P6 Extractives Lands

Maryland Data and Proposal

LUWG May 4, 2016

Jeff White

History of Decision Making

- **2014** – Extractive lands included in proposed P6 land-use classifications sent to WQGIT
- **October 2014** – WQGIT approved land-use classifications at
- **June 2015** – LUWG meeting: "extractive under further consideration"
- **September 2015** –WTWG meeting, proposals for extractive in P6 put on agenda
  - Proposal 1: Extractive lands in mixed open, because:
    1. No data to inform loading rates
    2. No accurate spatial delineation of extractive lands
    3. No BMP implementation
  - Proposal 2: No counter proposal
    - Would need to provide evidence contrary to the 3 points outlined above as to why extractive should be explicitly simulated
  - MDE counter proposal:
    - Apply open space relative loading rate to extractive lands

Reasons for including extractive in P6

A. There is precedent including extractive land in the modeling framework
   - Extractive land has been included in the Phase 5 model, the Bay TMDL and MD's Phase II WIP
   - Removing extractive land due to a lack of loading data could set a precedent for other land-uses with a paucity of data

B. Extractive land is regulated by NPDES permit
   - Loads from NPDES-regulated lands should be defined as regulated within the modeling and accountability frameworks
   - Extractive loads were part of the WLA within the Bay TMDL
   - Reductions from extractive land were explicitly specified within MD's Phase II WIP

C. The 3 preconditions for including a land use in Phase 6 are being met
   1. **No data to inform loading rates:** MD requires monitoring in the extractive permit. Modeling could be used to supplement whatever data is available
   2. **No accurate spatial delineation of extractive lands:** MD has accurate spatial data on extractive lands
   3. **No BMP implementation:** Under NPDES permits, SW BMPs are required on extractive lands.

   Furthermore, the burden of proof for making a change (removing extractive) should require evidence showing that the preconditions are not being met (panel report, literature review) rather than an absence of evidence showing that they are being met

MD Proposal

- As stated in September 2015 WTWG meeting
  - Explicit estimates of extractive lands in land-use
  - Apply relative loading rate for open space
  - Explicit model simulation and output for extractive lands
    - For tracking and management purposes
  - Research and investigate loading rates for extractive lands for Phase 7 model
    - Expert panel report
      - Can use data currently being collected by MD mineral mines

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Stormwater Permits

GENERAL PERMIT FOR DISCHARGES FROM MINERAL MINES, QUARRIES, BORROW PITS AND CONCRETE AND ASPHALT PLANTS

GENERAL DISCHARGE PERMIT NO. 10MM **NPDES PERMIT NO. MDG49**

Effective Date: May 1, 2010 **Expiration Date:** April 30, 2015

GENERAL PERMIT FOR DISCHARGES FROM SURFACE COAL MINES AND RELATED FACILITIES

DISCHARGE PERMIT NO. 11-CM **NPDES PERMIT NO. MDG85**

Effective Date: May 1, 2014 **Expiration Date:** April 30, 2019

(c) The limitations vary according to the type of mine and the type of discharge as shown in the chart below. Monthly average limits apply to every facility that discharges three or more times during the month. A discharge beginning one day and lasting into a second day is considered two discharges when determining whether or not the monthly average limit applies.

