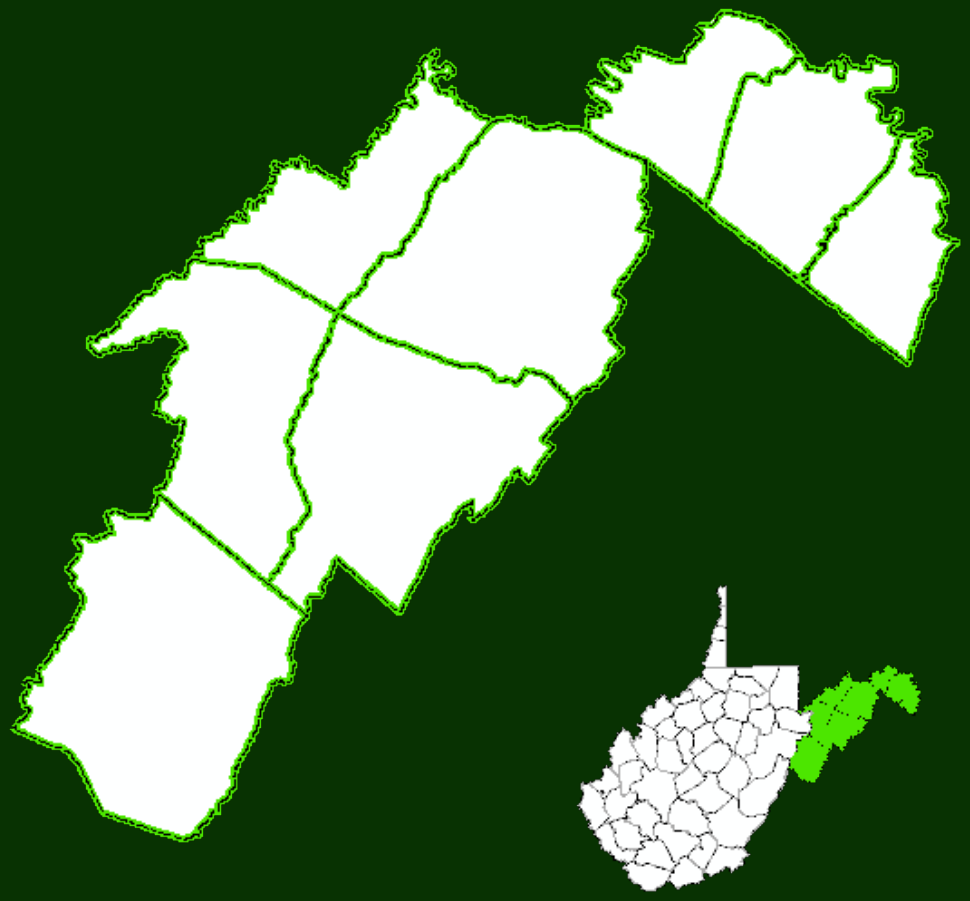
Estimating Construction AC in WV's Chesapeake Bay Counties

