



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION



Active and Abandoned Mine Operations

New Hope Crushed Stone

Status Update

Solebury Communications Group

June 2018

Tom Wolf, Governor

Patrick McDonnell, Secretary

June 2018 Project Status

STATUS AS OF:	Varies: End of 2017 to June 2018	
PROJECT	New Hope Crushed Stone (NHCS) Quarry Reclamation and Stream Restoration	
START DATE	Reclamation: January 29, 2016 Stream Restoration: January 29, 2016	
ANTICIPATED COMPLETION DATE	Reclamation: March 2019 Stream Restoration: March 2019	
CURRENT STATUS	Quarry Reclamation	On Schedule
	Stream Restoration	On Schedule

Key Ongoing Factors

- Provisions of the January 29, 2016, letter from DEP to NHCS continue to be in effect.
 - Reclamation and stream restoration are required to be completed by March 2019.
- Reclamation and stream restoration progress reporting to DEP by the 5th of each month remains.
 - As reclamation has proceeded, some standards have changed. See following Highlights slides for information and progress.
- Environmental Hearing Board Appeals by NHCS
 - January 29, 2016, DEP letter: Hearing held March 20, 2017. Decision anticipated later this year.
 - The EHB dismissed the NHCS appeal on September 7, 2017
 - August 26, 2016, Compliance Order: Withdrawn on August 15, 2017.
- Commonwealth Court Appeals by NHCS
 - January 29, 2016, DEP letter: EHB September 7, 2017, dismissal appeal filed on September 29, 2017.
 - A Commonwealth Court hearing was held on June 7, 2018.
- Status of reassessed and updated reclamation and stream restoration plan is complete. Key points:
 - Reclamation fill completion milestones have been added and is reported in this update.
 - Reclamation includes blasting along the east wall between October 2018 and March 2019. Blast plan information is included in this update.
 - Ongoing updates will occur as new information is available.
 - A temporary increase in pumping is in effect to allow for a two bench safety level and transformer relocation (see next slide).
- Sinkhole Update
 - February 28, off Sугan Road near Solebury Friends. This has been repaired by NHCS.
 - April 16, Solebury School grounds. This has been repaired by NHCS.

Highlights Since February 2018

- General
 - Settlement talks between DEP, other interested parties, and NHCS have continued.
- Inspections were conducted on March 13 and May 11
 - Statutorily required inspection frequency is once per quarter, but will be increased as needed as has been done in the past.
 - Site visits outside the inspection process are made to the quarry.
 - Affirmed increased pumping can not go lower than -40.
- Update on temporary increase in pumping (approved March 2, 2018)
 - The temporary rate is increased to maintain two bench safety level for reclamation and relocation of the transformer (up from 500,000 gallons per day).
 - Transformers will be relocated no later than by July 30, 2018.
 - Increased pumping for the two bench safety standard will continue as needed until the transformer is relocated and reclamation is completed in accord with the January 2016 letter, but can not go lower than -40 Mean Sea Level.

Highlights Since February 2018

- Reclamation and Stream Restoration Progress
 - Stream work
 - Due to the wet spring (see precipitation graph) there has not been much recent work on the stream.
 - An updated Module 14 was received on May 25 including the design of the stream outlet structure. This is being reviewed by DEP staff.
 - Reclamation progress by staked area
 - Based on the July 2017 drone survey, the quarry was segmented into 22 areas.
 - As of the end of 2017, 7 are complete (with possible final angle adjustments necessary depending on future surveys).
 - An additional 6 are underway with area #10 - #11 near completion.
 - Since February more material has been pushed over the north face in the area of #10 - #11 bringing it closer to completion.
 - Details are in the following tables with the reference map shown in the immediately following slide.
 - This approach will be used to show reclamation progress on a periodic basis as reliable data is available.

Highlights Since February 2018

- Reclamation and Stream Restoration Progress - Continue
 - Milestones established for reclamation completion by backfilling or blasting (as noted).
 - West, South of #1 and #1 - #2; estimated completed by July 31, 2018.
 - North, #9 - #19; estimated completed by June 30, 2018.
 - East, South of #23; estimated completed by August 30, 2018.
 - East, #4 - #23; estimated completed between October 2018 to March 2019 by blasting or the option of backfilling for select areas as indicated in the following table.
 - Factors effecting completion dates include weather and other unforeseen circumstances.
 - New work performance standards for reclamation
 - One employee on reclamation working a 40 hour week; second employee when available.
 - For the spring and summer, an additional 36,000 cubic yards will be placed on the north and west walls by no later than August 30, 2018.
 - The required rate of backfill material placement is 100 cubic yards per hour.

