

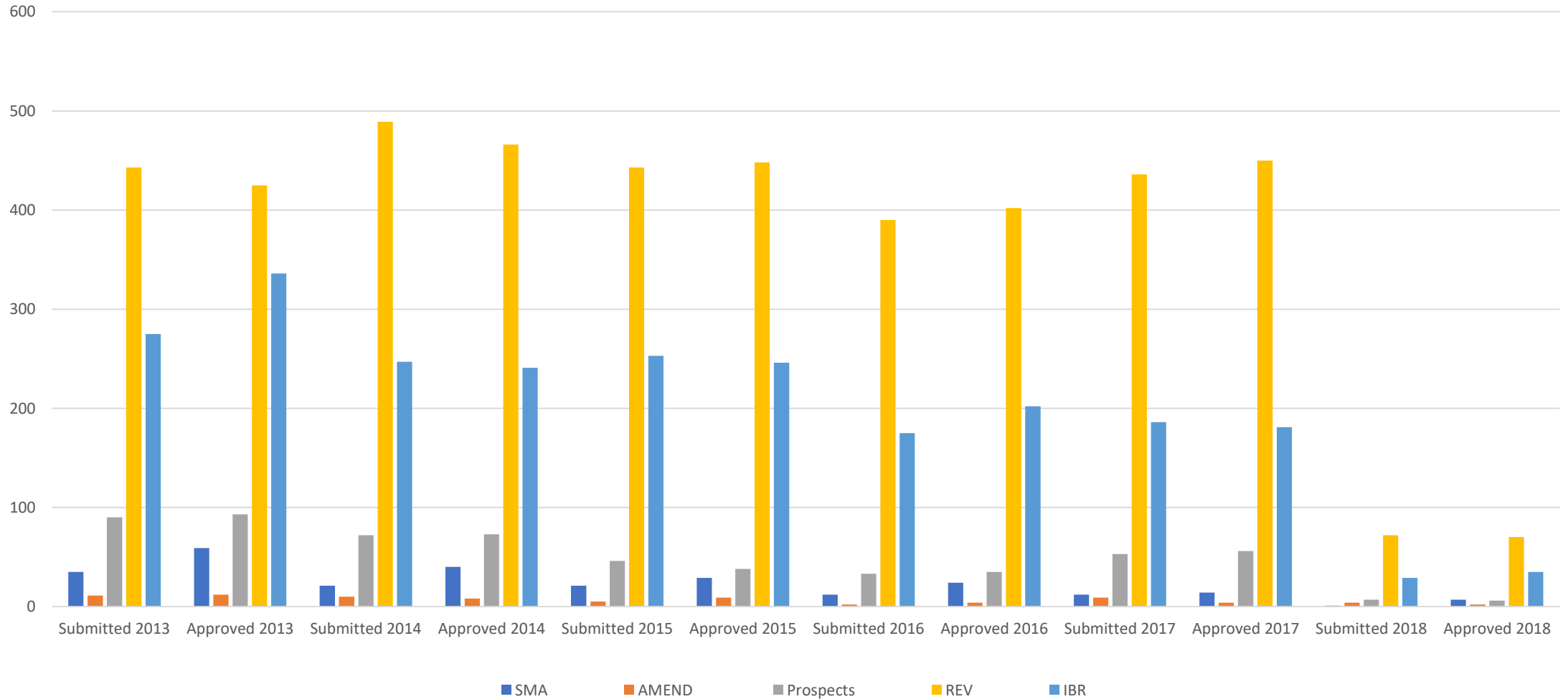
# WVDEP Update for 2017/2018

John Vernon

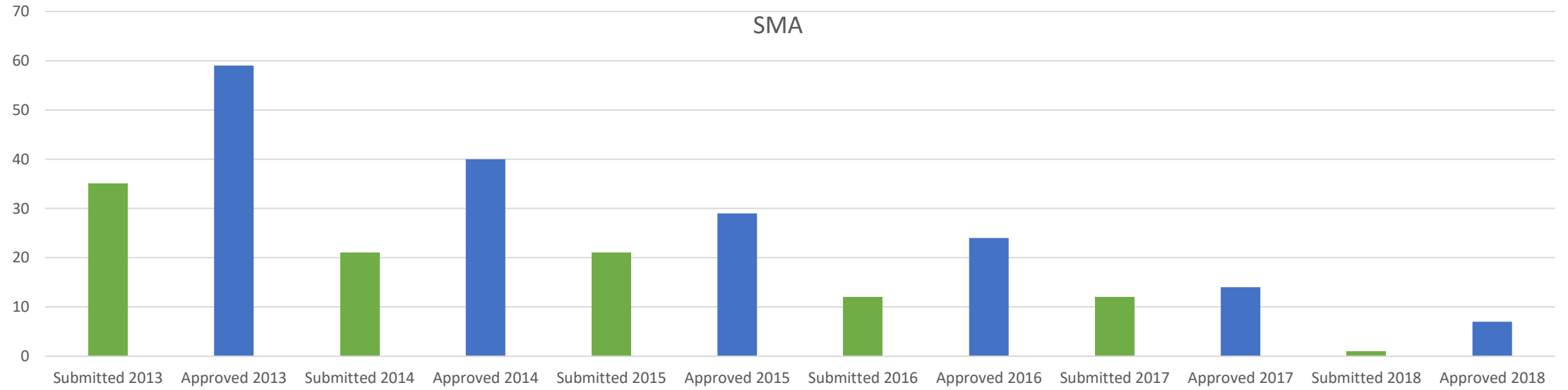
Assistant Director of Mining and Reclamation