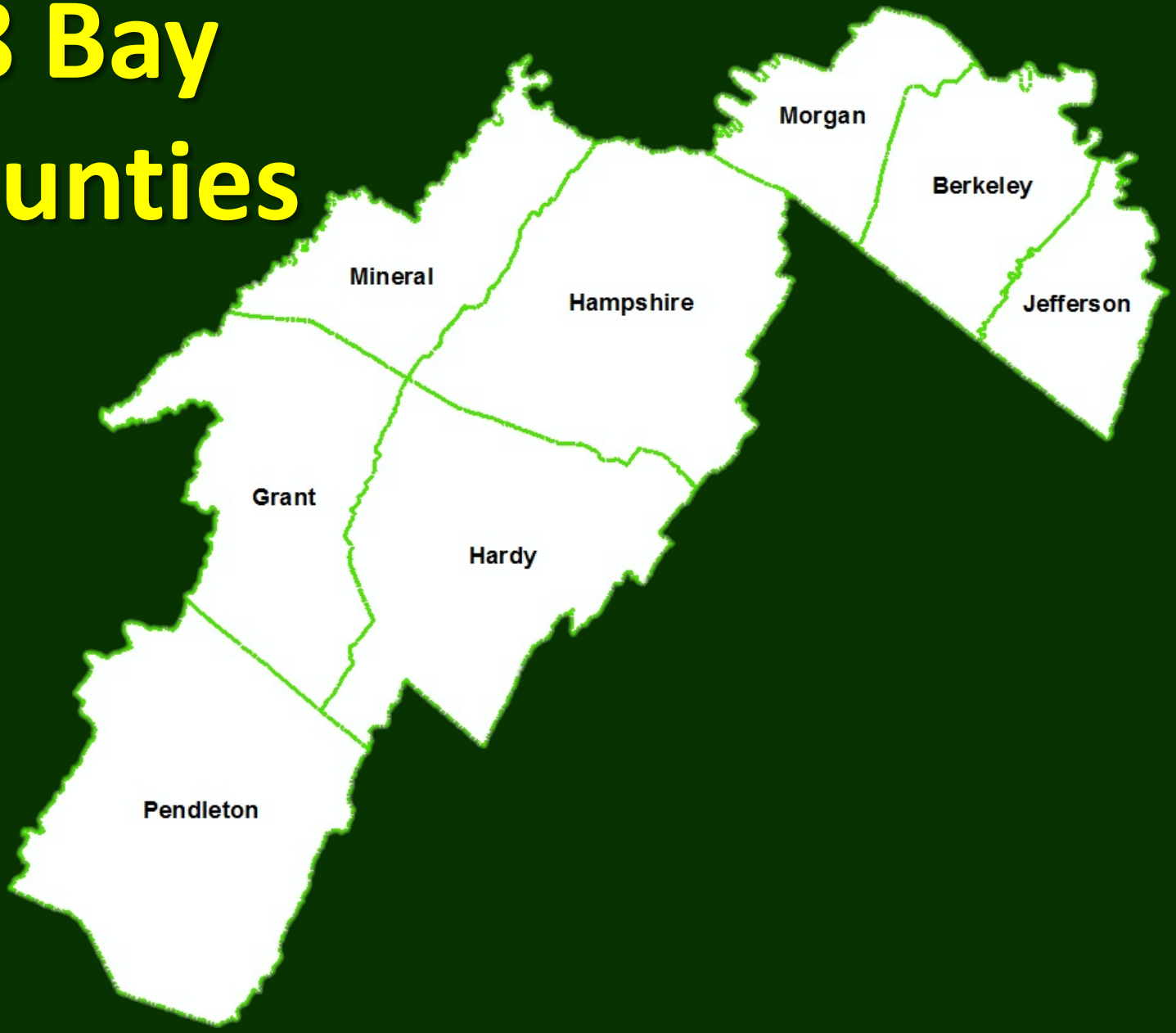


Land Use Work Group
February 2013

WV/NPDES Stormwater Construction General Permit WV0115924

- 1992 - Earth disturbance ≤ 3 acre
- 2002 - Earth disturbance ≤ 1 acre
- Exemptions: agricultural activities, logging, most oil & gas construction, and earthmoving covered under other NPDES permits, such as coal mining

