



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION



Active and Abandoned Mine Operations

New Hope Crushed Stone

Monthly Update

Solebury Communications Group

February 2018

(Includes information since November 2017 and emergency March 2, 2018 water level action)

Tom Wolf, Governor

Patrick McDonnell, Secretary

February 2018 Project Status

STATUS AS OF:	Varies: End of 2017 to March 2, 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	<input type="button" value="On Schedule"/>
	Stream Restoration	<input type="button" value="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.
- 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 - August 26, 2016, Compliance Order: Withdrawn on August 15, 2017.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.
- Information from NHCS for the end of 2017 is resulting in a reassessment of the reclamation and stream restoration plan leading up to March 2019. Key points:
 - DEP is working with NHCS to have a detailed plan including specific milestones through March 2019.
 - The amount of reclamation fill to be moved is less than has been previously reported.
 - Part of the plan moving forward will include blasting along the east wall (which will yield efficiencies and time savings) and details on remaining stream restoration work.
 - It is expected these details will be finalized by this April.
 - The method for tracking reclamation progress is changing effective with the February 2018 project status update.
- A new sinkhole is being investigated as of February 28, 2018.
 - It is expected NHCS will be directed to make a repair.

Highlights Since November 2017

- General
 - Settlement talks between DEP and NHCS have continued.
- The last inspection was conducted on November 29, 2017.
 - One will occur the first quarter of 2018.
 - 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.
- Temporary increase in pumping approved by DEP.
 - On March 2, NHCS requested to temporarily increase pumping in accord with the January 29, 2016, letter to prevent inundation of the electrical panel (picture on slide 12).
 - DEP granted the request the same day.
 - The temporary rate is up to 2 million gallons a day (from 500,000 gallons per day).
 - NCHS is required to provide to DEP a cost estimate of moving the panel, a timeline for its movement, and documentation that includes photos of quarry lake water levels and/or pumping data that the increased pumping at the quarry is congruent with the temporary emergency authorization (last point, reported daily during pumping).

Highlights Since November 2017

- Reclamation and Stream Restoration Progress
 - Stream work was the focus in December through February.
 - General work was completed along the channel and the building of cribs for stream bank stabilization.
 - No reclamation material was moved during this period.
 - Reclamation progress by staked area (as of December 11, 2017).
 - Based on the July 2017 drone survey, the quarry was segmented into 22 areas.
 - Of these 22 areas, 7 are complete (with possible final angle adjustments necessary depending on future surveys).
 - An additional 6 are underway with area #10-11 near completion.
 - Details are in the following table 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.

Reclamation Progress Data

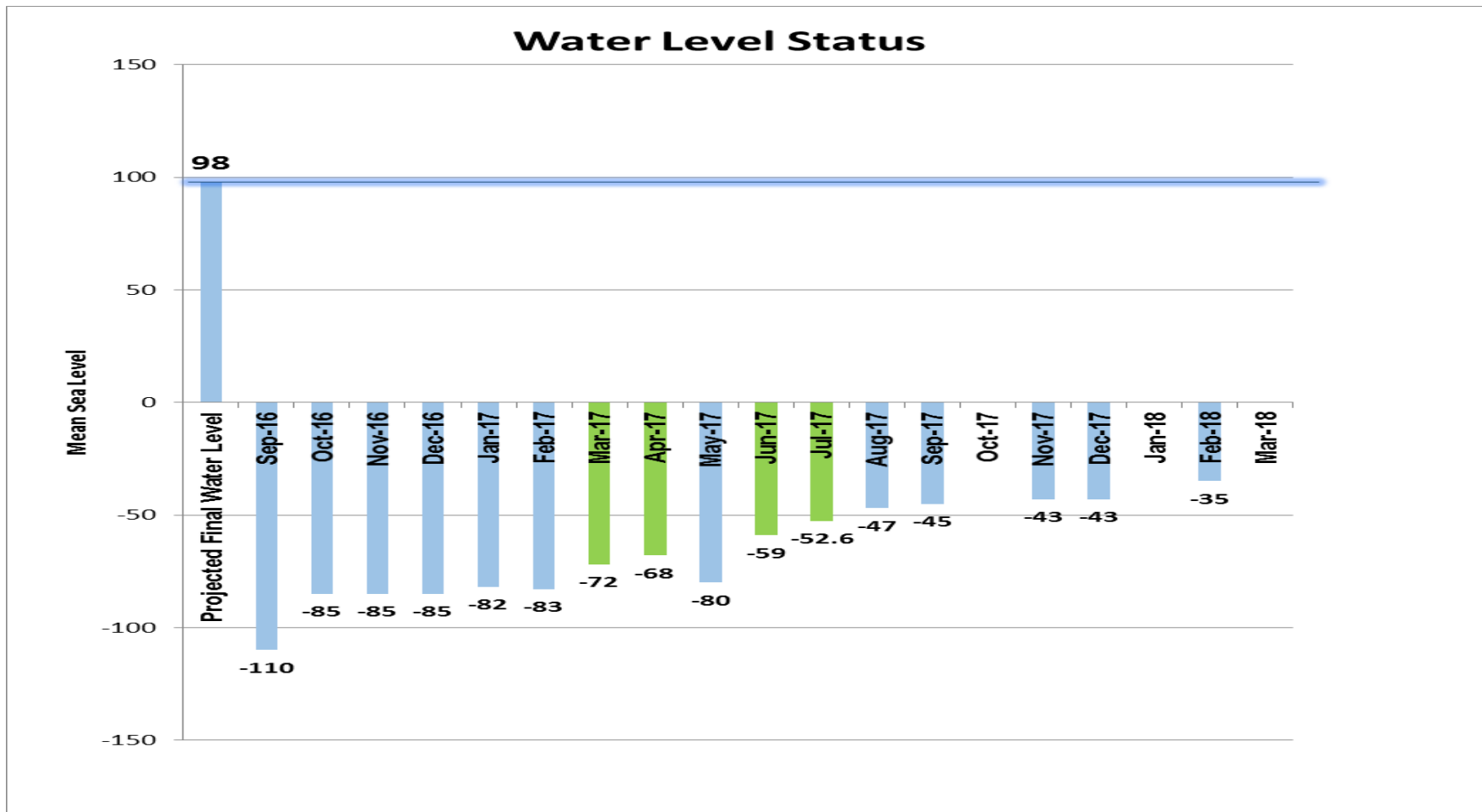
	Staked Reclamation Area	Location	Reclamation Progress (% Complete)	Progress From July 17 to December 11, 2017 (% Complete)	Angle of Reclamation (Approximate)
1	South of #1	West wall	30%	+30%	
2	#1 - #2	West wall	4%	+4%	
3	#2 - #3	West wall	100%		37°
4	#3 - #4	West wall	100%	+3%	37°
5	#4 - #5	West wall	100%		35°
6	#5 - #6	West wall	100%		34°
7	#6 - #7	North wall	100%		26°
8	#7 - #8	North wall	100%		23°
9	#8 - #9	North wall	100%		26°
10	#9 - #10	North wall	73%	+36%	
11	#10 - #11	North wall	94%	+62%	
12	#11 - #12	North wall	48%	+10%	
13	#12 - #19	NE wall corner	69%		
14	#19 - #18	East wall	1%		
15	#18 - #17	East wall	22%	+22%	
16	#17 - #16	East wall	1%		
17	#16 - #15	East wall	1%		
18	#15 - #20	East wall	1%		
19	#20 - #22	East wall	0		
20	#21 - #22	East wall	0		
21	#22 - #23	East wall	0		
22	South of #23	East wall	0		