Highlights Since February 2018

- Blast Plan Received and Under Review
 - The Pottsville District Mining Office received the blast plan for the east wall and began their review.
 - In June a blasting inspector completed a site inspection and reviewed the plan with the NHCS foreman and blasting contractor.
 - Final approval is expected by late June or early July.
 - Blasting site preparation, blasting, and subsequent associated reclamation work will occur as planned beginning October 2018 and end March 2019.
 - Progress will be reported no later than the end of the calendar year.

Reclamation Volumes - Status

Method and Location	Original Volume to Complete (cubic yards) - Corrected	Cubic Yards Moved	Cubic Yards Remaining for Completion	Percentage Remaining
Backfill - West and North	256,550	219,700	36,850	14.4%
Backfill - East	84,775	0	84,775	100.0%
Blast to Grade - East	30,598	0	30,598	100.0%
Totals	371,923	219,700	152,223	40.9%

Note: Volumes moved are through the end of 2017. A status of reclamation progress will be verified after August 30 through another drone survey. The south end of the quarry is the old portion which is not subject to reclamation requirements. See the map (go forward two slides) which shows the staked areas of the quarry.

Reclamation Progress Tracking

	Staked Reclamation Area	Location	Reclamation Progress (% Complete)	Progress From July 17 to December 11, 2017 (% Complete)	Angle of Reclamation (Approximate)	Method	Estimated Completion Date
1	South of #1	West wall	30%	+30%		Backfill	7/30/2018
2	#1 - #2	West wall	4%	+4%		Backfill	7/30/2018
3	#2 - #3	West wall	100%		37°	Backfill	Done
4	#3 - #4	West wall	100%	+3%	37°	Backfill	Done
5	#4 - #5	West wall	100%		35°	Backfill	Done
6	#5 - #6	West wall	100%		34°	Backfill	Done
7	#6 - #7	North wall	100%		26°	Backfill	Done
8	#7 - #8	North wall	100%		23°	Backfill	Done
9	#8 - #9	North wall	100%		26°	Backfill	Done
10	#9 - #10	North wall	73%	+36%		Backfill	6/30/2018
11	#10 - #11	North wall	94%	+62%		Backfill	6/30/2018
12	#11 - #12	North wall	48%	+10%		Backfill	6/30/2018
13	#12 - #19	NE wall corner	69%			Backfill	6/30/2018
14	#19 - #18	East wall	<1%			Blast to grade	Oct 2018-March 2019
15	#18 - #17	East wall	22%	+22% (Prior backfill)		Blast to grade	Oct 2018-March 2019
16	#17 - #16	East wall	<1%			Blast to grade	Oct 2018-March 2019
17	#16 - #15	East wall	<1%			Blast to grade	Oct 2018-March 2019
18	#15 - #20	East wall	<1%			Blast to grade	Oct 2018-March 2019
19	#20 - #22	East wall	0			Blast to grade (Secondary option, backfill)	Oct 2018-March 2019
20	#21 - #22	East wall	0			Blast to grade (Secondary option, backfill)	Oct 2018-March 2019
21	#22 - #23	East wall	0			Blast to grade (Secondary option, backfill)	Oct 2018-March 2019
22	South of #23	East wall	0			Backfill	8/30/2018