8 Bay Counties



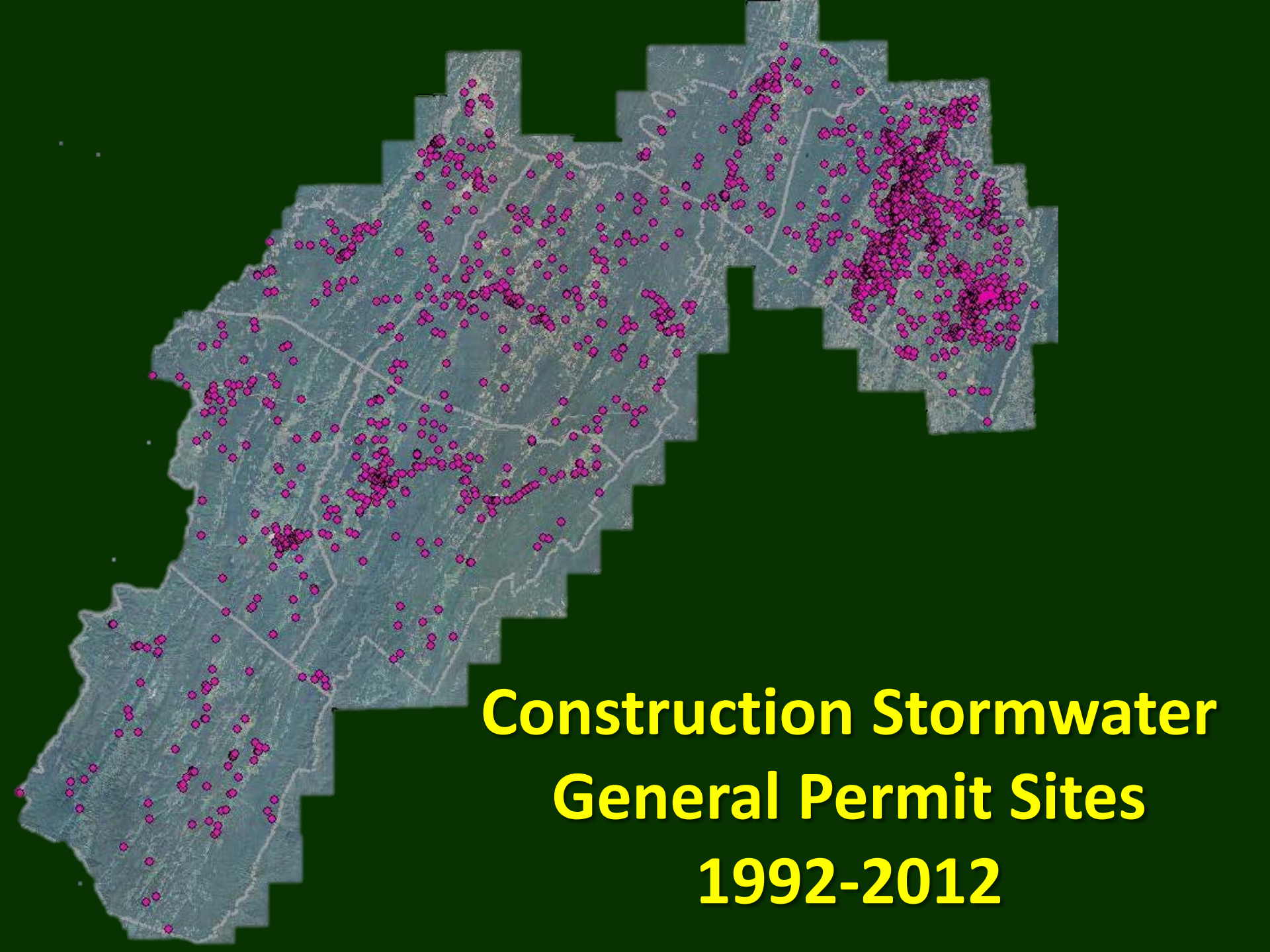
County	2006 Acres Permitted	P5.3 Model Acres Bare-construction
Berkeley	6692.33	111.2
Grant	669.78	49.2
Hampshire	1003.67	29.1
Hardy	1398.46	46.9
Jefferson	3537.2	169.8
Mineral	385.34	18.5
Morgan	271.03	12.8
Pendleton	248.98	19.4
Total	14,206.8	457.0

P5.3.2 corrected this land use issue in the model

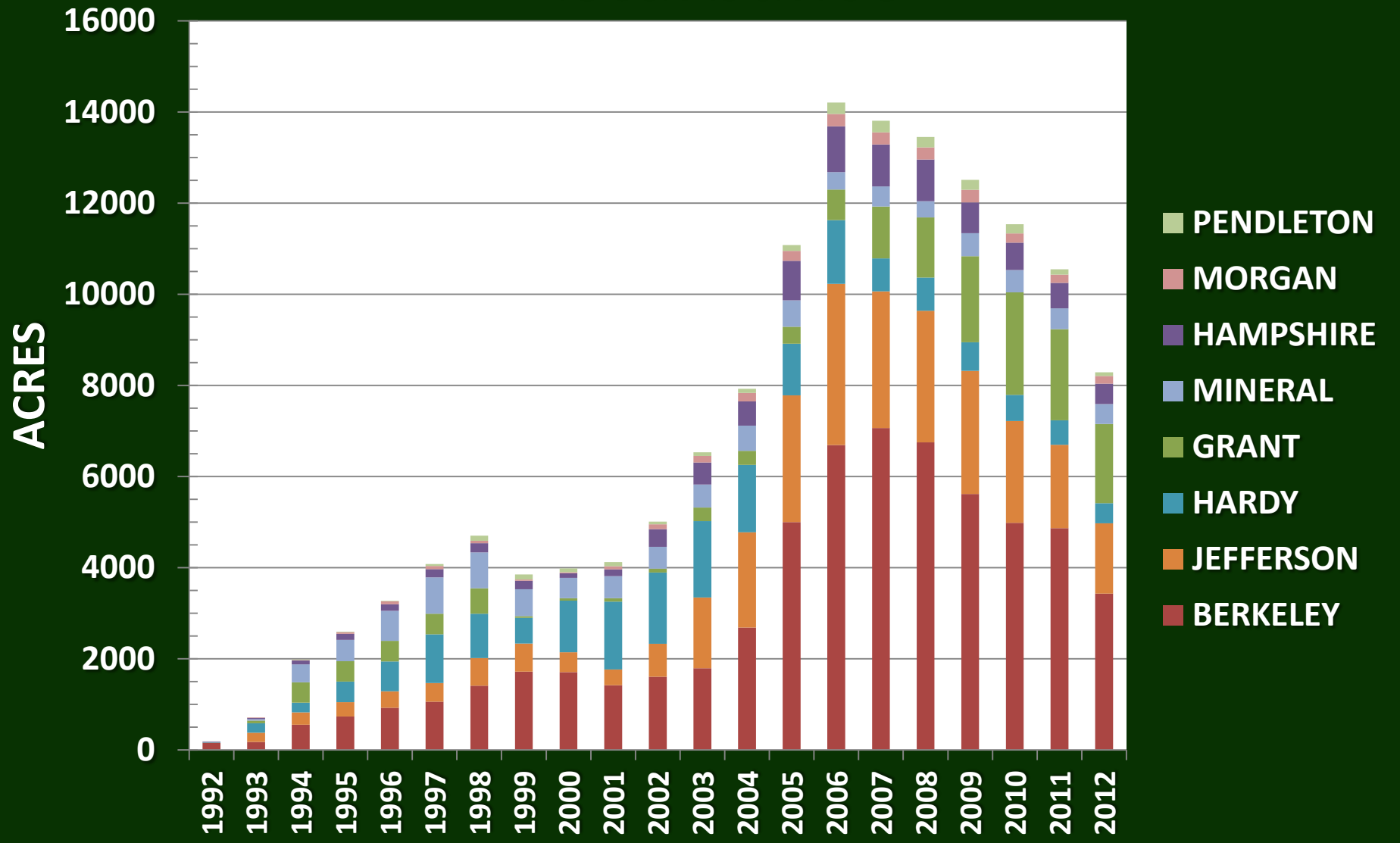
Currently Open Construction Stormwater General Permit Sites

