

An aerial photograph of a residential neighborhood. A winding road or path runs through the center, flanked by houses and trees. A creek or stream is visible in the lower right portion of the image. The overall scene is captured from a high angle, showing the layout of the community and its natural features.

~~2021~~

2023

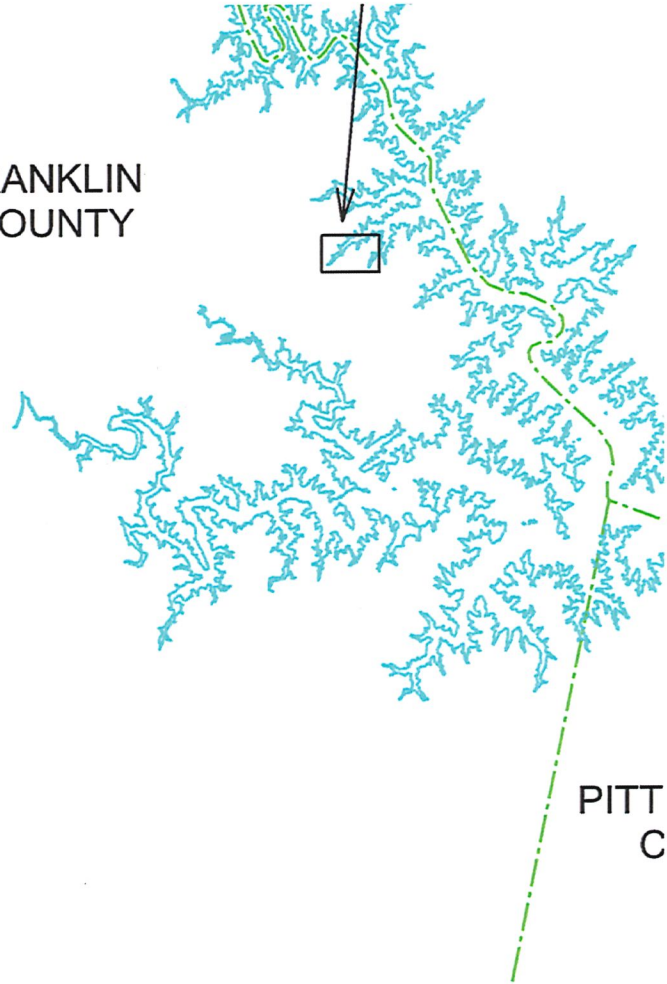
# AEP Sedimentation Report

---

