

Compilation of historical Nontidal Network database for loads and trends through 2022

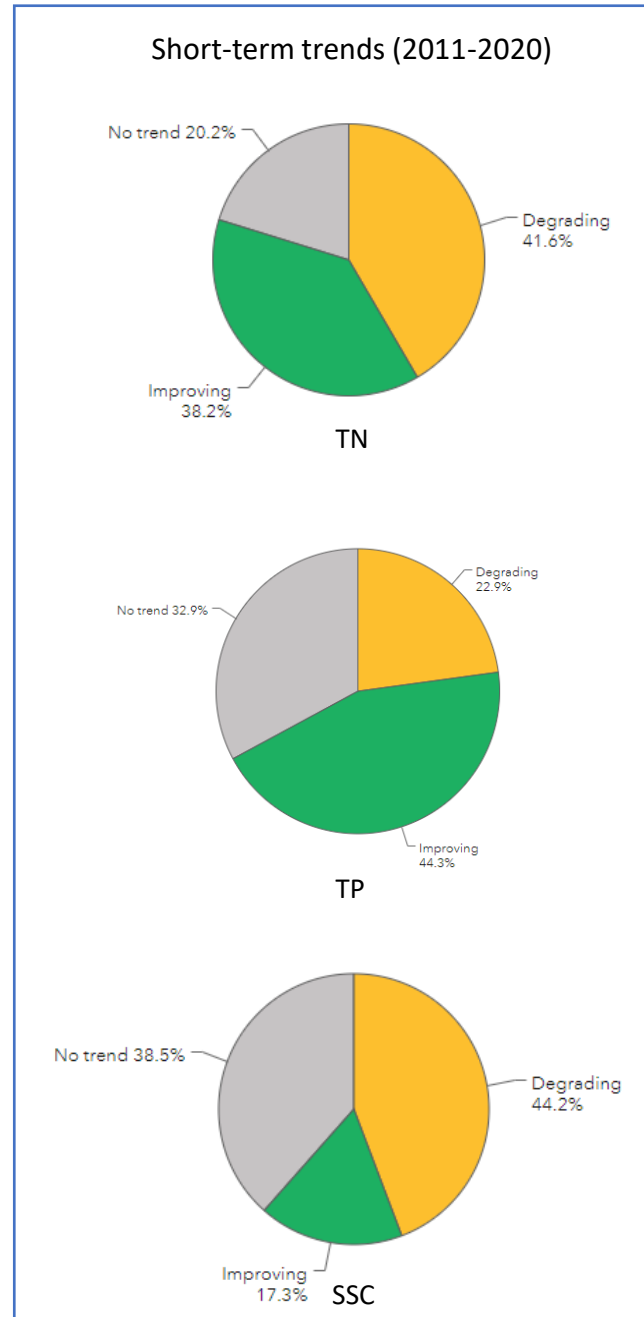
Nontidal Network Workgroup

April 2023 Meeting

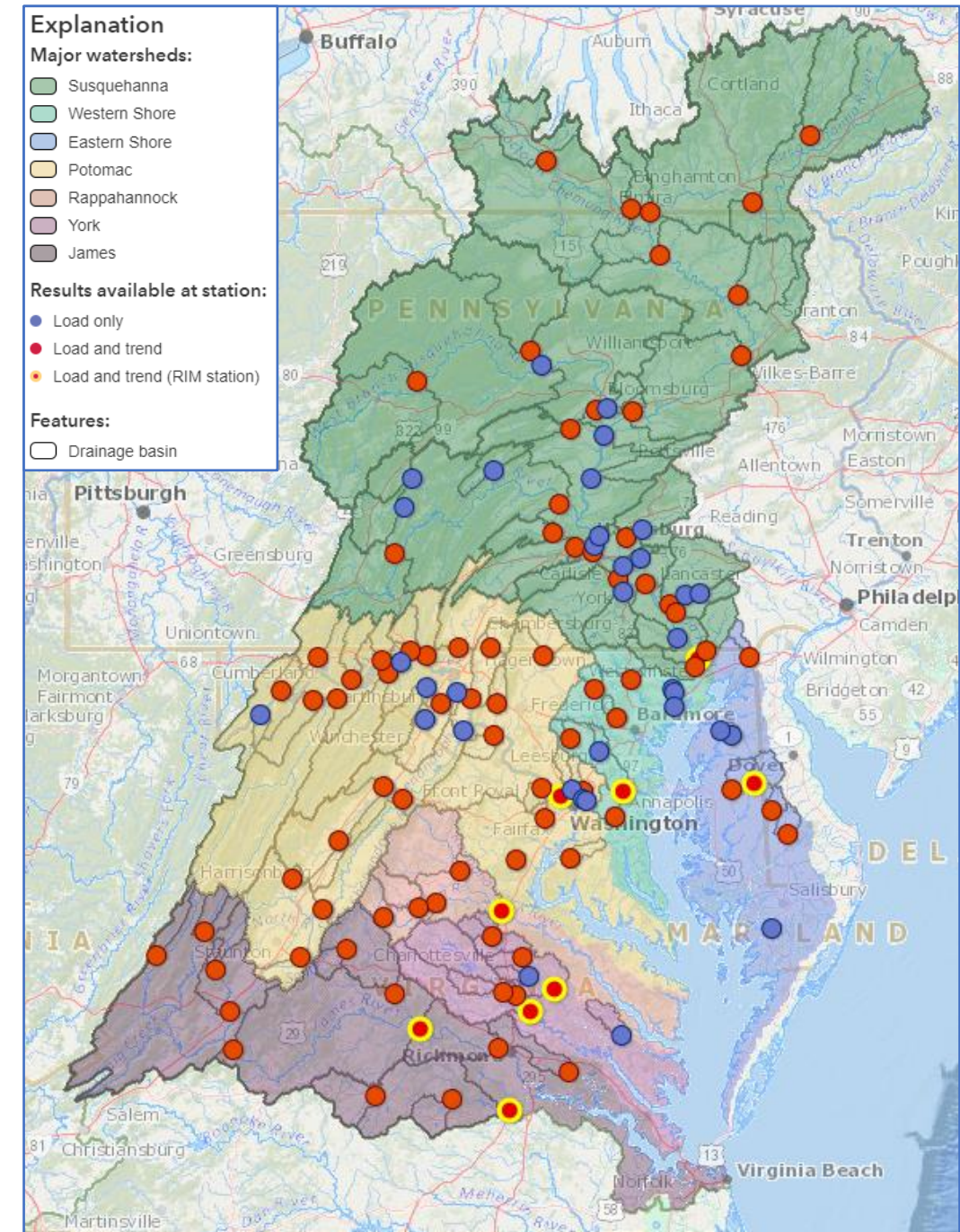
James Colgin, PAWSC

NTN Data

- 123 monitoring stations
- Nitrogen, Phosphorous, Sediment
- Multi-agency data source
- WY 1984 to 2022
- Long-term trends, short-term (10 year) trends, or load only
- Methods: WRTDS-K



<https://va.water.usgs.gov/geonarratives/ntn/>



Data Providers

DEDNREC

DELDNR

MDDNR

MDE

NRO

OWML

PADEP

PADER

PGHD

PRO

SCRO

SRBC

USGSMD

USGSPA

USGSVA

USGSWV

VADEQ

VRO

Stations (Q and QW)