WV WIP 2 Milestone

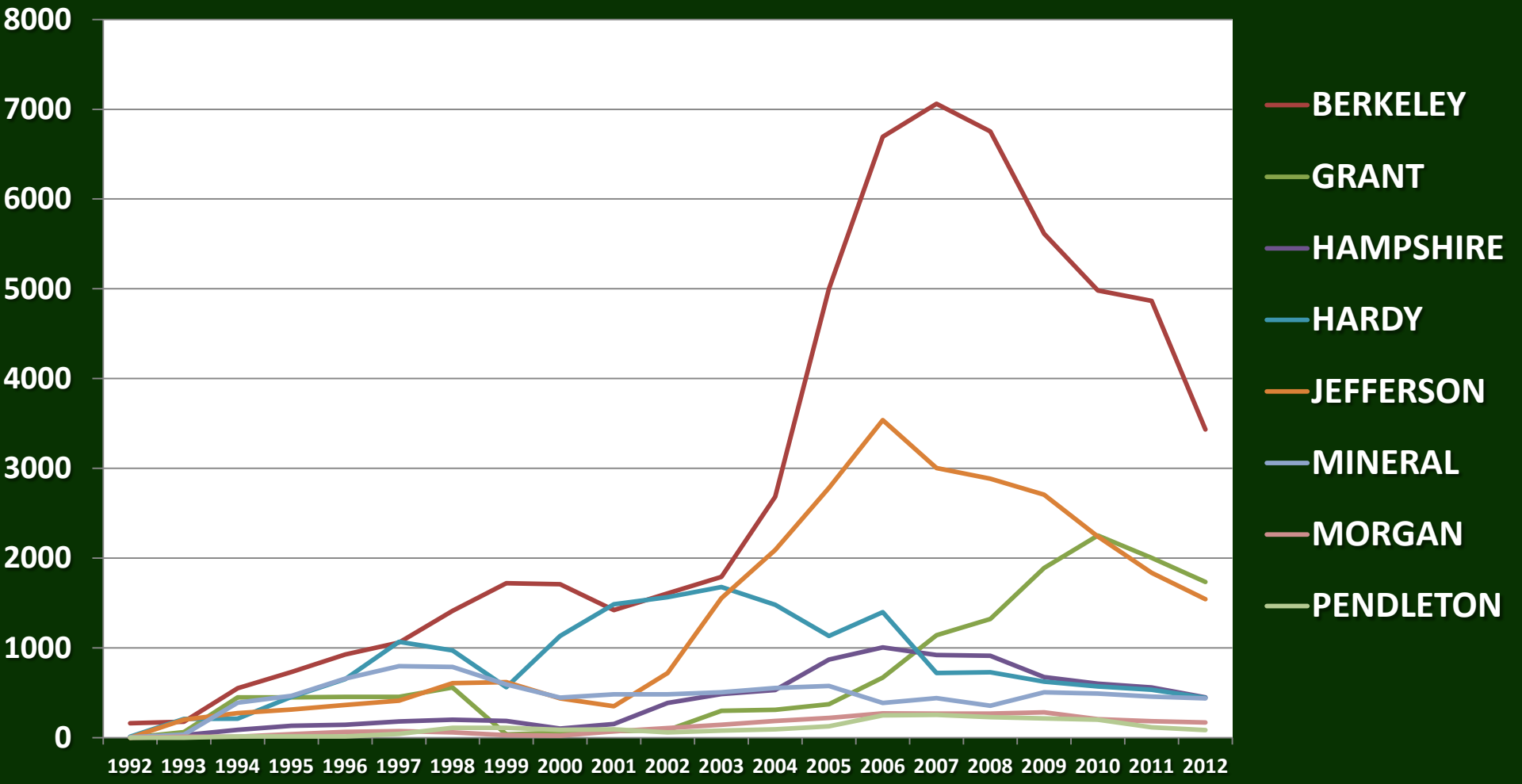
County	2012 Actual (ac)	Future Implementation Goals (ac)			
		2013	2015	2017	2025
Berkeley	3433	6,066	5,000	4,000	3374
Grant	1735	2,482	2,000	1,800	1,000
Hampshire	448	300	350	350	350
Hardy	443	901	500	450	400
Jefferson	1541	3,182	2,500	2,000	1,750
Mineral	438	440	440	440	300
Morgan	169	199	200	200	200
Pendleton	83	239	200	200	200


