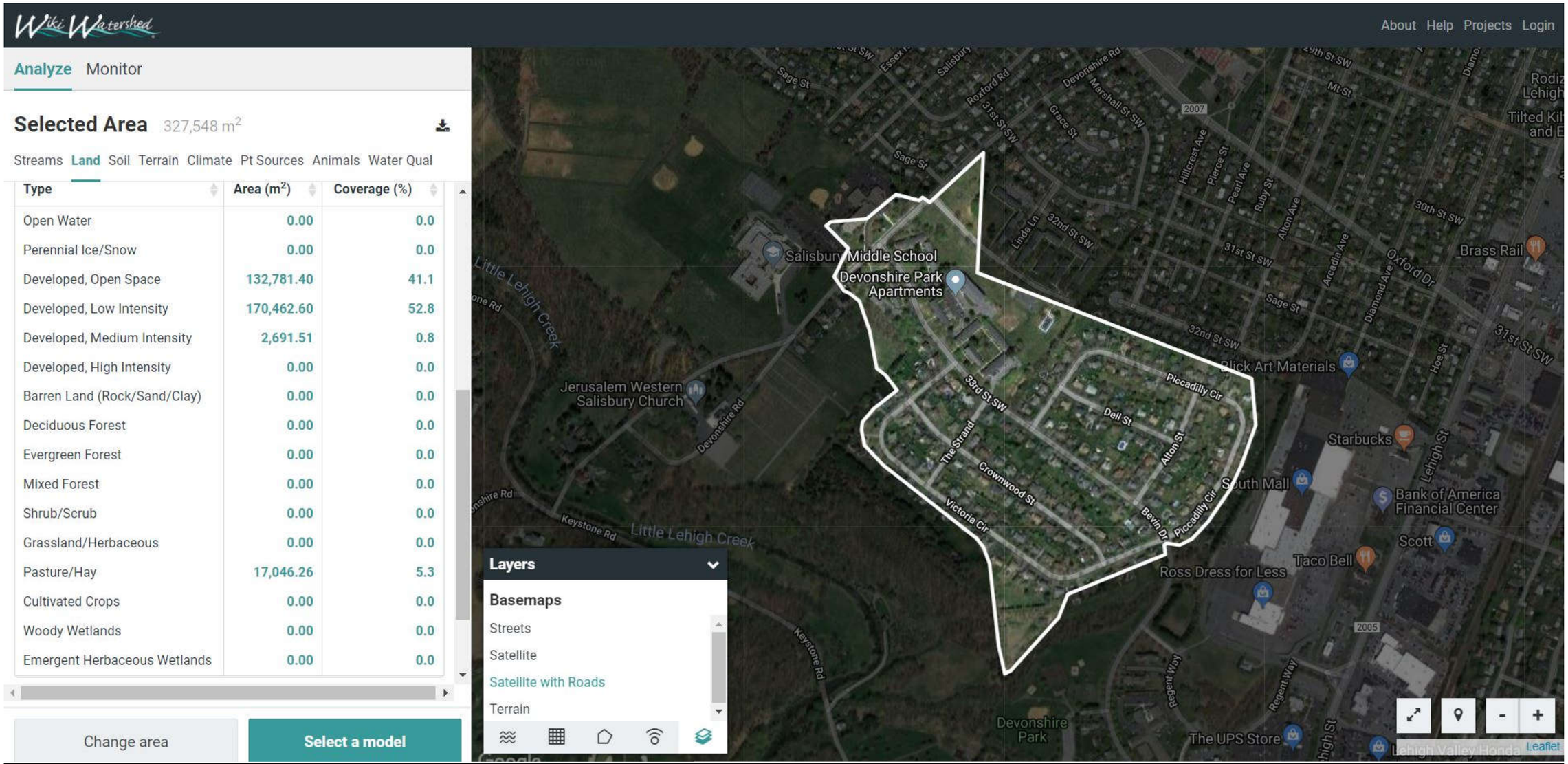
SEWERSHED 042B – CONSTRUCTED WETLAND TRIBUTARY:



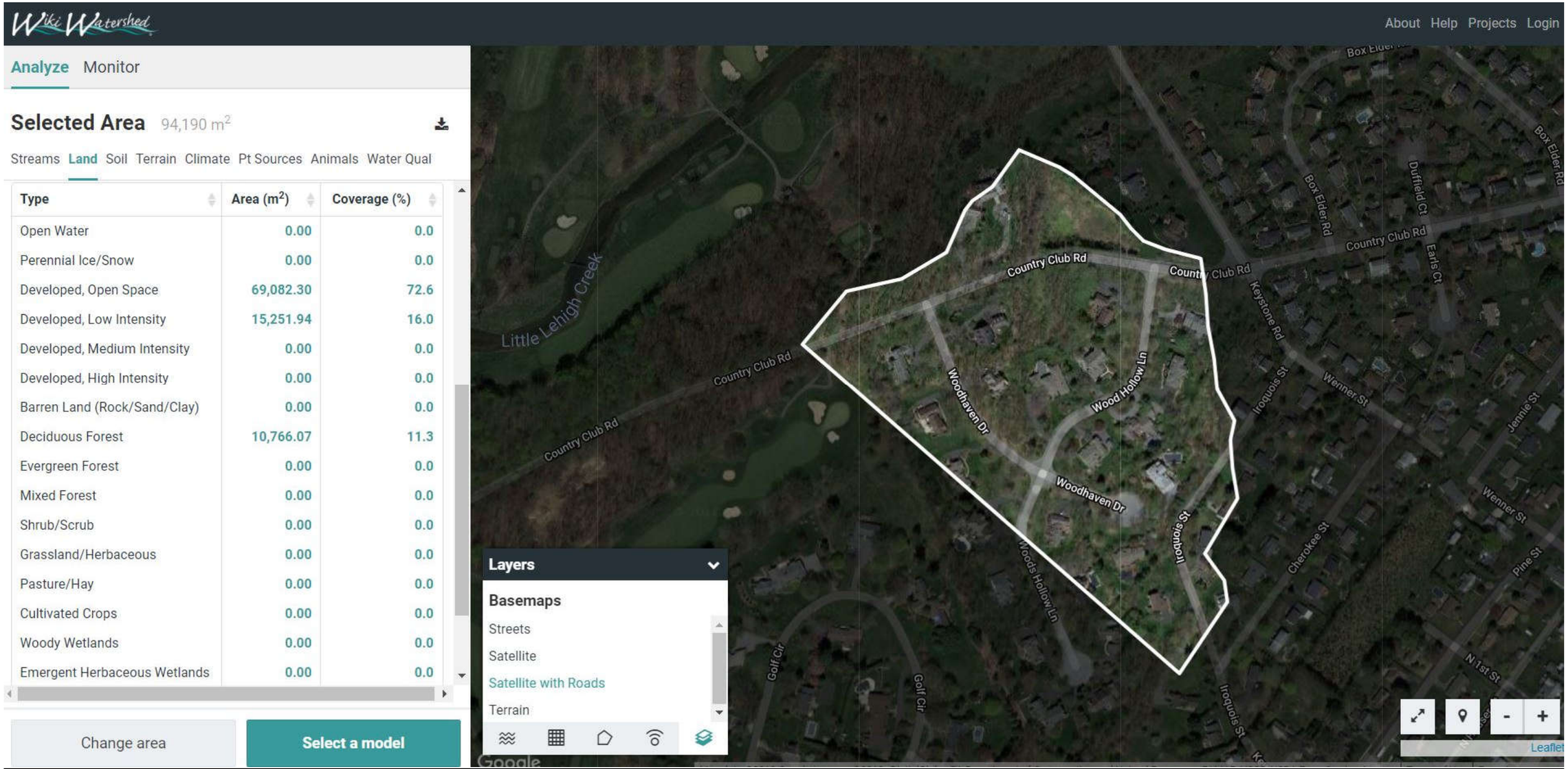
SEWERSHED 054B – DETENTION BASIN RETROFIT TRIBUTARY:



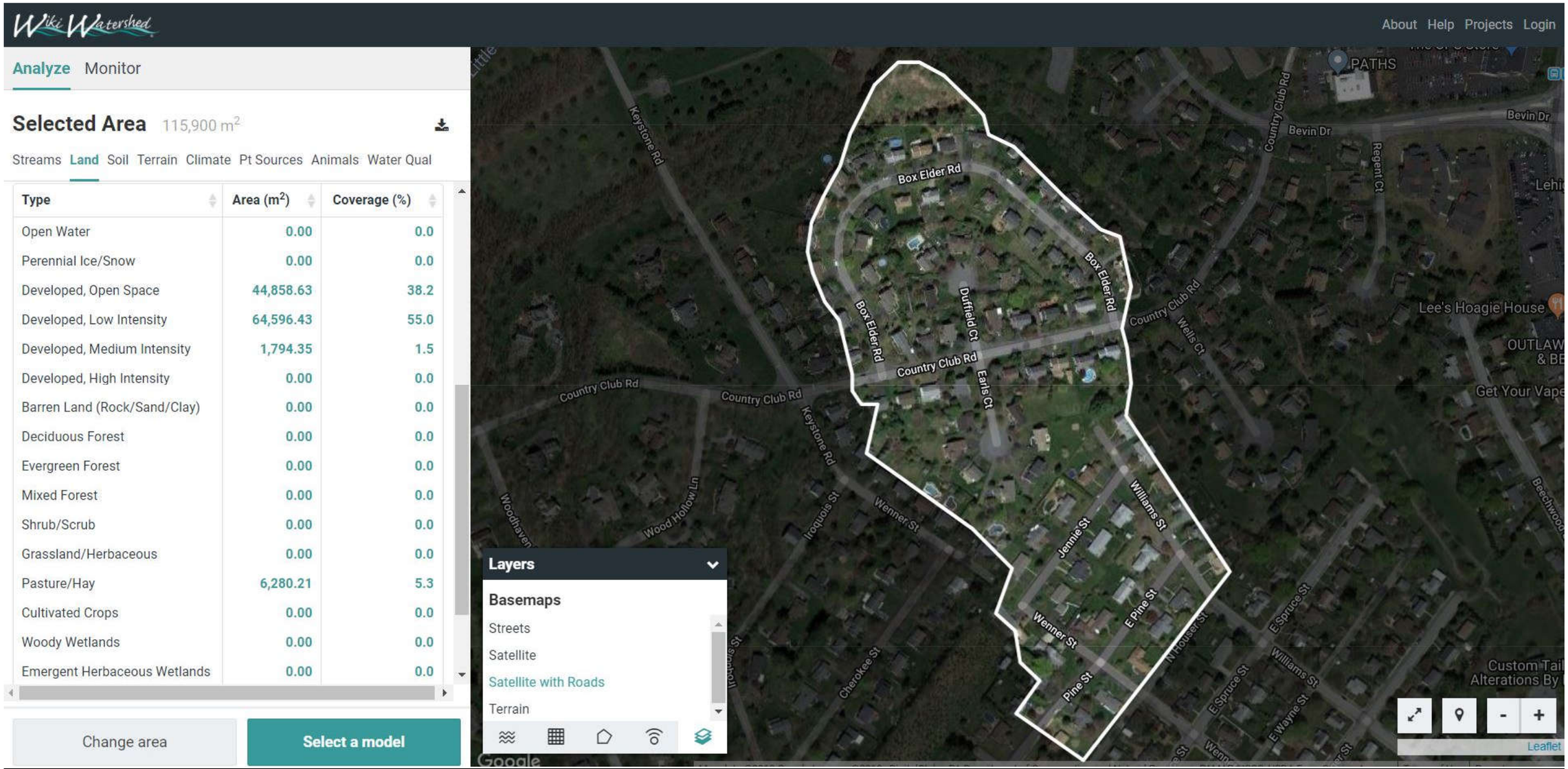
SEWERSHED 064 – DETENTION BASIN RETROFIT TRIBUTARY:



SEWERSHED 070 – DETENTION BASIN RETROFIT TRIBUTARY:



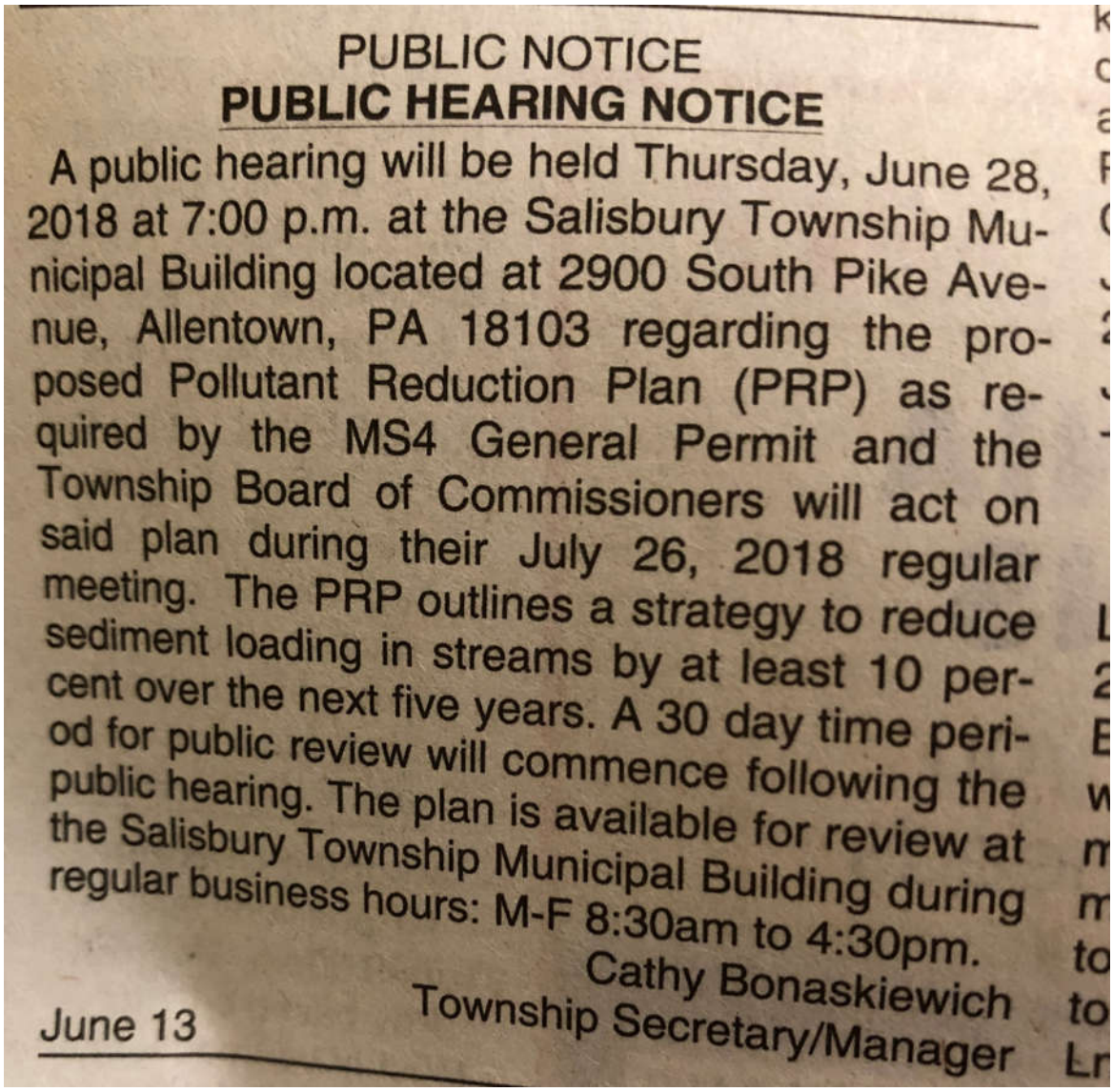
SEWERSHED 071 – DETENTION BASIN RETROFIT TRIBUTARY:



CONSTRUCTED WETLAND CONCEPT PLAN
FOR
LAUBACH PARK


LEHIGH AVENUE
FAIRVIEW ROAD
S.R. 8001
SANITARY MANHOLE RIM ELEVATION = 539.34 VCP 8" NORTH = 530.44 VCP 8" WEST = 529.69
SANITARY MANHOLE RIM ELEVATION = 537.70 VCP 8" EAST = 528.45 VCP 8" WEST = 528.35
STORM MANHOLE RIM ELEVATION = 538.55 CMP 8" NORTH = 535.55 BOTTOM BASIN = 534.25
SANITARY MANHOLE RIM ELEVATION = 542.24 VCP 8" EAST = COULD NOT OPEN VCP 8" WEST = COULD NOT OPEN
SANITARY MANHOLE RIM ELEVATION = 551.59 VCP 8" EAST = 541.41 VCP 8" WEST = 541.31
STORM INLET TOP GRATE = 536.54 CIP 8" S = 535.44
IRON PIPE FOUND
UTILITY POLE
DISCONNECT EXISTING STORM SEWER INTO WETLAND
WETLAND OVERFLOW
CONSTRUCTED WETLAND
NEW STORM SEWER DIRECTED TO WETLAND
PROPOSED SWALE TO WETLAND
STORM PIPE OUTLET RCP 24"X36" OUT = 523.81
STORM PIPE OUTLET CPP OUT = 523.79
EXISTING POND
TOWNSHIP OF SALISBURY DBV. 1081 PG. 446 PIN # 641657318585 PARCEL ID #10NE3-2-27 SQ. FEET: 198984 ACRES: 4.57
SANITARY MANHOLE TOP RIM = 523.64 INVERT = FIELD VERIFY
SANITARY MANHOLE TOP RIM = 521.23 INVERT = FIELD VERIFY
KEVIN T. & CHRISTINE M. WATTO PARCEL ID# 641656289405-1 DBV 1601 PG 1154
N/F TOWNSHIP OF SALISBURY DBV. 1064 PG. 652 PIN # 641655890757 PARCEL ID #10NE3-2-3 SQ. FEET: 418363 ACRES: 9.60
BASKETBALL COURT
BASEBALL FIELD
TENNIS COURT
TENNIS COURT
PLAYGROUND
GRASS AREA
BITUMINOUS PARKING LOT
BITUMINOUS WALKWAY
STONE PARKING AREA
CONCESSION STAND
STONE AREA
BLEACHERS
DUGOUT
SCOREBOARD
WATER FOUNTAIN ON CONCRETE PAD
WATER FOUNTAIN ON CONCRETE PAD
FOOTBALL FIELD GOAL POST
BASEBALL FIELD EDGE OF INFIELD
EDGE OF INFIELD
4' TALL CHAIN LINK FENCE
WOODEN PRIVACY FENCE
LIGHT STANDARD UNDERGROUND WIRES
LIGHT-STANDARD PPL #64704-S46676
LIGHT STANDARD #64705-S46685
LIGHT-STANDARD PPL #64697-S46688
LIGHT STANDARD OVERHEAD WIRES
LIGHT STANDARD ATTCH #64674-S46635 & #64697-S46688 UNDERGROUND WIRES
SANITARY SEWER RIGHT OF WAY DBV 330 PG 314
SANITARY SEWER EASEMENT DWG. NO.-206 DBV 1258 PG 874 ARNOLD TO ARNOLD
SANITARY SEWER EASEMENT DWG. NO.-205 DBV 1258 PG 874 ARNOLD TO ARNOLD
SANITARY MANHOLE TOP RIM = 527.40 VCP 8" W = FIELD VERIFY
SANITARY MANHOLE TOP RIM = 505.91 INVERT = FIELD VERIFY
PPL POLE #64645-S46705 UNDERGROUND WIRES NO PARKING ANYTIME
PPL POLE #64697-S46647 UNDERGROUND WIRES
PPL TRANSFORMER UNDERGROUND WIRES
PPL BOLT #64711-S46729 UNDERGROUND WIRES
SIGN NO PARKING
SIGN PARK RULES
SIGN WILLIAM H. LAUBACH MEMORIAL PARK
SIGN CROSSWALK
SIGN POLICE, TIP LINE 30" TRUCK
SIGN PARK/POND RULES
BOLLARD
HANDICAPPED PARKING
HANDICAPPED SPACE
1 HANDICAPPED SPACE
9 SPACES
10 SPACES
2 SPACES
13 SPACES
4 SPACES
3 SPACES
CONCRETE PADS
FLAGPOLE
SHED
DOG RUN
GAZEBO
CONCRETE BRIDGE
WOODEN FOOT BRIDGE
TROUT CREEK
TRACT LINE
TRACT LINE
TRACT LINE
TRACT LINE
WOODS
LIDAR CONTOURS
EXISTING PAVILION
EXISTING FRAME BUILDING
CONCRETE PADS
CASTING WOODS
GEORGE STREET (UNOPENED)
CARTWAY 33' R.O.W.
50' R.O.W.
15' R.O.W.
15' ABANDONED R.O.W.
ABANDON HIGH TENSION TOWER
UTILITY EASEMENT DBV 1629 PG 878
16' TREE PP&L UTILITY EASEMENT MISC. VOL. 228 PG. 252 DWG. # LA-41185-O HOSENSACK-ALLENTOWN LINE 60' WIDE