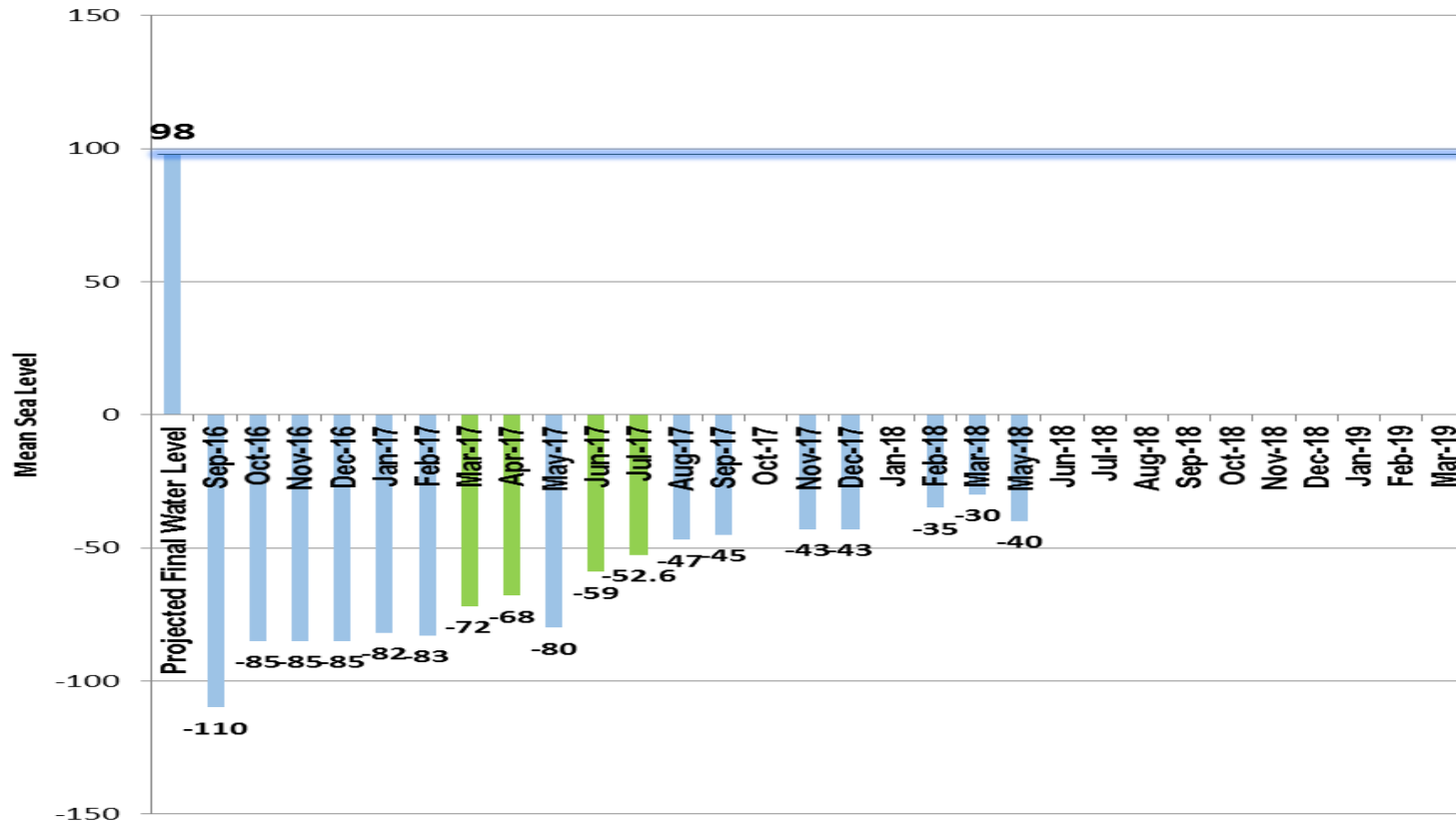
NOTE: See next page for map referencing the staked areas. Green areas show completed sections which may require some final grading and work to bring them to the 35 degree standard based on a final assessment.