## A Look at Becky's Creek and Other Issues

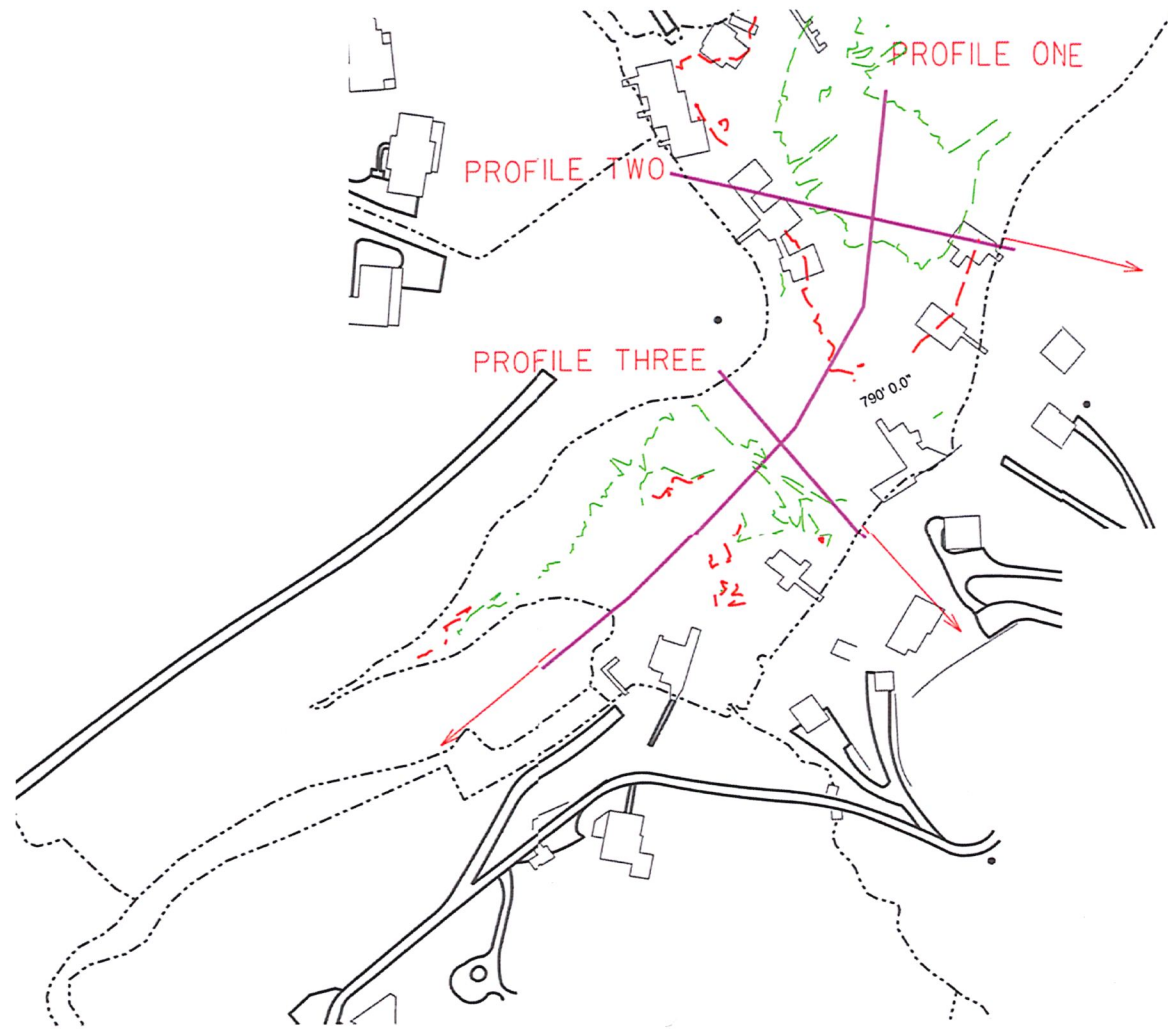
Beck

FRANKLIN  
COUNTY



PITT  
C

LOCATION



BECKYS  
POOL ELEVATI

## Comparison of survey data to previous survey results

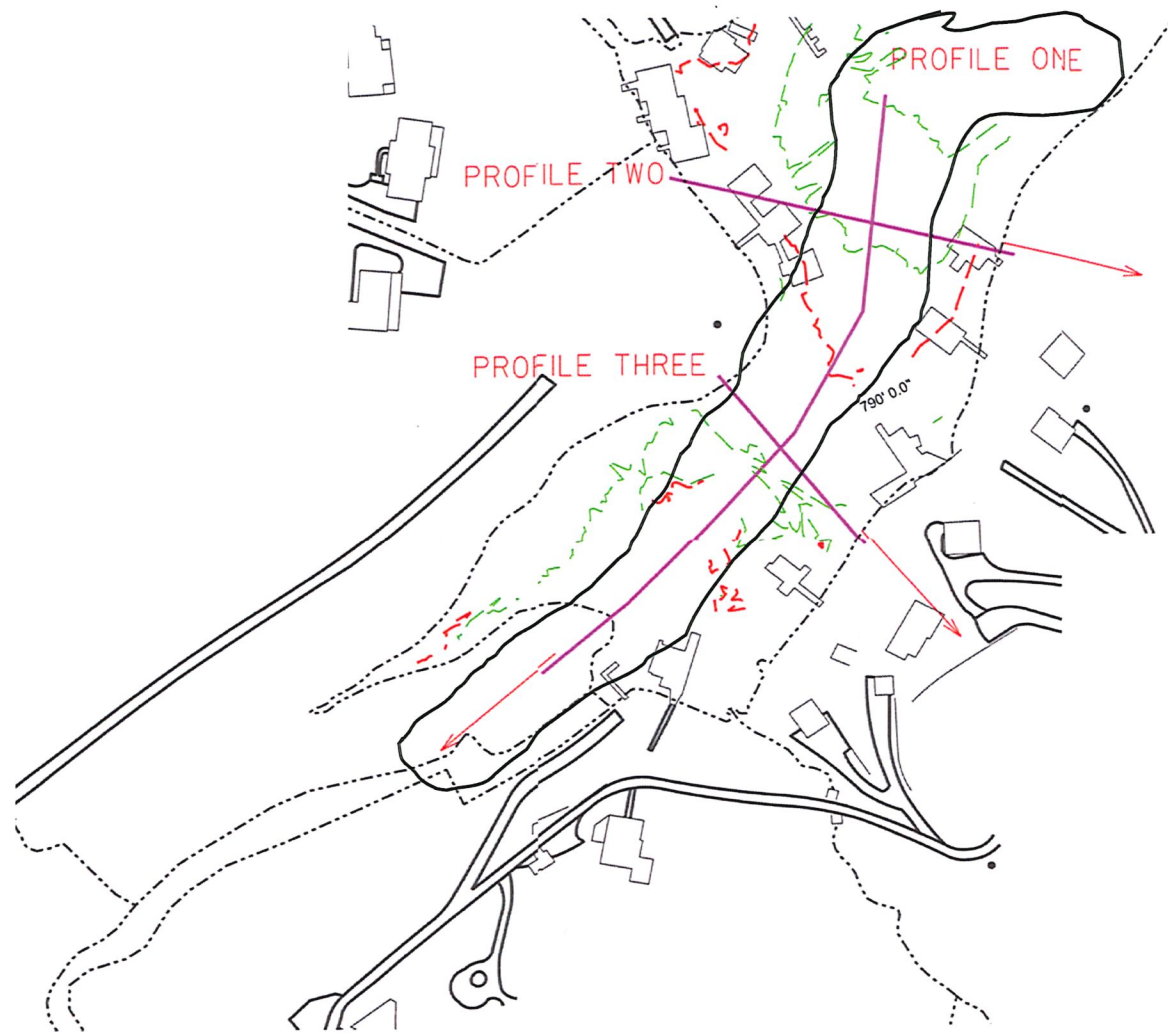
The profiles included on the drawings in Appendix A show a comparison of sediment elevation data generated from all four surveys completed to date (i.e., the 2005 base survey, the 2011 survey, the 2016 survey, and the 2021 survey).