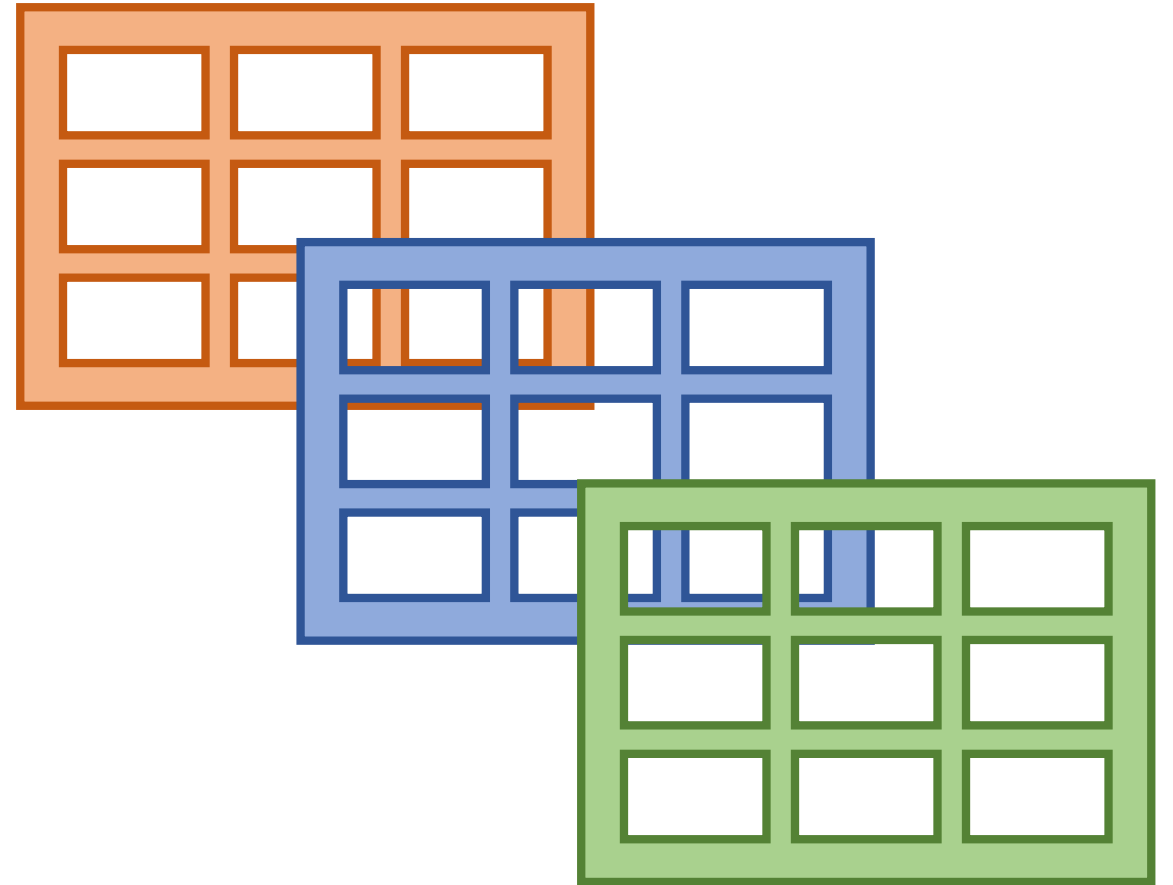
01486000	01542500	01571005	0158175320	01613525	01648000	01674500	1BNFS010.34	304191	CAC0148	TF4.0M	WQN0226	WQN0305
00302031	01548005	01571104	01582500	01614000	01648010	02011500	1BSMT004.60	3-RAP030.21	CON0180	TF4.0P	WQN0229	WQN0317
00304191	01548075	01571500	01585075	01614500	01651000	02015700	1BSSF003.56	3-RAP066.54	CVA0046	TF5.0A	WQN0231	WQN0401
01487000	01549700	01571505	01586000	01616400	01651770	02020500	1BSSF100.10	3-ROB001.90	DER0015	TF5.0J	WQN0243	WQN0404
01488500	01549760	01573160	01589300	01616500	01651800	02024000	1BSTH027.85	3-RPP147.10	GEO0009	TOC0037	WQN0259	WQN0410
01491000	01553500	01573560	01591000	01618100	01654000	02024752	2-APP110.93	3-RPP147.49	GUN0258	TOW0030	WQN0263	WQN0433
01491500	01553700	01573695	01593500	01619000	01658000	02031000	2-BCC004.71	7-DRN010.48	GWN0115	TUK0181	WQN0269	WQN0445
01493112	01553850	01573710	01594440	01619500	01658500	02034000	2-BLP000.79	8-LTL009.54	LIC0042	WCK0001	WQN0271	WQN0448
01493500	01554000	01574000	01594526	01621050	01664000	02035000	2-CFP004.67	8-MPN094.79	LXT0200	WIL0013	WQN0272	WQN0462
01495000	01555000	01575585	01595300	01626000	01665500	02037500	2-CHK032.77	8-MPN094.94	MGN0062	WIL0065	WQN0273	WQN0501