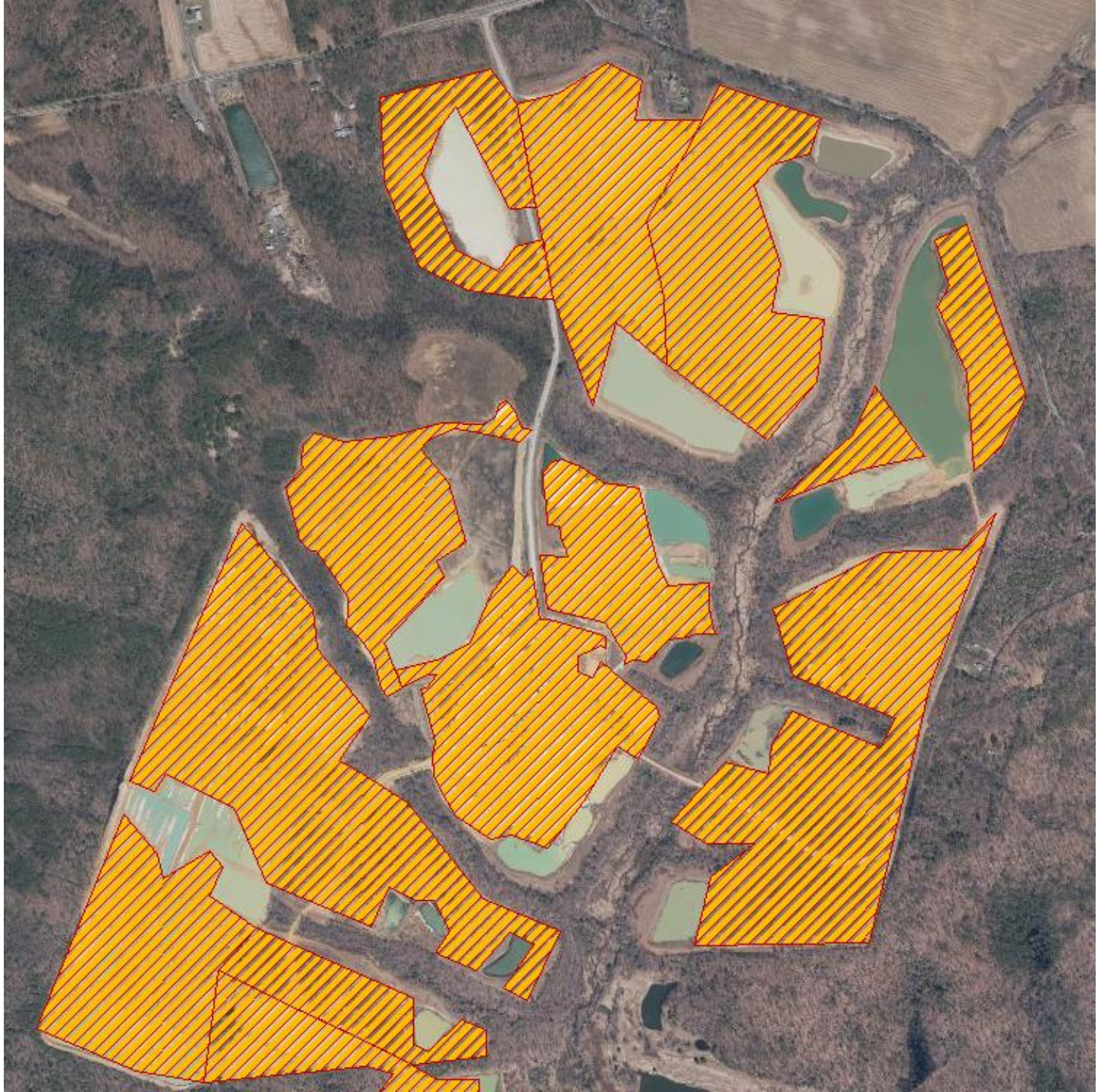
Type of mine or discharge	Monthly Average (mg/L)	Daily Maximum (mg/L)
Carbonate quarry discharge, dry weather	15	31
Carbonate quarry discharge, wet weather	[Reserved]	[Reserved]
Carbonate process discharge	17	37
Non-carbonate quarry discharge, dry weather	30	66
Non-carbonate quarry discharge, wet weather	[Reserved]	[Reserved]
Non-carbonate process discharge	45	60

If dry weather discharges occur during the calendar month, the permittee shall monitor at least once during dry weather conditions. The permittee shall test for both total suspended solids and settleable solids each month if discharges occur during both dry and wet weather conditions.