Profile One represents the **stream thalweg**, where the greatest amount of sediment could potentially accumulate or erode.

The two additional profiles provide representative views of the channel morphology.

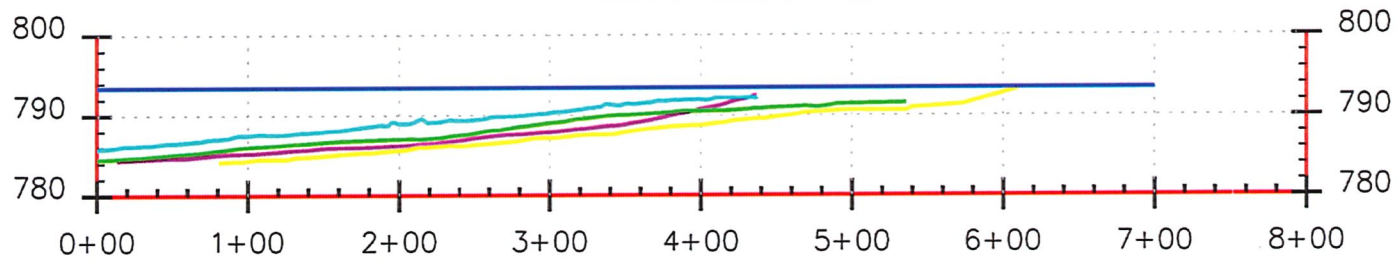
Note that wherever the 2021 profiles terminate at different (i.e., shorter length) stations than prior year profiles or are absent, either the water depth was less than approximately 2 feet (i.e., near-shore or other shallow locations) or the profile length was sufficiently far enough out into deeper water.

In hydrological and fluvial landforms, the **thalweg** is a line drawn to join the lowest points along the length of a stream bed or valley in its downward slope, defining its deepest channel. The thalweg thus marks the natural direction (the profile) of a watercourse.



BECKYS  
POOL ELEVATI

PROFILE ONE

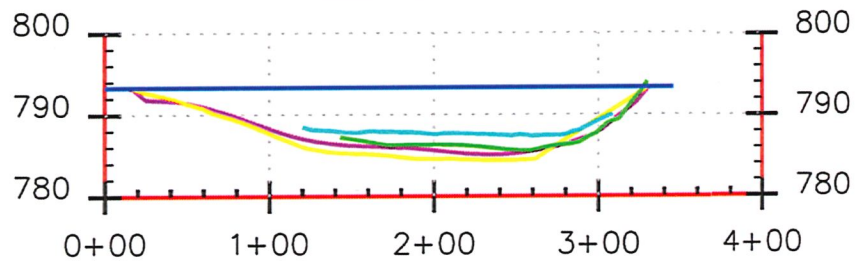


LINE	SURFACE	OFFSET
—	2005 BASE	0.00
—	2011 REVIEW	0.00
—	2016 REVIEW	0.00
—	2021 REVIEW	0.00
—	POOL	793.33 0.00

Scaled 5.0000 Times Ver.  
 Scaled 1.0000 Times Hor.