Reclamation Progress Location Map



Water Level Tracking

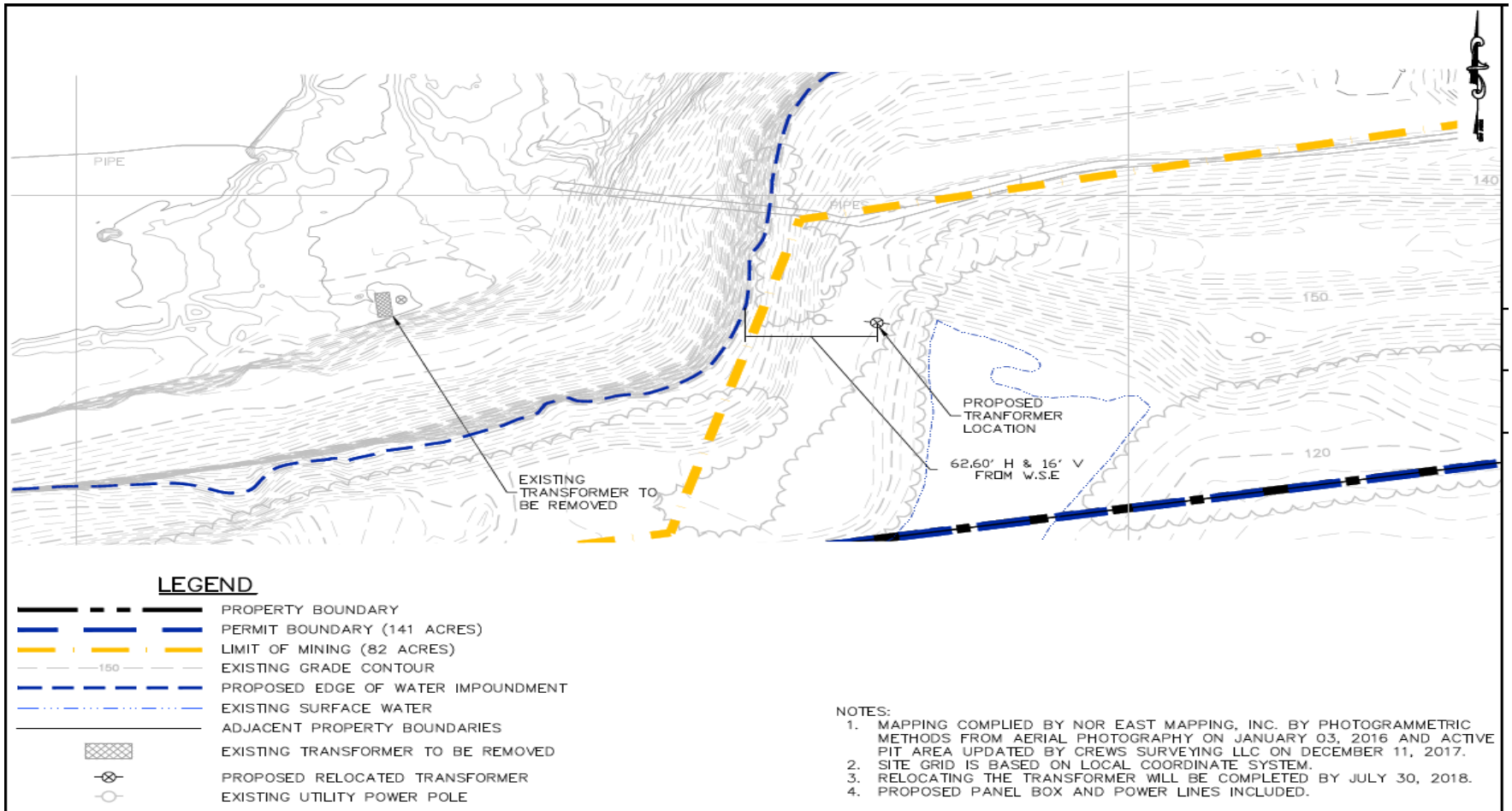
Water Level Status



Blue bar = Estimated Green bar = NHCS consultant, EarthRes, PE stamped reports
 Note: Emergency increased pumping allowed in March 2018 to provide a minimum safety bench level of -35 until the transformers are moved. Can not go lower than -40.