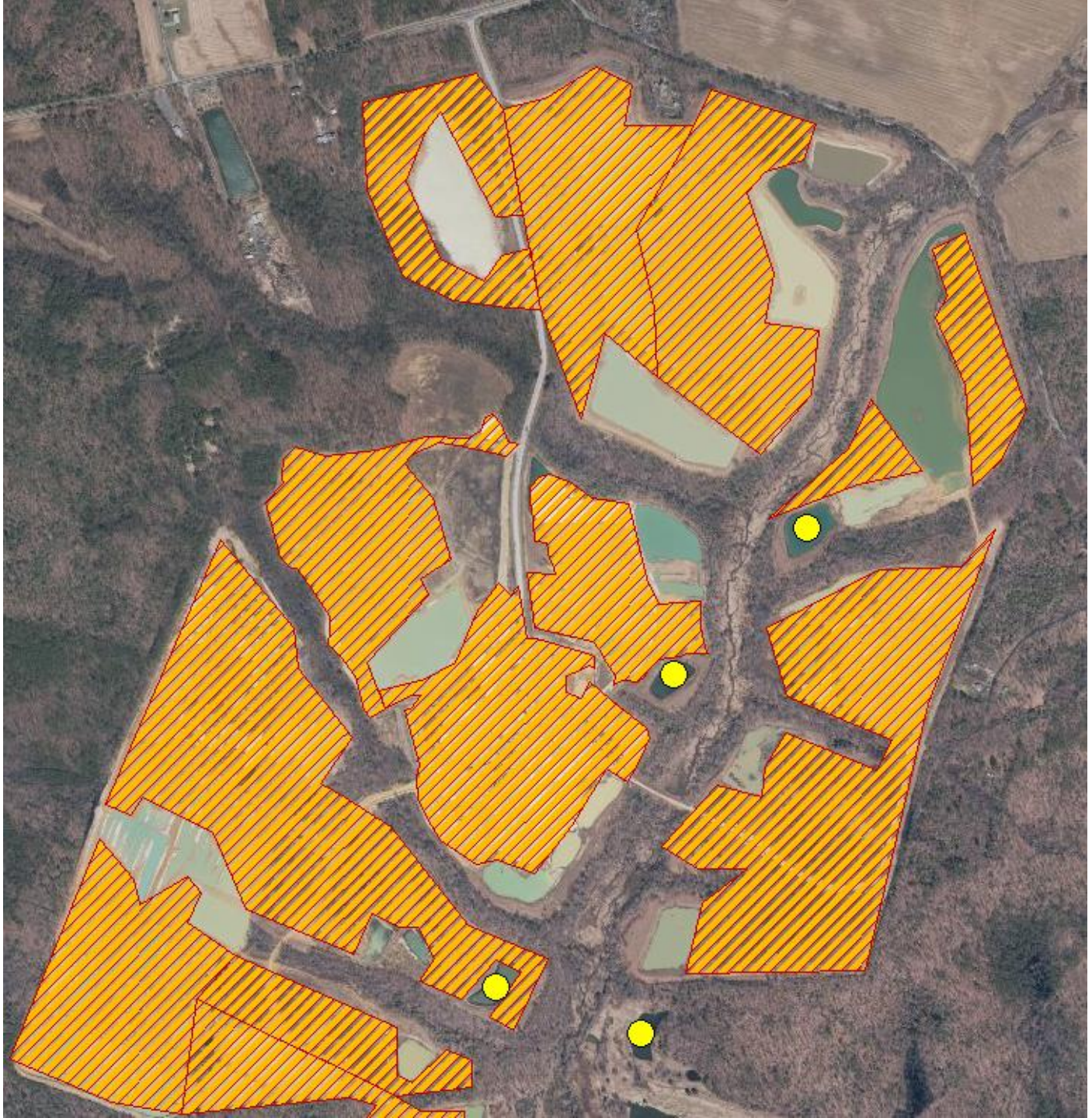
Sand and gravel pit in PG county

Facility has a permit

MD's LU data for the mine