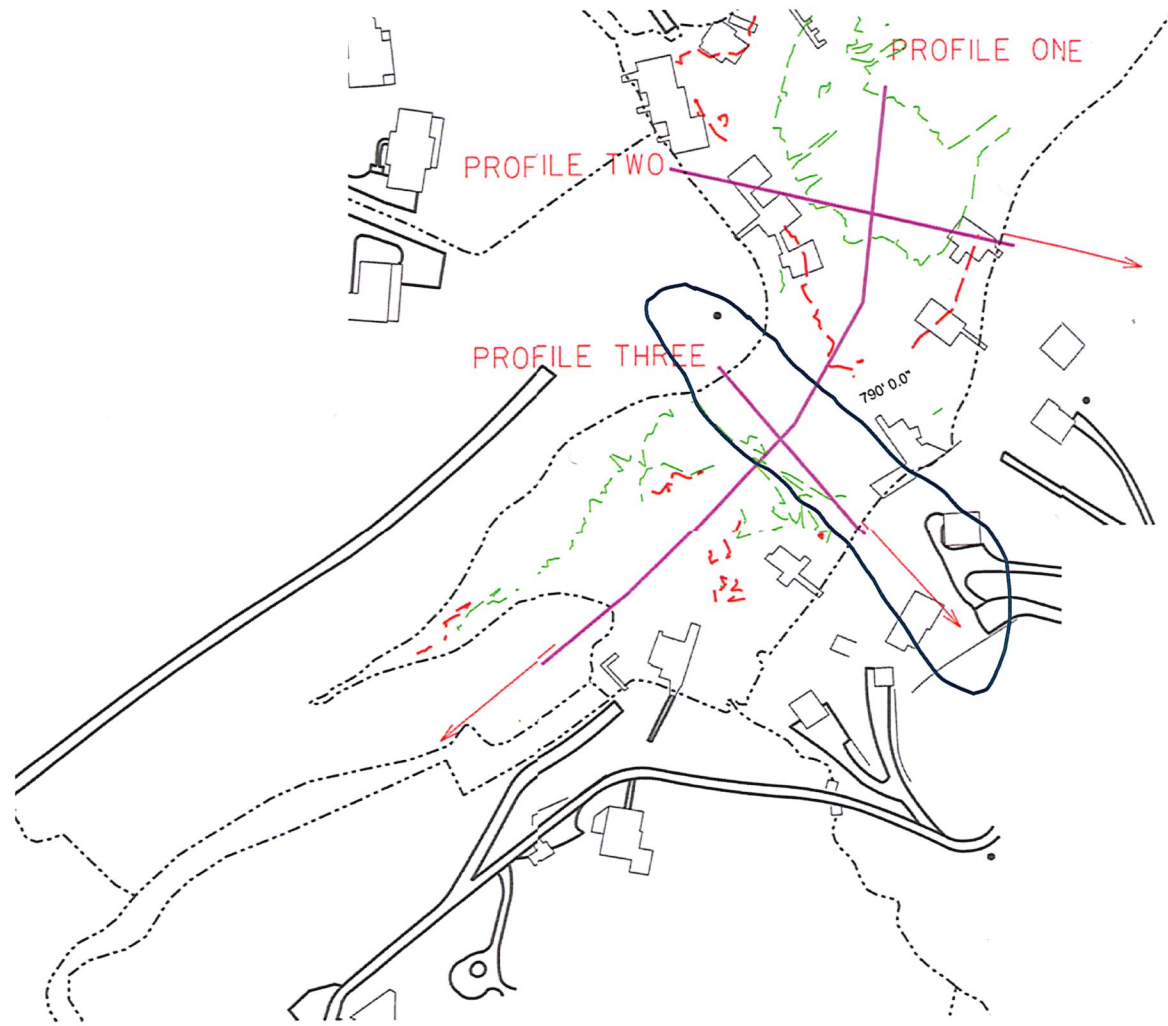


PROFILE TWO



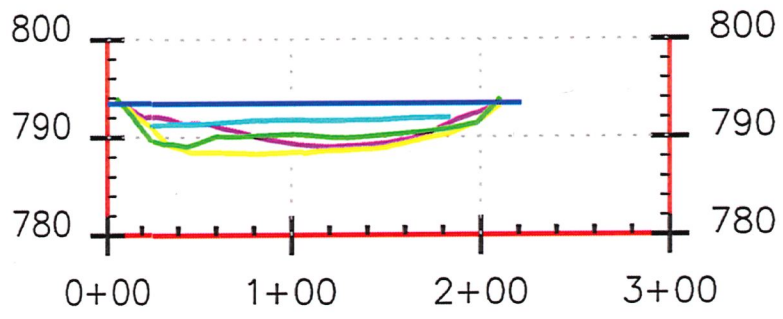
LINE	SURFACE	OFFSET
—	2005 BASE	0.00
—	2011 REVIEW	0.00
—	2016 REVIEW	0.00
—	2021 REVIEW	0.00
—	POOL 793.33	0.00

Scaled 5.0000 Times Ver.  
 Scaled 1.0000 Times Hor.