Construction Stormwater
General Permit Sites
1992-2012

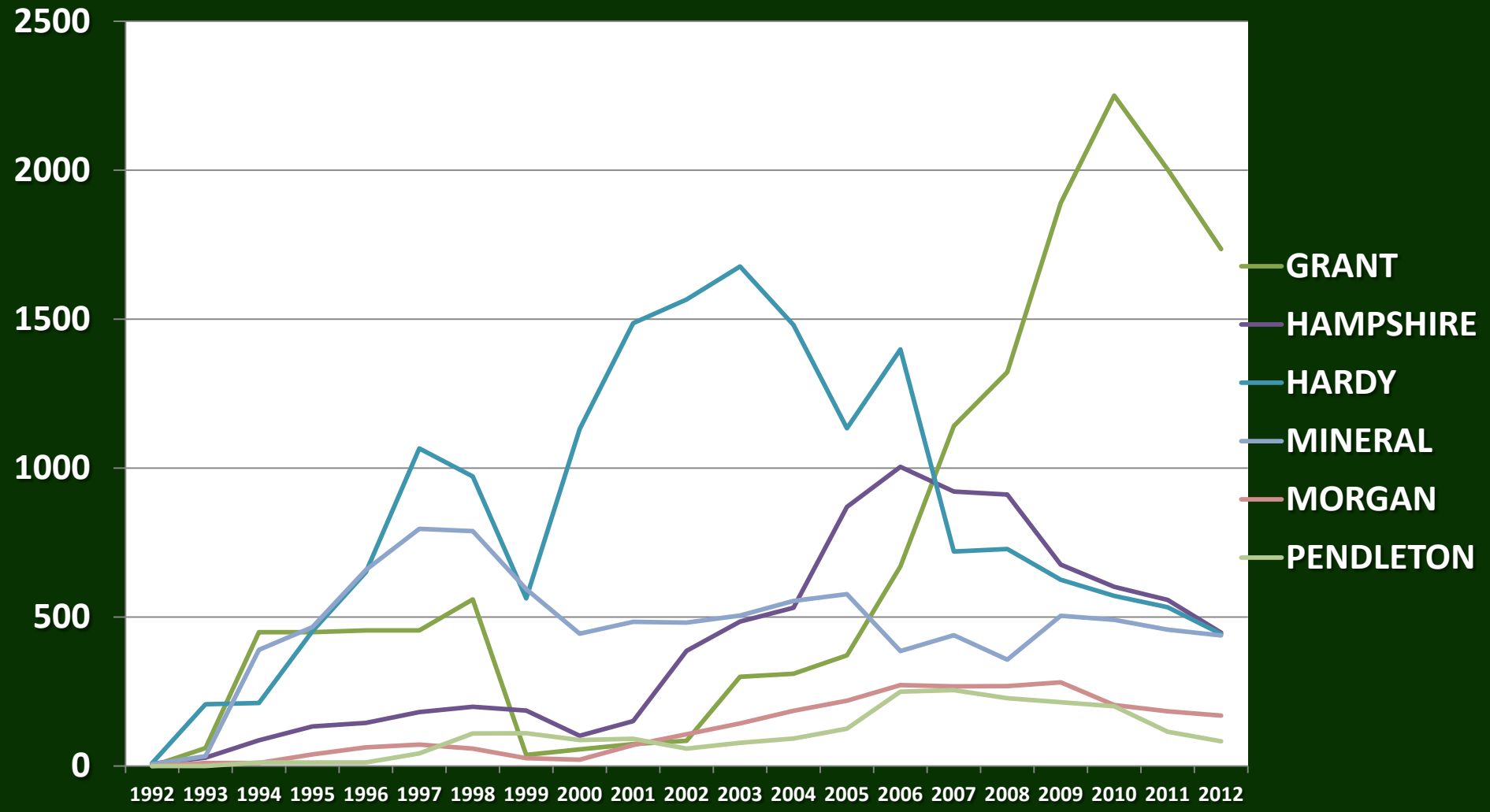
Concurrently Permitted Acres of Disturbance