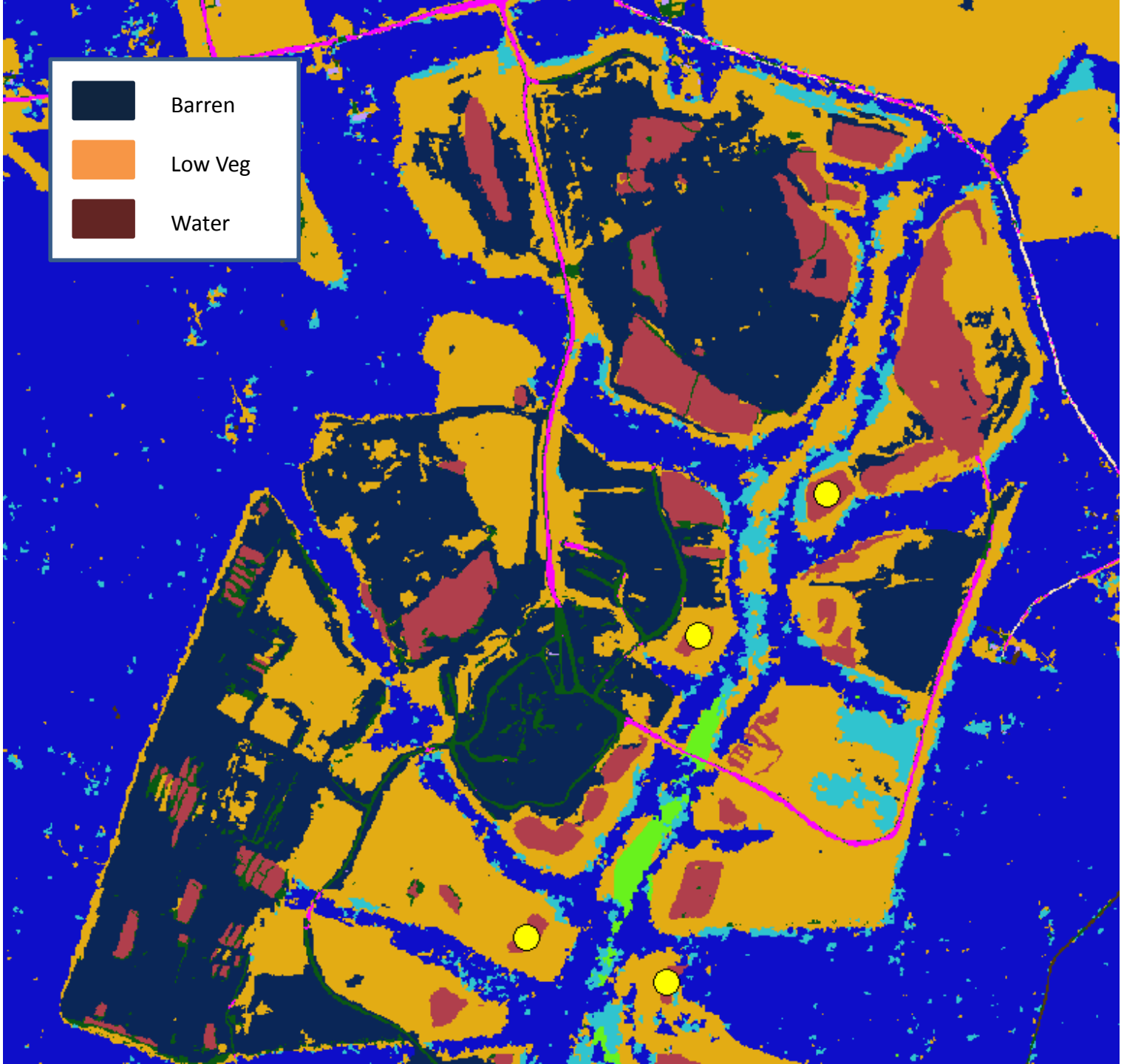


BMPs (detention ponds) at the mine



BMPs will have