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



Blue bar = Estimated

Green bar = NHCS consultant, EarthRes, PE stamped reports

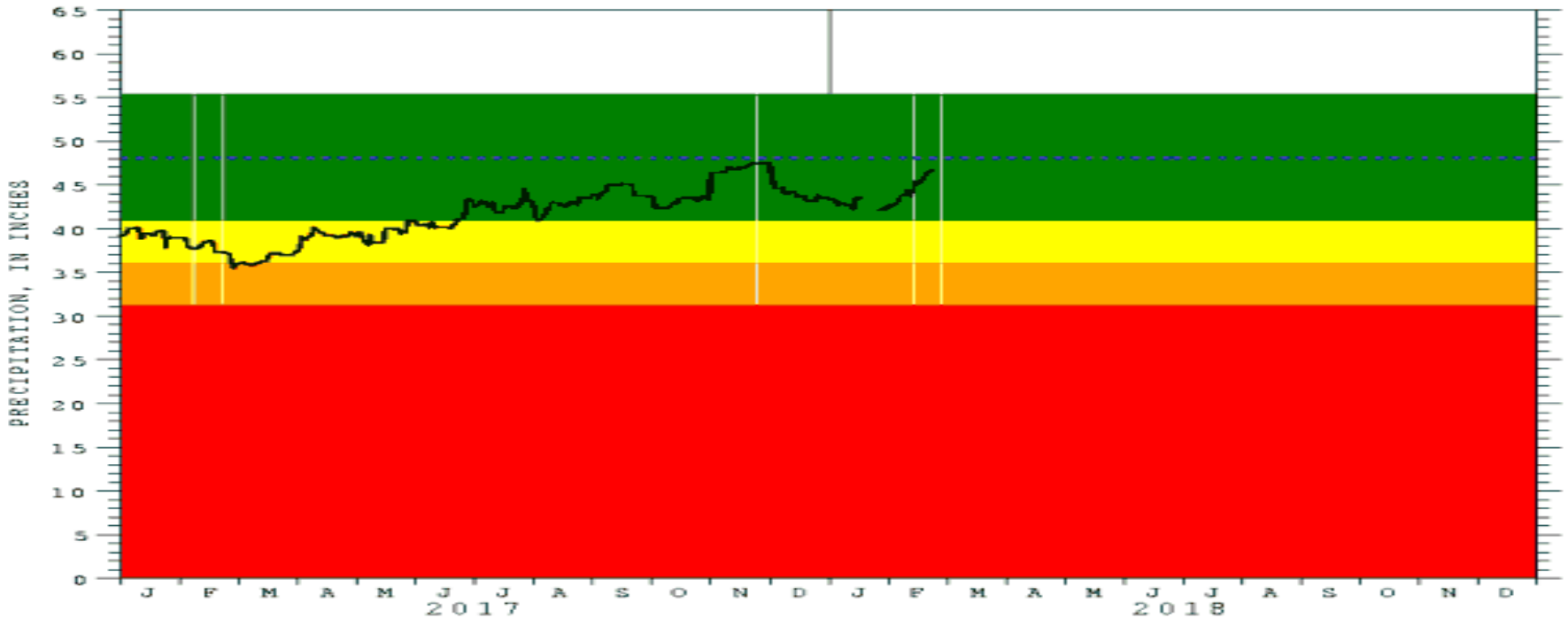
NHCS Monitoring Well Locations



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=02/21/18



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



Emergency Water Level: March 2, 2018



Quarry Overview: Nov. 29, 2017



Quarry Overview: Jan. 10, 2018



Stream – Towards Quarry Inlet



February 2018

Upper Stream



February 2018

Upper Stream



February 2018

Upper Stream



February 2018

Crib Building



February 2018

Note: Cribs are being used towards the stream inlet to stabilize the banks. They allow for vegetation to grow which will become the bank structure as the wood decays.



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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

Patrick McDonnell, Secretary