# Permitting Activity for 2013-2018

## SMCRA Permitting



# SMA Activity 2013-2018



Submitted

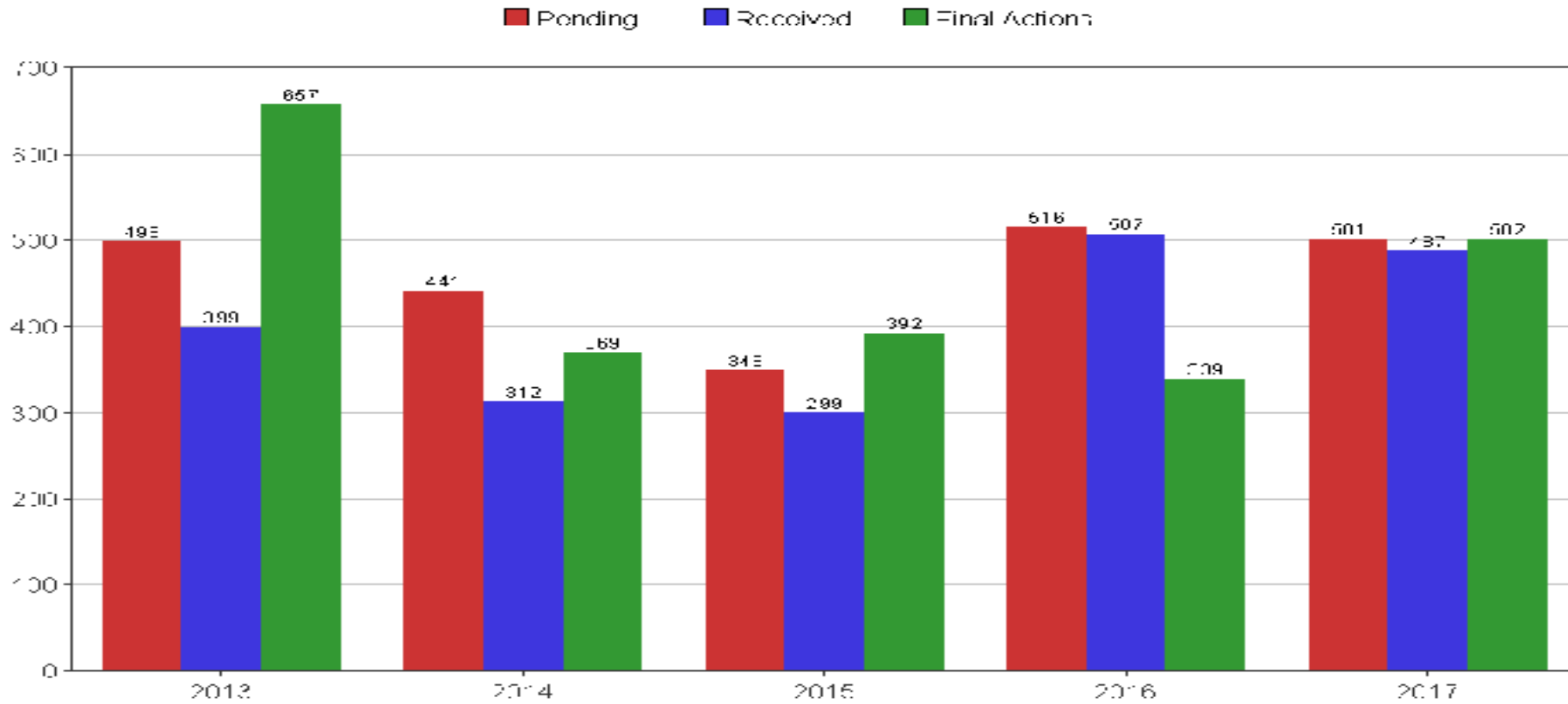


Approved



# NPDES Activity

**NPDES Applications - NPD, NPR & Major NPM  
Pending, Received, Final Action by Year  
For Week Ending 12/31/2017**



# Industry Training in NPDES

- **April 17, 2018:** Session 1 -How to avoid common problems when submitting a NPDES permit application. This includes water analysis and use of the POC Workbook, Proper submittal of the Narrative WQ Justification, Acceptable BWQ data, etc.
- **May 16, 2018:** Session 2 -How to use common workbooks, conduct an Aluminum Translator Study and use of the Workbook, conduct a Reasonable Potential Assessment and use of the RP Workbook, and conduct a Mixing Zone study and calculation of limits.
- **August 22, 2018:** Session 3 - Overview and application of the most current policies, Precipitation Induced Outlets with Instream Benchmarks, Post Mining Limits, and Instream Monitoring Frequency Reduction.
- **November 14, 2018:** Session 4 - Selenium Update and Calculation of new limits using fish tissue studies.
- Please check all NPDES sessions you will be attending above (all in Charleston). You will receive a certificate of completion for 4 PDHs, per class.