BECKYS  
POOL ELEVATI

# PROFILE THREE



LINE	SURFACE	OFFSET
—	2005 BASE	0.00
—	2011 REVIEW	0.00
—	2016 REVIEW	0.00
—	2021 REVIEW	0.00
—	POOL 793.33	0.00

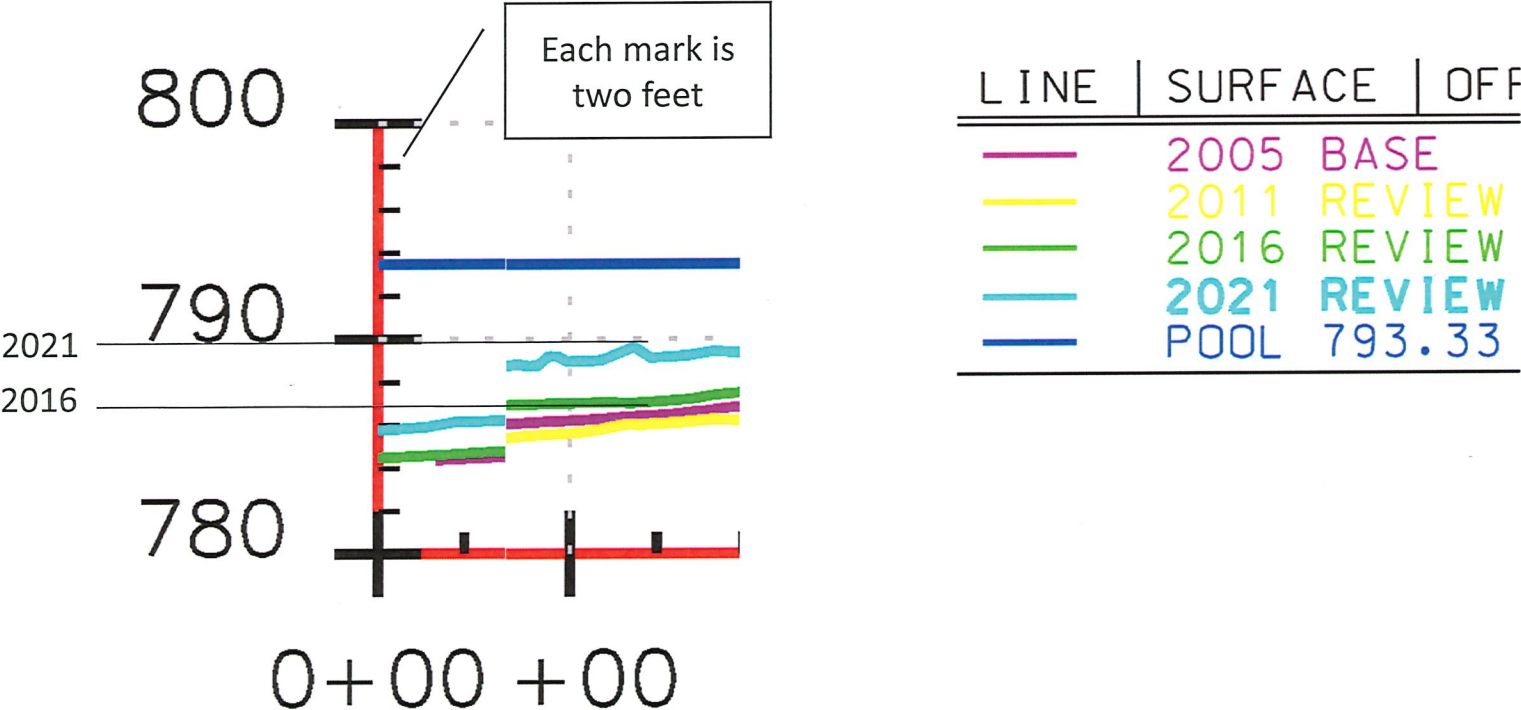
Scaled 5.0000 Times Ver.  
 Scaled 1.0000 Times Hor.