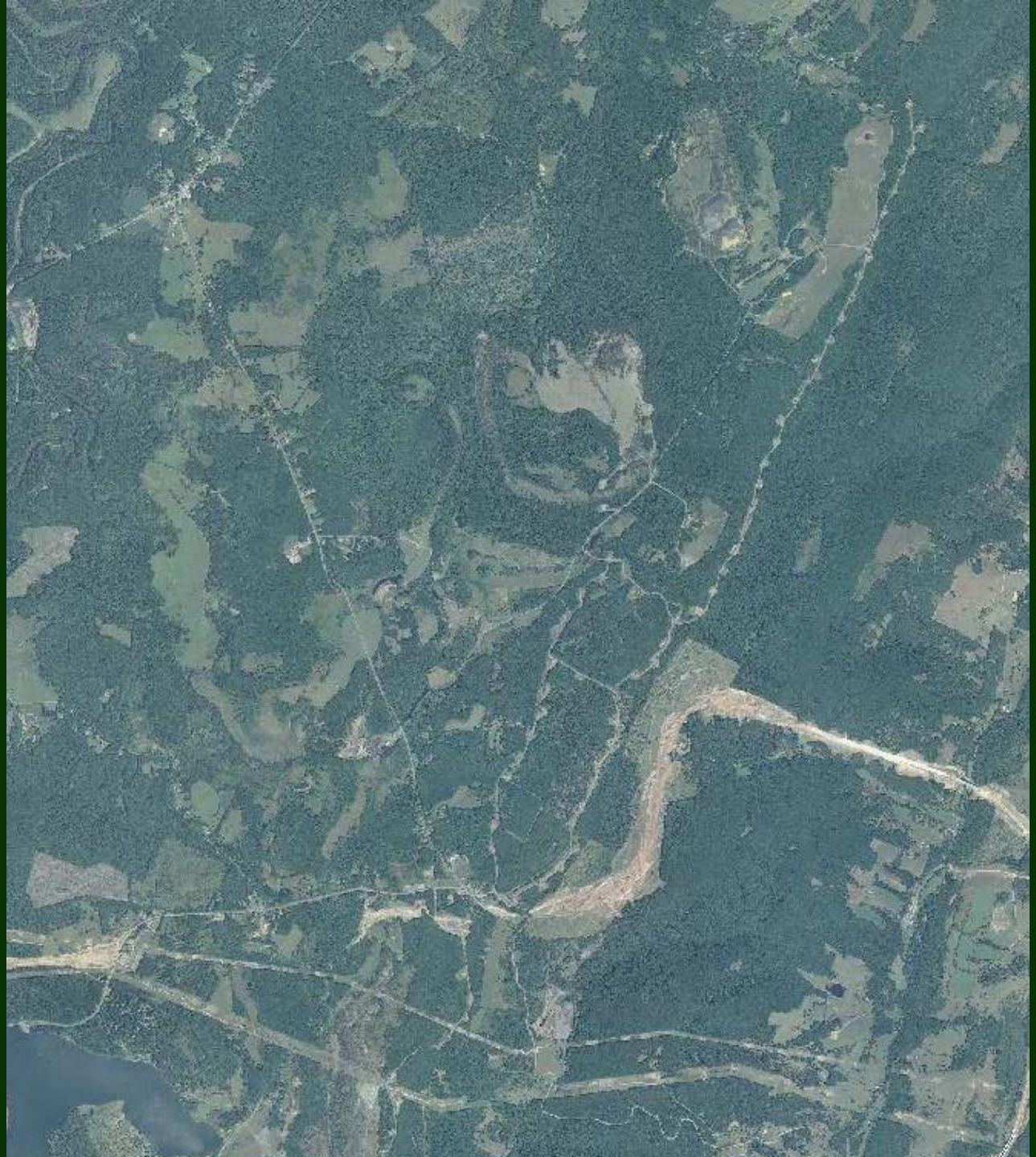


Concurrently Permitted Acres of Disturbance



Concurrently Permitted Acres of Disturbance





Project Name _____

Section 1.a. Select the project type.