01502500	01555500	01576000	01599000	01628500	01666500	02037618	2-CHK035.26	8-NAR005.42	MKB0016	WQN0201	WQN0278	WQN0509
01503000	01556000	015765195	01601100	01631000	01667500	02039500	2-DPC005.20	8-PCT000.75	MON0528	WQN0202	WQN0280	WQN0510
01511500	01558000	01576754	01601500	01632900	01668000	02041000	2-JMS113.20	8-PCT000.76	MON0546	WQN0203	WQN0281	WQN0511
01515000	01562000	01576767	01604500	01634000	01669520	02041650	2-JMS117.35	8-POR008.97	NPA0165	WQN0204	WQN0282	WQN0512
01529500	01565000	01576787	01608500	01636500	01671020	02042500	2-JMS127.50	A4	NWA0016	WQN0210	WQN0283	WQN0513
01531000	01567000	01577500	01609000	01637500	01671100	1AACO014.57	2-JMS279.41	ANA0082	PR01	WQN0212	WQN0284	
01531500	01568000	01578310	01610155	01638480	01673000	1ACAX004.57	2-MCM005.12	ANT0044	PXT0972	WQN0214	WQN0285	
01534000	01570000	01578475	01611500	01639000	01673800	1ADIF000.86	2-MRY014.78	ANT0047	SID0015	WQN0217	WQN0286	
01536500	01570500	01580520	01613030	01646000	01674000	1ASOQ006.73	2-RVN015.97	ANT0366	TF1.2	WQN0223	WQN0301	
01540500	01571000	01581752	01613095	01646580	01674182	1BMDD005.81	302031	BEL0053	TF3.0	WQN0224	WQN0302	