## AEP Narrative for Becky's Creek (page 6 of Final Report)

### *Beckys Creek*

In comparing the 2021 survey data profiles to the data from the prior surveys, the 2021 data for the Beckys Creek site (Sheet 3) indicates **slightly increased sediment deposition on all three profiles.**

What does “slightly increased” mean using the data provided?



Data represents depth (water line to bottom) on profile 1 at 200 horizontal feet

## Comparison of AEP descriptive notation to change shown on data graphs

**AEP Definition of Increase/Loss of Sedimentation versus Data from Profile Charts**

Sheet and Location		Profile data per AEP				Change in FEET from 2016			
Sheet #	Location	Profile 1	Profile 2	Profile 3	Profile 4	Profile 1	Profile 2	Profile 3	Profile 4
1	Anthony Ford Boat Launch	SD	ISS	N	-	ID	-12	0	-
2	Beaverdam Creek	N	N	N	-	2 to 4	1 to 2	1	-
3	Becky's Creek	SI	SI	SI	-	2 to 3	2 to 4	2 to 3	-
4	Betty's Creek	ND	ND	ND	-	± 1 to 2	± 1	1 to 3	-
5	Big Indian Creek	SI	SI	SI	-	2 to 3	1 to 2	1 to 3	-
6	Blackwater River	N	ISD	N	ISD	2 to 10	0 to 6	1 to 2	2 to 6
7	Craddock Creek	N	N	N	-	1 to 2	1 to 3	2	-
8	Gills Creek	SI	SI	U	-	± 4	2 to 3	ND	-
9	Grimes Creek	SI	SI	SI	-	2 to 4	2 to 3	2	-
10	Hales Ford Boat Launch	SI	N	SI	-	1 to 3	1	1 to 4	-
11	Hardy Ford Boat Launch	SI	SI	N/ISD	-	1 to 5	2 to 5	± 3	-
12					-				-
13	Little Indian Creek	SI	SI	SI	-	± 1 to 2	1 to 3	1 to 2	-
14	Lynville Creek	N	N	?	-	ID	ID	ID	-
15	Mariners Landing	N	N	N	-	1 to 4	0 to 4	1 to 2	-
16	Mitchells Cove	N	N	N	-	2	1 to 2	1 to 2	-
17					-				-
18					-				-
19	Penhook Boat Launch	N	N	N	-	1 to 2	1 to 2	0 to 3	-
20					-				-
21	Roanoke River	SI	N	N	-	2 to 5	2 to 4	2 to 3	-
22	Scruggs Boat Launch	N	N	N	-	1 to 2	0 to 6	0 to 2	-
23	Standiford Creek	SI	SI	SI	-	1 to 2	1 to 2	1 to 2	-
24	State Park Boat Launch	ISD	ND	ISD	-	2 to 8	2 to 3	2 to 10	-

**AEP Written Description of Data**

N- negligible  
 ND- no difference  
 ISD- increased sediment deposition  
 ISS- increased sediment scouring  
 SD- same departure  
 SI- slightly increased