outfall data soon, per the permits

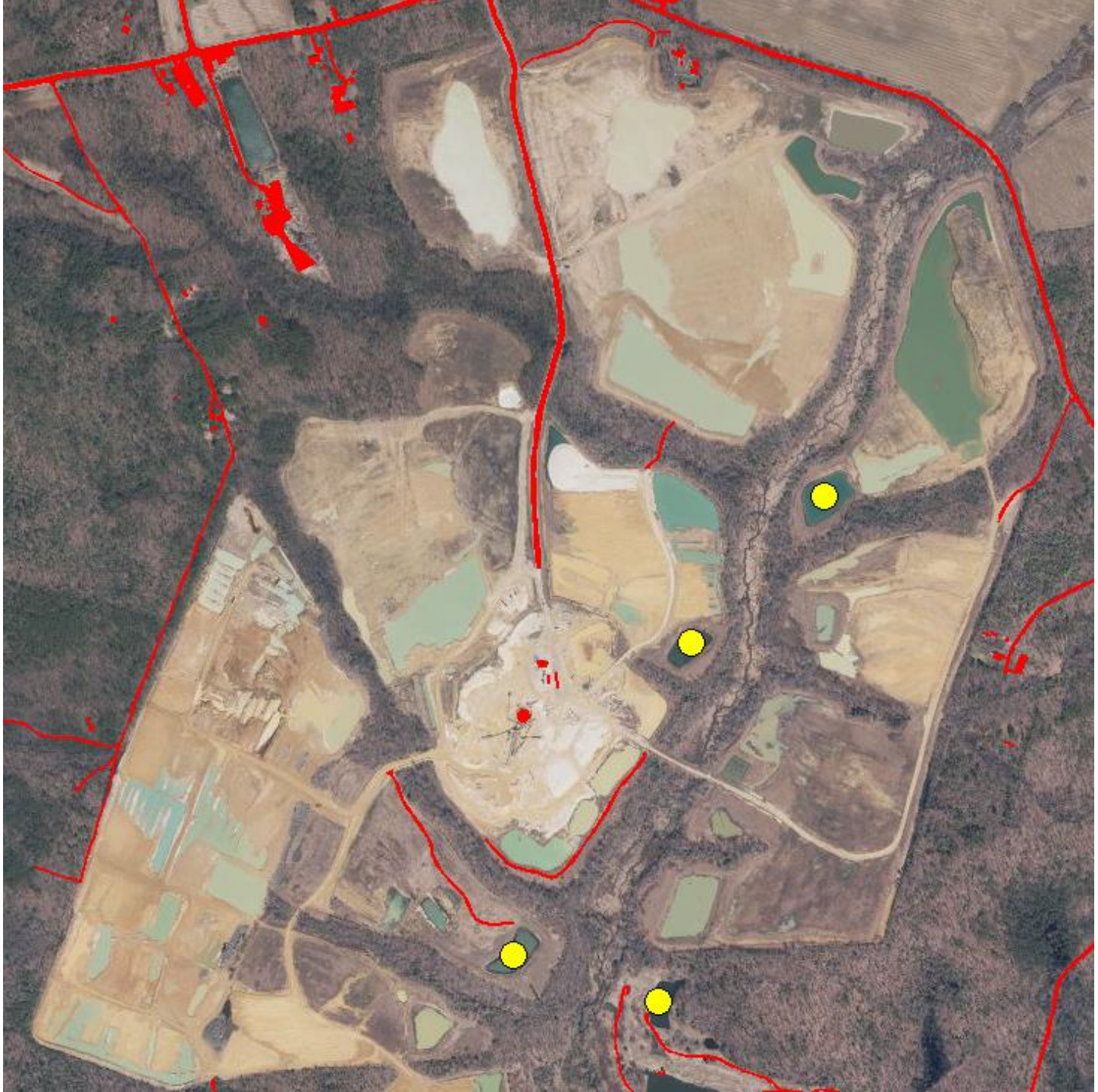
This is how CC maps the mine



Turf?