PP&L UTILITY EASEMENT MISC. VOL. 220 PG. 268 DWG. # LA-39345-O HOSENSACK-ALLENTOWN LINE 60' WIDE
PINE ROW 50' WIDE
N/F CRAIG & KIMBERLY HALDEMAN PARCEL ID# 641656360675-1 DOC. ID# 7144305
N/F RICHARD & KAREN ORLEMANN PARCEL ID# 641655637498 1 DOC. ID# 7478459
N/F PAMELA J. ZINSZER PARCEL ID# 641656541719-1 DBV 1366 PG 0446
N/F SAEED MOGHAL DBV 1276 PG 865 PARCEL ID# 641656856803-1 DOC. ID# 7387294
N/F TOWNSHIP OF SALISBURY DBV. 1095 PG. 1149 PIN # 641656976388 PARCEL ID #10NE3-2-18 SQ. FEET: 4531 ACRES: 0.10
N/F JOHN A. & SUSAN ASP DBV 1276 PG 865 PARCEL #10NE3-2-19
N/F JOHN A. & SUSAN ASP DBV 1236 PG 50 PARCEL #10NE3-2-18A
N/F AUTHUR SHUKAITIS DBV 1323 PG 761 PARCEL #10NE3-2-17
N/F BRIAN C. & LORI L. PRITCHARD DBV 1640 PG 0757 #10NE3-2-4A
N/F JIM F. & JUDITH C. BOWER DBV 1331 PG 0893 #10NE3-2-4
N/F DENNIS R. JR. & KATHLEEN M. PASLEY INSTR. # 2013033310 #10NE3-2-6
N/F IVY C. PYCHINKA DBV 1437 PG 0136 #10NE3-2-7A
N/F JOHN E. & JESSICA A.SCHMIDT DBV. 1659 PG. 0703 #10NE3-2-7
N/F MARYANN WOLF INSTR. # 2010043636 #10NE3-2-7B
N/F DANIEL S. & WENDY L. BELLESFIELD INSTR.# 7457702 #10NE3-2-3
N/F LYDIA BARRETO, JUDY A. BARRETO MATOS & DENNIS MATOS INSTR. # 2014002941 PARCEL #10NE3-2-16 TRACT 2
N/F LYDIA BARRETO, JUDY A. BARRETO MATOS & DENNIS MATOS INSTR. # 2014002941 PARCEL #10NE3-2-16 TRACT 1
IRON PIN FOUND
IRON PIPE FOUND
IRON PIPE FOUND (HELD FOR LINE)
IRON PIPE FOUND (BURIED 1' NOT HELD)
OLD FENCE POST (TYP.)
BUSH ROW
UTILITY POLE WITH UNDERGROUND WIRES & SIGN WITH PARK RULES
HANDICAPPED AREA WITH SLOPE
ARBORITAS
EXISTING LEGAL RIGHT OF WAY
S 80°19'24" W 413.64'
N 80°06'22" E 572.44'
S 80°06'22" W 205.24'
N 10°01'59" W 635.45'
S 74°24'53" W 359.62'
N 87°39'43" E 80.89'
N 67°19'49" E 80.66'
N 86°53'08" E 220.00'
N 84°53'50" E 101.41'
N 70°40'43" E 100.00'
N 15°19'17" W 32.96'
S 15°19'17" E 32.96'
S 10°01'18" E 393.44'
N 60°15'40" E 313.10'
S 43°50'10" E 104.10'
N 60°15'40" E 121.79'
N 87°55'20" E 89.79'
N 2°55'20" E 89.79'
N 11°55'20" E 89.79'
N 87°55'20" E 89.79'
S 11°55'20" E 89.79'
S 2°55'20" W 89.79'
S 87°55'20" W 89.79'
N 11°55'20" W 89.79'
N 87

PUBLIC NOTICE ADVERTISEMENT



PUBLIC NOTICE

PUBLIC HEARING NOTICE

A public hearing will be held Thursday, June 28, 2018 at 7:00 p.m. at the Salisbury Township Municipal Building located at 2900 South Pike Avenue, Allentown, PA 18103 regarding the proposed Pollutant Reduction Plan (PRP) as required by the MS4 General Permit and the Township Board of Commissioners will act on said plan during their July 26, 2018 regular meeting. The PRP outlines a strategy to reduce sediment loading in streams by at least 10 percent over the next five years. A 30 day time period for public review will commence following the public hearing. The plan is available for review at the Salisbury Township Municipal Building during regular business hours: M-F 8:30am to 4:30pm.

Cathy Bonaskiewich
Township Secretary/Manager

June 13

Advertisement in the June 13, 2018 edition of the THE PRESS owned and operated by Times News, Inc. newspaper

PUBLIC COMMENTS AND RESPONSES

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