**All data is in FEET**

ID- insufficient data  
 ND- no difference  
 ± - plus or minus feet

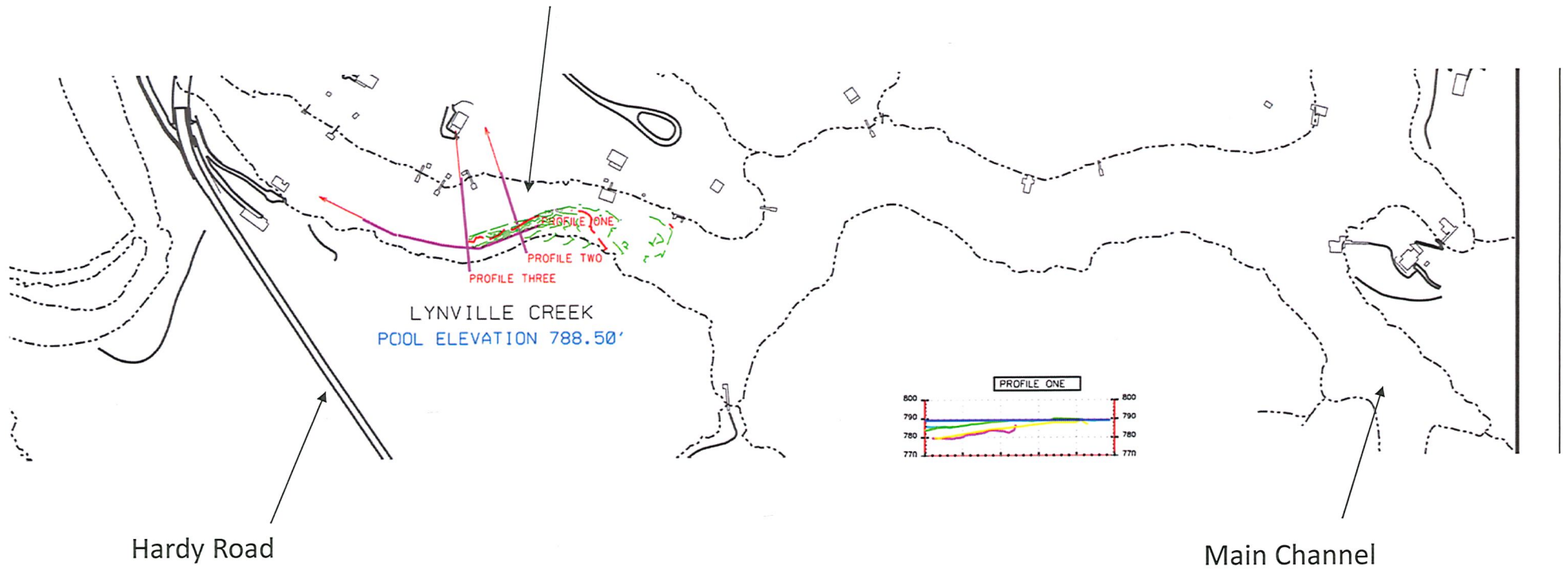
## Are the AEP profile data complete for each test site?

Sheet #	Location	Complete Profile Information			Change in depth compared to 2016*		
		Is Profile Data Complete?	Loss of depth	Increased depth	Unable to determine**	Unknown	
		Profile data incomplete	No profile data				
1	Anthony Ford Boat Launch	P2, P3	P1		P2, P3		P1
2	Beaverdam Creek	P1, P2, P3		P1, P2, P3			
3	Becky's Creek	P1, P2		P1, P2, P3			
4	Betty's Creek	P1, P3		P1, P2, P3			
5	Big Indian Creek	P1, P2, P3		P1, P2, P3			
6	Blackwater River	P1, P2, P4	P3	P1, P2, P4			P3
7	Craddock Creek	P1		P2, P3		P1	
8	Gills Creek	P1, P2	P3	P1, P2			P3
9	Grimes Creek	P2, P3		P1, P2, P3			
10	Hales Ford Boat Launch	P1		P1, P2, P3			
11	Hardy Ford Boat Launch	P1, P2		P1, P2, P3			
12							
13	Little Indian Creek	P1, P2, P3		P1, P2, P3			
14	Lynville Creek	P1, P2	P3	P1, P2			P3
15	Mariners Landing	P1, P3		P1, P2, P3			
16	Mitchells Cove	P1		P1, P2, P3			
17							
18							
19	Penhook Boat Launch	P2		P1, P2, P3			
20							
21	Roanoke River	P1, P2, P3		P1, P2, P3			
22	Scruggs Boat Launch	P1		P1, P2, P3			
23	Standiford Creek	P2, P3		P1, P2, P3			
24	State Park Boat Launch	P1, P2		P1, P3		P2	