Relevant pcodes

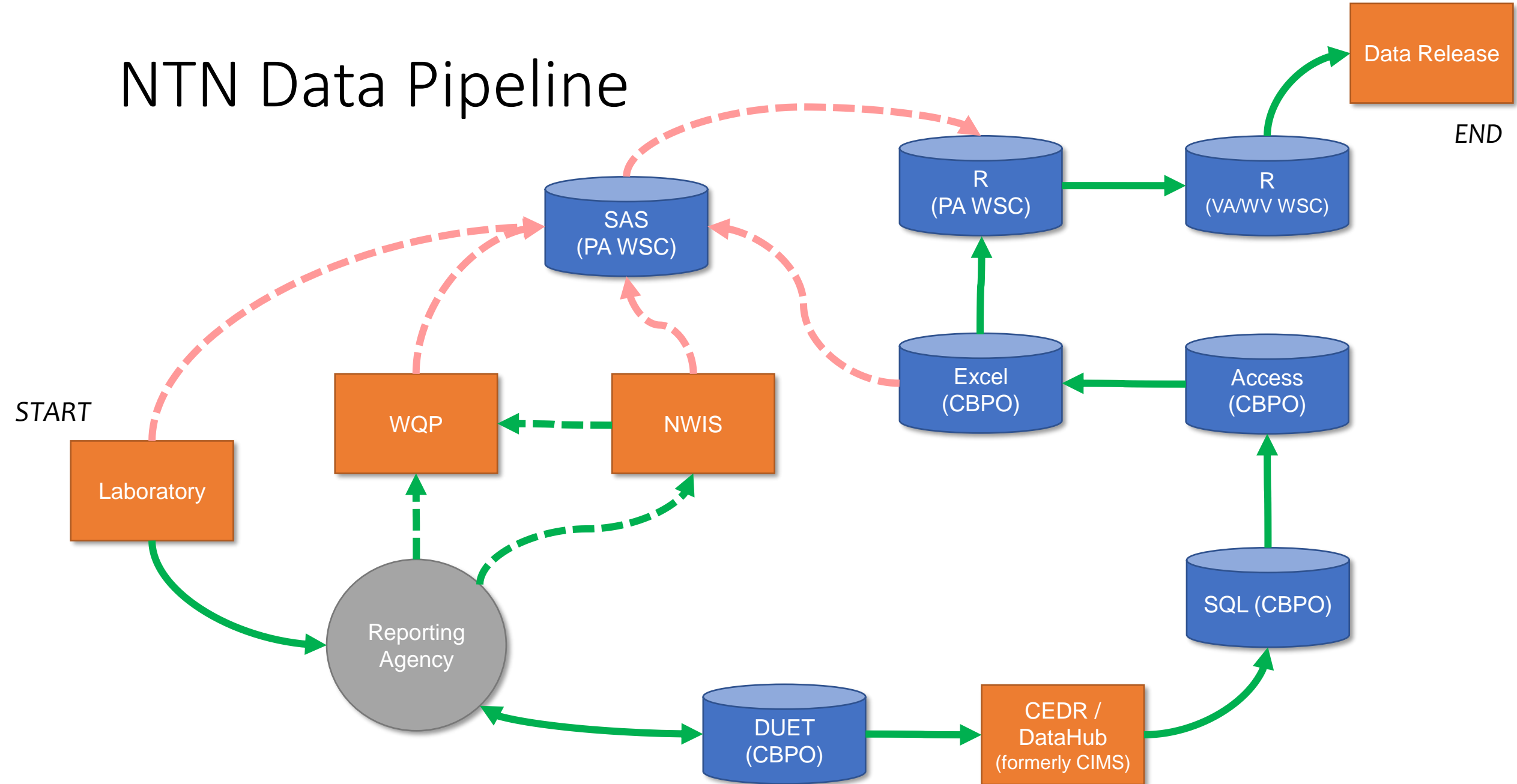
Nitrogen	Phosphorous	Sediment
00600	00665	80154
00601	00666	00530
00602	00667	
62855	00671	
62854	00672	
49570		
00630		
00625		
00631		
00620		
00615		
00613		
00618		
00623		

Databases

- **Historical Database**
Pennsylvania WSC
- **DataHub / CEDR**
Chesapeake Bay Program Office
- **Water Quality Portal**
USGS / EPA / NWQMC
- Other historical databases may include: CIMS, NWIS, compiled Access/Excel files



NTN Data Pipeline



Questions

- Can we streamline the process and pull from one data source?
- How much data from one source is reproducible in another source?
- What are the differences between data sources?
 - Number of observations
 - Sample dates/times
 - Data values
 - Laboratory qualifiers/remarks/comments
 - Other attributes: method codes, measured vs. calculated, etc.
- How much data has been through a QAQC process?
 - Has NTN data in the DataHub been processed through DUET (formerly DUQAT)?
 - Do we need to incorporate more QAQC?
- Are we missing any data?

Timeline

Fiscal Year 23							Fiscal Year 24			
Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
	Extract web data									
	Modify scripts									
		Identify data discrepancies								
		Resolve pcode hierarchy								
		Resolve data discrepancies								
					QAPP					
					Data Release					
							OFR			
							Prep data			
							Loads/trends computation and analysis			