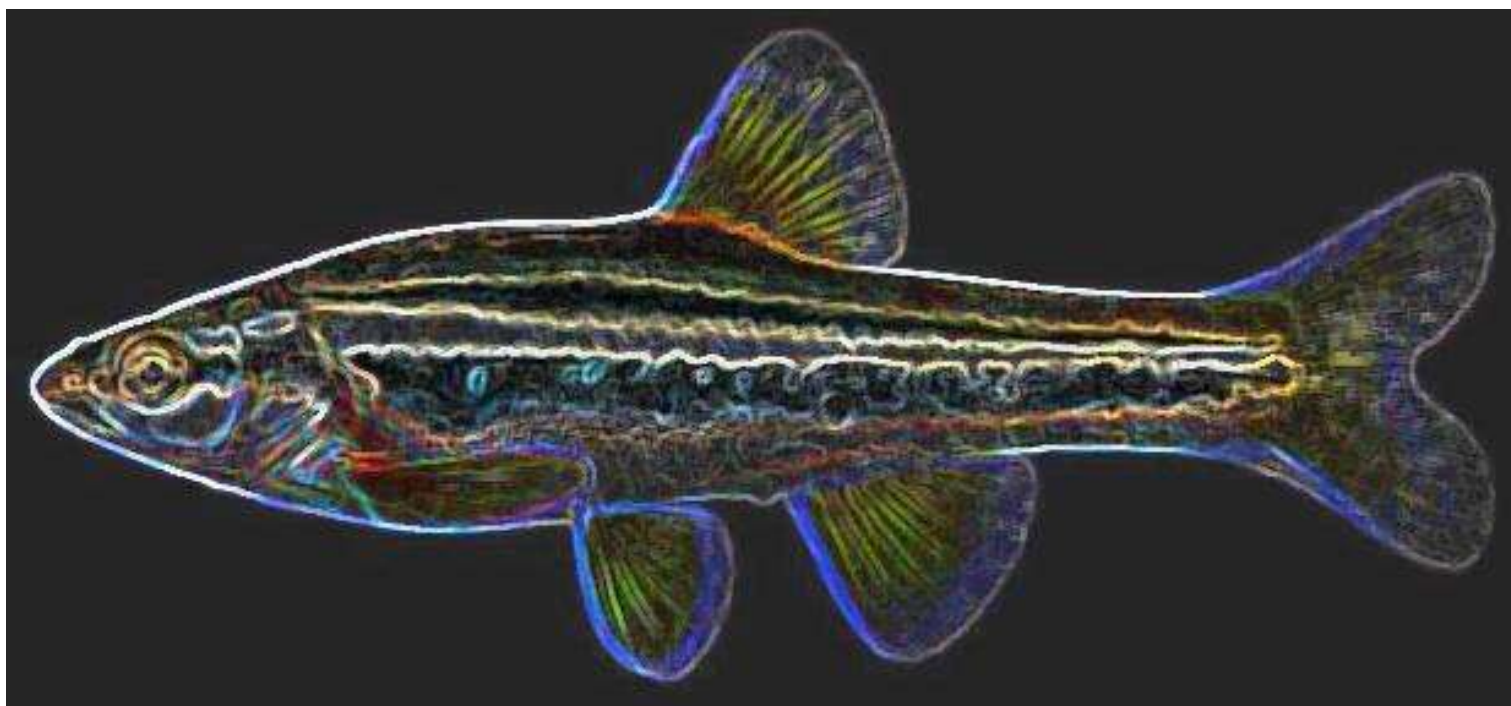
# Additional NPDES Efficiencies

- Revision to Post Mining Limits- October 2017

Included permitting guidance in relation to Precipitation-induced outlets vs. Non-precipitation induced outlets.

Addressed Tech Based Effluent Limits vs. Water Quality Based Effluent Limits.

# Selenium Update



# WV Selenium Chronic Aquatic Life Criteria

- Fish tissue studies performed to recalculate selenium limits according to new criteria
- To date 98 study plans have been submitted encompassing around 170 study sites
- 7 permits have been approved, 2 are under review currently
- Lowest limit to date 5.0  $\mu\text{g}/\text{L}$  monthly average & 8.7  $\mu\text{g}/\text{L}$  daily max
- Highest limit to date 17.1  $\mu\text{g}/\text{L}$  monthly average & 29.6  $\mu\text{g}/\text{L}$  daily max
- Average limits 10.8  $\mu\text{g}/\text{L}$  monthly average & 18.8  $\mu\text{g}/\text{L}$  daily max
- EPA is thoroughly reviewing all applications and commenting BUT they have not submitted any objections





# Tomblin Wildlife Management Area

**Tomblin Wildlife Management Area-4,000+ Acres  
Elk Stocking in Place**

Laurel Lake WMA

Laurel Lake  
Wildlife  
Management Area

Laurel  
Lake  
Lands

Delbarton/Arc Land WMA

Delbarton/Arc  
Land Wildlife  
Management Area

Source: Esri, HERE, DeLorme, Intermap, Incorpore P Corp., GEBCO, USGS, FAO, NPS, NRCAN, Esri, IGN, Kantam, NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, ©OpenStreetMap contributors, and the GIS User Community

# Elk thriving on Reclaimed mine lands



West Virginia DNR arranged in 2107 to move 60 Arizona elk to Tomblin WMA in 2018 to add to elk from Kentucky already at Tomblin WMA

# Boy Scout Summit Bechtel Reserve

- Built on many SMCRA, Special Reclamation, and AML reclaimed sites in Fayette County (10,600 acres+ Total)
- ARRI Reclamation Test Facility located on the property
- New Merit Badge in 2014 “Mining in Society”



# The Merit Badge and Summit Bechtel Reserve

**Mining provides the 30 minerals it takes to make a smart-phone and up to 12 for a bicycle**

Consists of 8 Requirements covering topics such as:

Mineral Production, Safety, Mining History, Equipment, Planning/Permitting, Reclamation, Careers



# 2017 National Jamboree

One of the Largest WV Cities (30,000+)  
On Reclaimed Land



# Hobet 21 and the West Virginia National Guard



# Mining and National Guard Readiness



Soldiers from Bravo Troop, 1st Squadron, 150th Cavalry Regiment at Hobet 21

# Hobet 21 Mine Pools for WV Guard Use



WVDEP is assisting the WV National Guard in developing mine pool resources.



# AGRI-Park West Virginia Nicholas County Muddlety Mine Site Part of Patriot Gardens Initiative



Darrell Sears of WV National Guard holding apple seedling at Muddlety Site

# Patriot Gardens



**An agricultural initiative of the W.Va. National Guard  
designed to align and mobilize strategic efforts  
in order to provide new economic and employment  
opportunities for West Virginia veterans**

Major General James Hoyer  
Adjutant General  
West Virginia National Guard



# Making Active Programs More Efficient

- Avoiding SMCRA and NPDES overlap
- Separate Inspection Forms SMCRA and NPDES
- NPDES Comprehensive Inspection (Complete) yearly with quarterly Reconnaissance Inspections (Partial)
- Separate Single Event Violation Forms (MR-HP15E), similar to Notice of Violations issued under SMCRA

# New NPDES Inspection Forms

MR-6HPE West Virginia Department of Environmental Protection Page 1 of 1  
 ERIS MR-6HPE HYDROLOGIC PROTECTION UNIT INSPECTION (EPA) REPORT

NPDES NUMBER	LATITUDE	LONGITUDE	DATE	INSPECTION			PHOTOS
				TIME	REASON	TYPE	
[REDACTED]	37° 52' 28" N	81° 35' 8" W	05/01/2017	09:00	RI	CEI	No

PERMITTEE NAME		[REDACTED]		NPDES EXP DATE		10/23/2012	
ASSOC. PERMITS		[REDACTED]					
LAST HPU INSP DATE	TYPE	CUR NPR#	CUR NPM#	1	CUR NPT#		
TIME USED (HRS)=>		PERMIT REVIEW	1.00	INSPECT	0.00	TRAVEL	0.00
						REPORT	0.00
AREAS EVALUATED:		PERMIT	X	FACILITY SITE REVIEW	N/A	EFFLUENT/RECEIVING WATERS	X
		RECORDS/REPORTS	N/A	SELF-MONITORING PROGRAM	X	COMPLIANCE SCHEDULES	X
		OPERATIONS MAINTENANCE	N/A	STORMWATER	X		

**INSPECTION COMMENTS**  
 INSPECTION TYPE= CEI-Compliance Evaluation Inspection (complete inspection with or without sampling)  
 RI-Reconnaissance Inspection (partial inspection)

EVALUATION CHOICES ARE: SEV Issued (and number automatically), N/A-Not applicable, or FC-Full compliance

SEV STANDARD	EVALUATION	SEV#	SEV STANDARD	EVALUATION	SEV#
A0011 Unapproved Bypass.....	SEV Issued	1	A0012 Effluent Stormwater Violation.....		
A0013 Failed Toxicity Test.....			A0015 Unauthorized Discharge of Brine..		

# Special Reclamation

- Watershed treatment vs Point Source in Preston County
- Muddy Creek and Sandy Creek have EPA approved variances for in-stream treatment.
- Martin Creek of Muddy Creek of Cheat River and Maple Run and Left Fork of Little Sandy Creek of Tygart Valley River will be subject to an in-stream NPDES permit.

# AML advances in Instream Water Treatment



Three Forks in Preston County, Instream Dosers have recovered up to 18 miles of fishery streams

# North Fork of Birds Creek Doser



Amazing fish population restoration despite elevated TDS  
Pre-doser survey-1 fish ½ mile upstream of Tygart Valley River in Three Forks  
Two years after doser installation-1605 fish of 21 different species



How big are those fish Jeff