This project is a ☐ new development ☐ redevelopment ☐ retrofit BMP

Section 1.b. Attach a topographic map that outlines both the project boundary and the limits of disturbance.

Section 1.c. List the total project area and the total earth disturbance.

Total Project Area _____ ac

The area being developed under this permit registration, including portions of the site that may not be disturbed during the project.

Total Disturbed Area _____ ac

All disturbed areas directly related to construction of the entire project (offsite waste/borrow, access roads, utility installation, sediment controls etc.) that will be covered under this registration.

Section 1.d. Please read the land use category descriptions below. Then, on page 2, list the number of acres of each land use in the pre and post development states for whichever is larger, the project area or disturbed area.

Hay is land managed for the production of forage crops that are machine harvested. The forage crop may be grasses and/or legumes. Fallow land should also be included in this category.

Pasture is land managed primarily for livestock grazing.

Trampled Riparian Pasture is defined as a 35 ft. width on either side of an unfenced stream that runs through any pasture. This area will be calculated by multiplying the number of linear ft. of stream running through project by 70 ft. and then dividing the total by 43560 sq. ft. to report acres. This area will then be subtracted from the total area of land in the Pasture category.

Crop is land managed for the production of row crops and open nurseries.

Urban Impervious areas are developed lands that have a land cover that prevents infiltration of surface water. Examples include concrete, asphalt, brick, roofing, other man-made materials, compacted soils and exposed rock outcroppings.

Urban Pervious areas are developed lands that allow infiltration of surface waters. Examples include lawns and other vegetation, permeable pavements and pavers. Gravel lots and roads should be counted as pervious unless the ground underneath the stone layer is heavily compacted.

Forest land use, for the purpose of this addendum, is broader than any standard definition of forested land cover. Any land that does not fall into one of the above categories should be counted as forest. Typically this will include any wooded or open areas that are not used for agriculture and/or have not been developed. This broader definition is used to conform to the Chesapeake Bay TMDL models. The models determine the acreage of forest by subtraction from all other calculated areas.

Project Name _____

Existing Land Use (in acres)		Proposed Land Use (in acres)	
Hay		Hay	
Pasture		Pasture	
Trampled Riparian Pasture		Trampled Riparian Pasture	
Crop		Crop	
Urban Impervious		Urban Impervious	
Urban Pervious		Urban Pervious	
Forest		Forest	
Unknown Land Use			

Section 2. Stormwater Management

Is your project in a MS4 community? ☐Yes ☐No

Does this project's stormwater management plan meet a volume reduction or retention standard (choose one)?