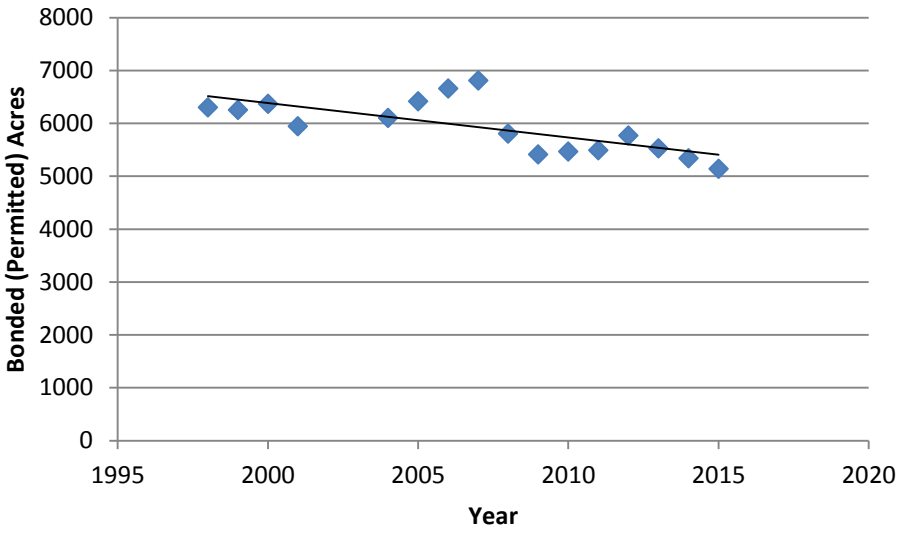
Mixed Open?

This is the local data for the mine



Extractive Lands Through Time

- Mineral Mines
  - Mining activity correlated with construction activity
    - Materials needed for construction
  - History of permits through time
    - Permit issue and release dates
- Coal mines
  - Mining activity has been constant over time
  - History of permits through time
    - Permit issue and release dates



perpart	licnumber	receive	acrespermt	acreslimit	decision	decisdate	pereffect	perexpire	restoreby
00-SP-0558	SL-0297	7/12/1999	3.99	0	ISSUED	10/23/2001	10/18/2001	10/31/2006	4/30/2007
00-SP-0558	SL-0297	9/3/2003	4.93	0	ISSUED	12/19/2003	10/18/2001	10/31/2006	4/30/2007
00-SP-0559	SL-0106	8/4/1999	37	0	ISSUED	5/10/2001	5/9/2001	5/31/2006	11/30/2006
00-SP-0560	SL-0362	8/9/1999	24.54	0	ISSUED	3/31/2000	4/3/2000	4/30/2005	10/30/2005
00-SP-0560	sl-0607	6/24/2002	10.76	35.83	ISSUED	5/20/2003	4/3/2000	4/30/2010	10/30/2005
00-SP-0561	SL-0601	9/7/1999	4.95	0	ISSUED	1/12/2000	1/10/2000	1/31/2010	7/31/2005
00-SP-0562	SL-0604	9/28/1999	5	0	ISSUED	11/17/1999	10/31/1999	10/31/2014	2/28/2005
00-SP-0563	SL-0213	10/28/1999	231.67	0	ISSUED	8/11/2000	7/31/2000	7/31/2015	1/31/2006
00-SP-0563	SL-0213	7/23/2015	231.67	0	ISSUED	8/27/2015	7/31/2000	7/31/2020	1/31/2006
00-SP-0564	SL-0564	12/16/1999	39.1	0	ISSUED	4/18/2000	4/17/2000	4/30/2005	10/31/2005

Possible Solutions

1. **Extractive acres explicit in P6 with mixed open loading rate (preferred by MD)**
2. Extractive acres assigned to mixed open
3. Extractive acres split between turf and mixed open (fractional approach)
4. Extractive acres reclassified to impervious
   – In MAST, MD can break out into extractive