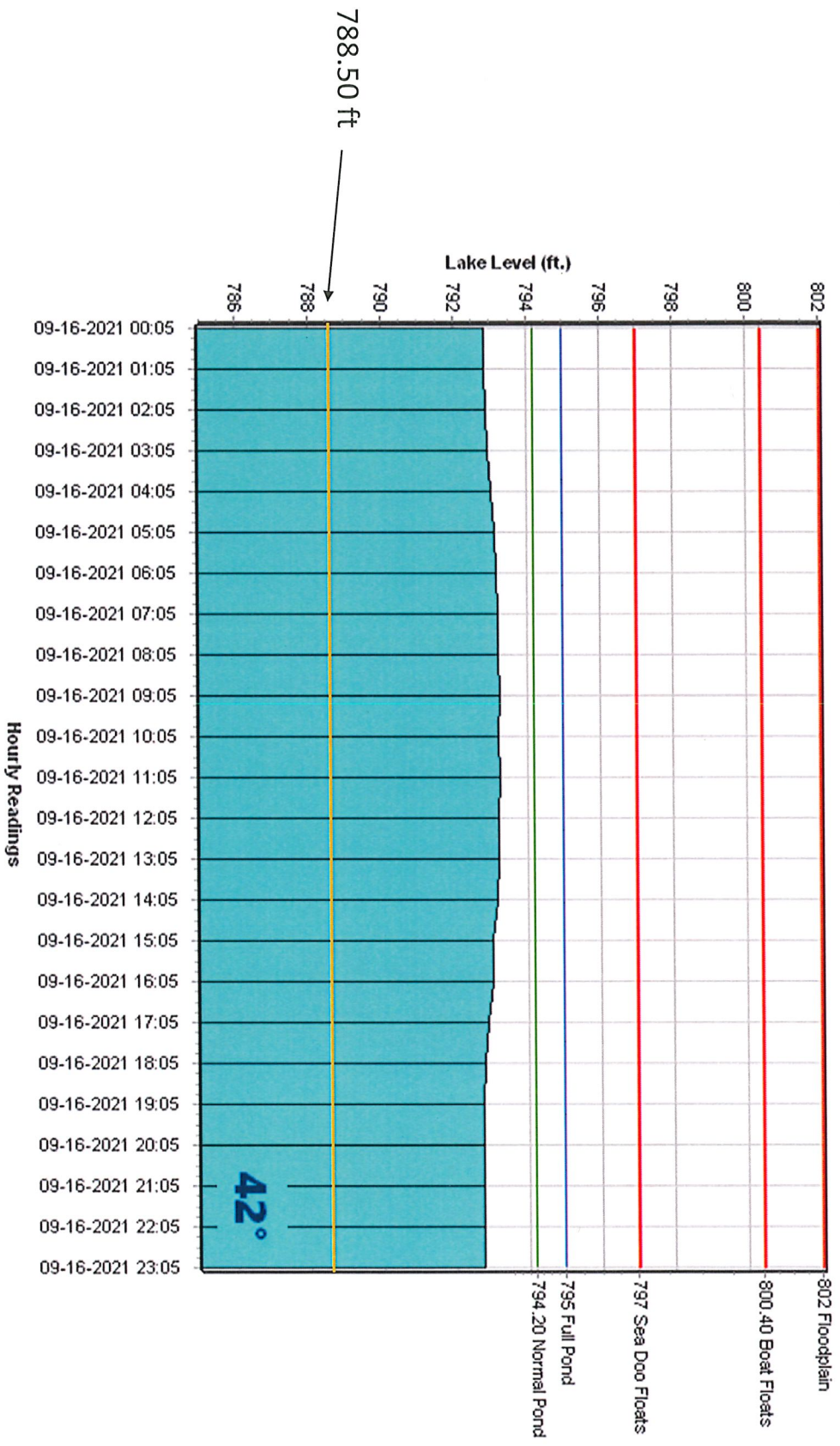
\*if incomplete data is shown, comparison is to available data

\*\*unable to discern change due to scale of profile data

Low water area visible from Hardy Road bridge



Lynville Creek poses some interesting questions? For example, pool elevation. On the day of testing, the pool elevation is noted as 788.50' (ft). That's 6.5 feet below full pond.



One Year  
  One Month  
  One Week  
 From  To

### **Requests and/or Recommendations for Reporting**

Glossary of terms used in the report

Data tables for each site

Legible graphical representations of collected data

Re-collection of data when and wherever “no data was collected”

Complete profile data at the 2005 profile (noting level of sediment +/- pool elevation)

Proposed mitigation in areas of significant accumulation (recreation facilities)