☐1" capture ☐Other enter standard _____

☐95th percentile ☐None

Do you have any post construction stormwater management BMPs proposed? ☐Yes ☐No

If **Yes**, then complete **Section 3**

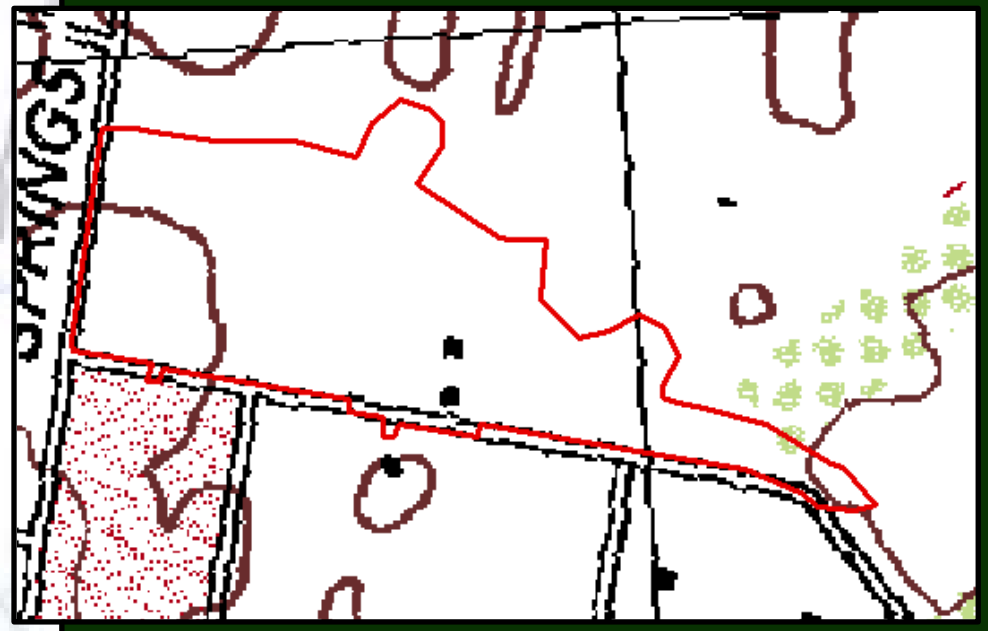
Section 3 Instructions

1. Select the BMP(s) that will be used for the project. Definitions for each BMP can be found at the end of the addendum. If the project will use more than one of a particular BMP (i.e. 3 wet ponds), please list each structure separately. Those additional BMPs can be listed at the bottom of the table or on a separate sheet of paper. Be sure to provide all requested information for each practice.

2. List the total amount of drainage area, in acres, that will flow through each BMP and the number of acres of impervious surface that will drain to that practice.

3. Locate the outlet point for the BMP. For BMPs that do not have a discernible outlet, use the approximate center point of the practice. For precision, latitude and longitude should be given to the nearest seconds. (Example: latitude 38° 18' 46", longitude 81° 34' 13"). Indicate if the coordinates reported are for the outlet or center point of that BMP.

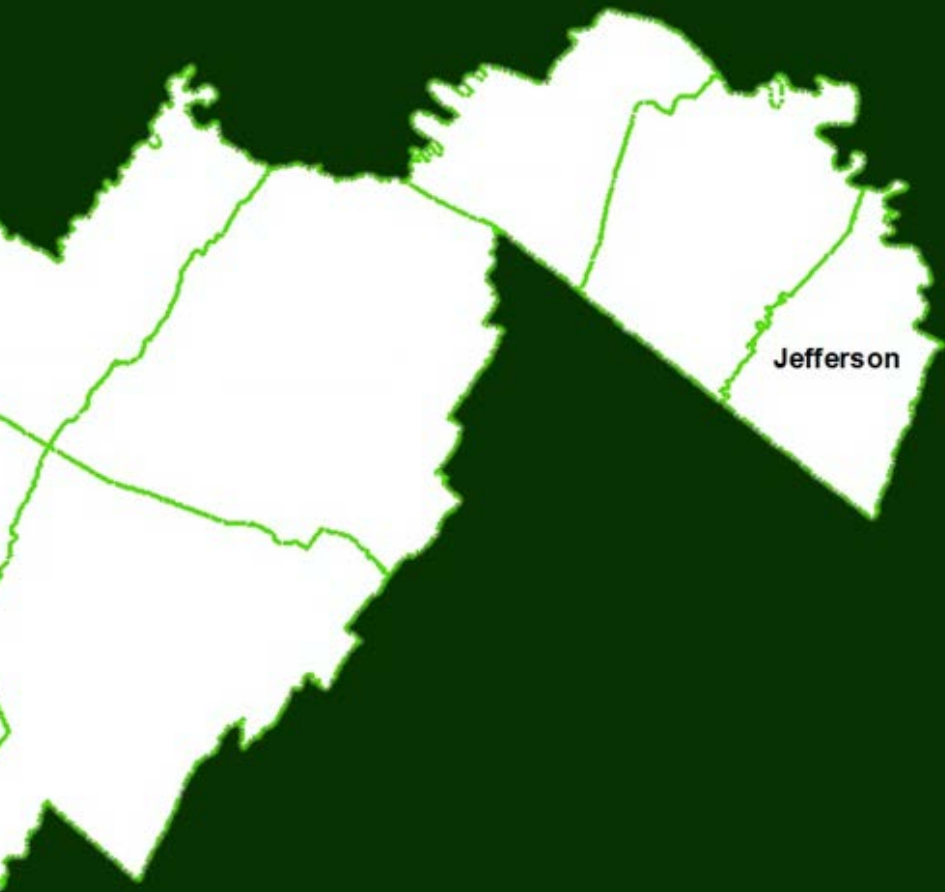
Disturbed Site
Area =
18.71 acres



Jefferson County Land Use Map

- 3 m resolution
- 2010-12 high resolution aerial imagery
- Completion date June 2013

Jefferson County Land Use Map



- Forest/woodland
- Orchard
- Grass/Shrub/Fallow
- Cropland
- Pasture
- Hay
- Wetland
- Barren/Extractive
- Open Water
- Low-Intensity Pervious urban (<50%IC)
- High-Intensity Pervious Urban (>50%IC)
- Low-Intensity Impervious Urban (<50%IC)
- High-Intensity Impervious Urban (>50%IC)