Transformer Relocation



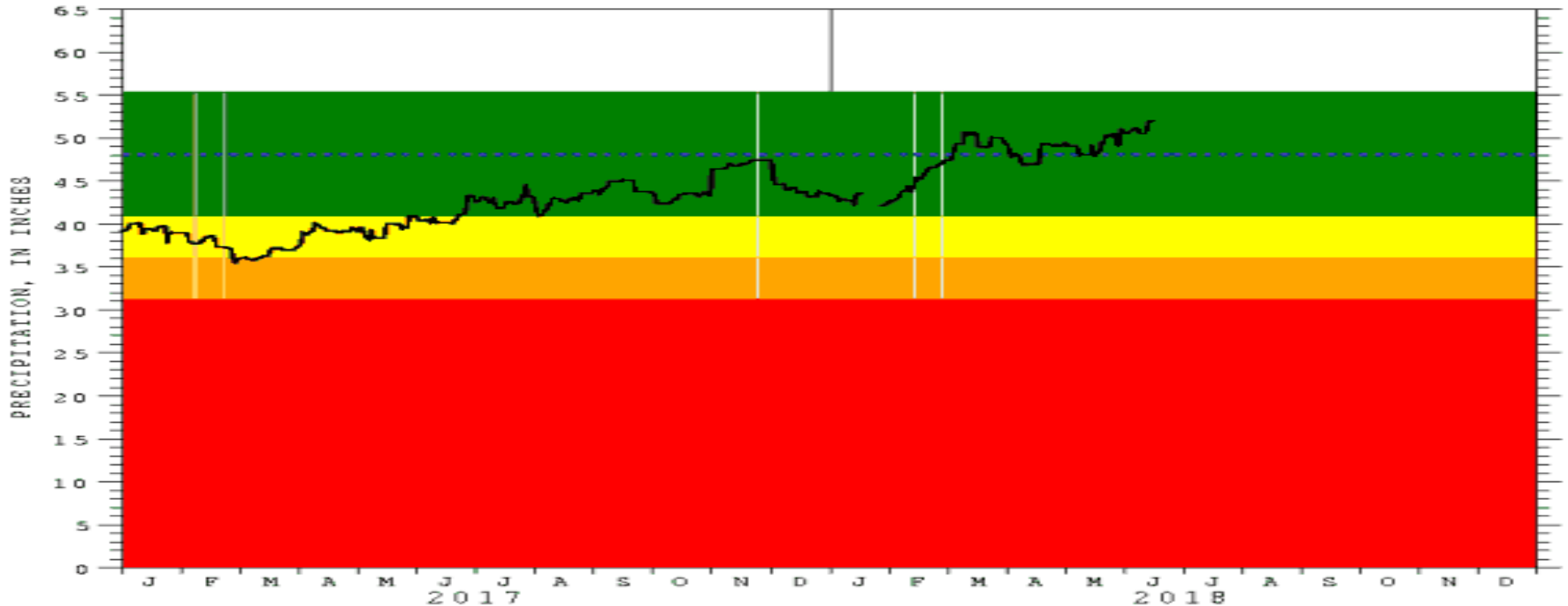
NHCS Monitoring Well Locations



Monitoring well locations are noted by MW1 and MW2 to the right and MW8 at the top center. The fourth in the center is for the plants water use.

Bucks County Precipitation: 2017-2018

BUCKS COUNTY PRECIPITATION
 USGS PLOT OF NATIONAL WEATHER SERVICE DATA
 MOVING 365-DAY TOTAL PRECIPITATION
 DATE OF PLOT=06/14/18



COLORED BANDS REPRESENT DROUGHT INDICATOR CRITERIA USED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR DROUGHT MONITORING

SOLID LINE = CURRENT MOVING 365-DAY TOTAL, IN INCHES
 DASHED LINE = MOVING AVERAGE 365-DAY TOTAL FOR 1981-2010, MARFC 2013

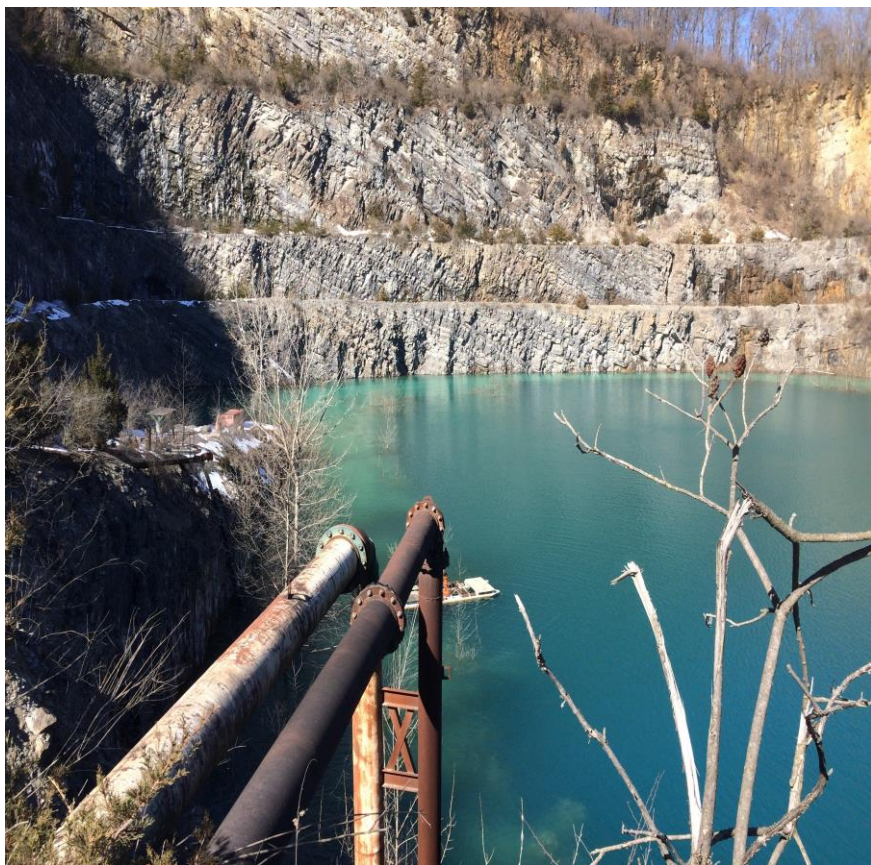
GREEN (TOP) BAND = 15 PERCENT ABOVE TO 15 PERCENT BELOW AVERAGE (NORMAL)
 YELLOW BAND = 15 TO 25 PERCENT BELOW AVERAGE (WATCH)
 ORANGE BAND = 25 TO 35 PERCENT BELOW AVERAGE (WARNING)
 RED (BOTTOM) BAND = GREATER THAN 35 PERCENT BELOW AVERAGE (EMERGENCY)

NHCS Bench Levels

- Bench 2 60' MSL
- Bench 3 10' MSL
- Bench 4 -35 MSL
- Bench 5 -85 MSL
- Bench 6 -120 MSL



Sump Area, South End



March 23, 2017



May 11, 2018

Note: Sump area pictures from 2016 were taken from the opposite side which was cover by water in early 2017.

North End



June 2, 2016



May 11, 2018

Looking South Along East Wall



October 6, 2016

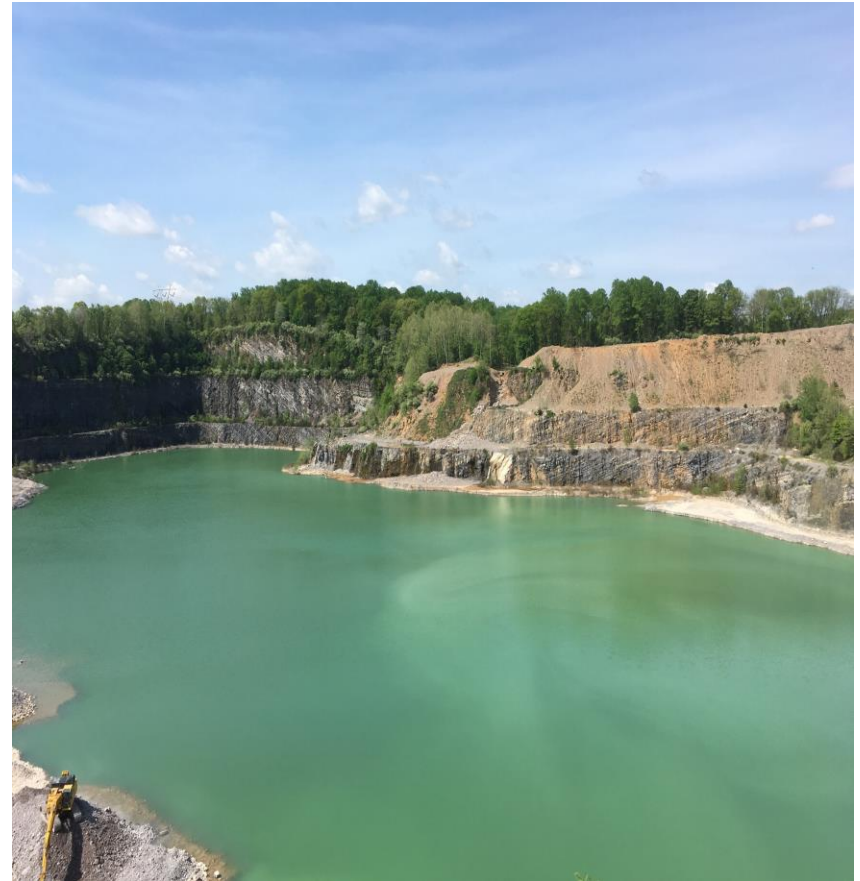


May 11, 2018

West View



June 2, 2016



May 11, 2018



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For More Information

Monthly Updates, Inspection Reports,
Communications and more, posted as available.

Please visit: www.dep.pa.gov

Regional Resources > Southeast Region > Community Information

Tom Wolf, Governor

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