

Welcome to Wild Wonderful West Virginia ?!?



Not if this is what you see heading south on I79 just after entering WV!!

This mine complex is ~3 mi in length

Huge increase in surface mining in northern WV

- mining high sulfur coal**
- using ash from power plants in mine pits**
- claim it reduces AMD so using it as “beneficial” use**

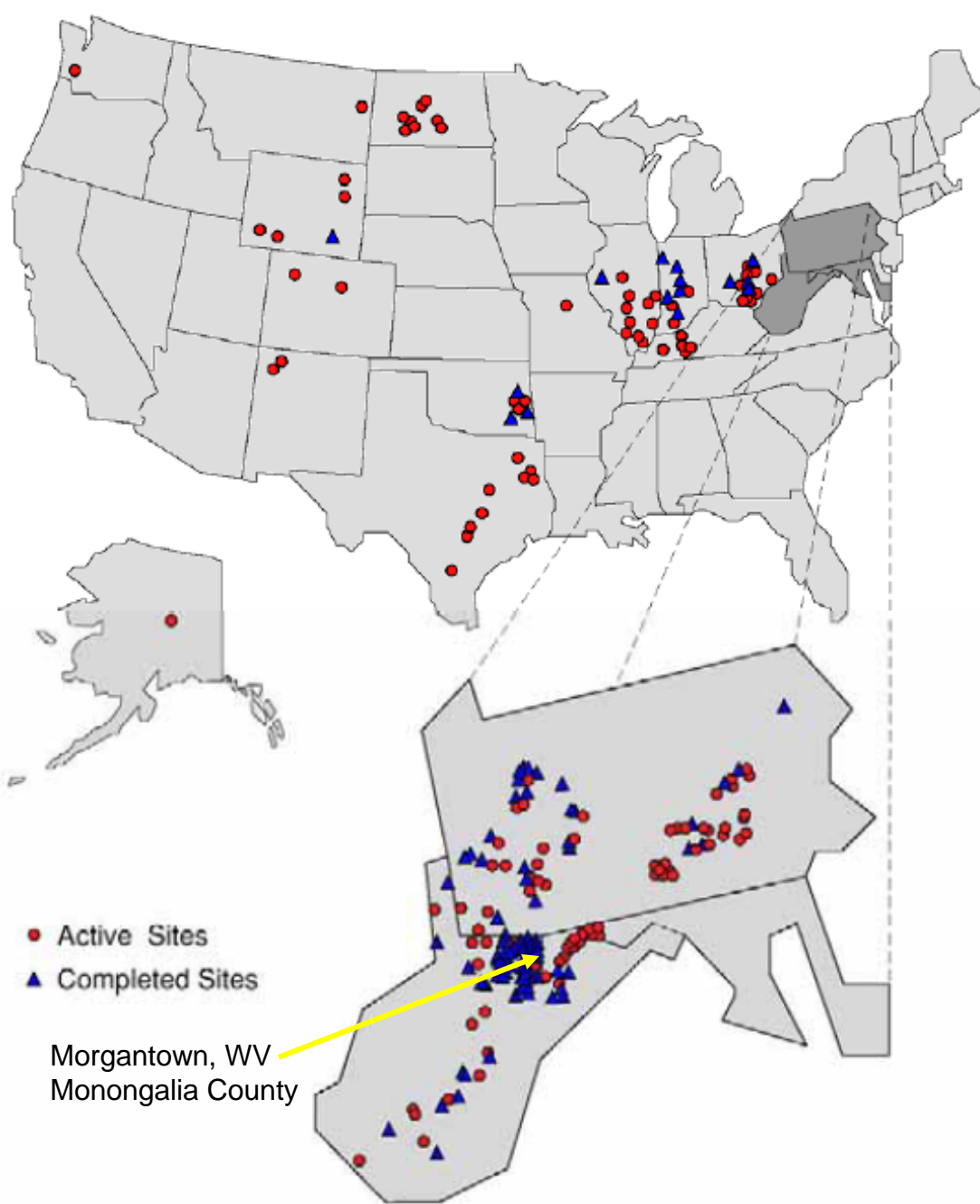




acres of exposed coal ash

- on surface of mine
- on coal face
- in mine pit





coal combustion waste (CCW) disposal sites thru 2003

- extensive use in northern West Virginia as mine fill

- figure does not include several WV sites permitted after 2003

-Figure 1.5 from: National Academy of Sciences. 2006. Managing coal combustion residues in mines. The National Academies Press, Washington, D.C. 238pp

FIGURE 1.5 Coal combustion residue mine placement sites in the United States.
 SOURCE: National Research Council; data collected through individual state surveys.

Morgantown, WV
 Monongalia County

Why are we concerned?

- millions of pounds of toxic waste in the fly ash that was dumped in 1998-2009 by just one mining company

- but no ground water and little surface water monitoring is occurring

Pounds of toxic metals

arsenic	166,903
barium	931,591
chromium	254,709
lead	1,714,467
mercury	12,326
vanadium	336,020
All metals	4,841,914

Data Source: EPA Toxics
Release Inventory

fugitive dust -- fly ash, coal and other dust, diesel fumes

- from mine pit, heavy equipment, blasting**
- particulates add to poor air quality and respiratory problems**



Mine between Morgantown and Cassville

Fugitive dust (along Rt 7 towards Cassville)

- street sweeper stirs up particulates (left photo)
- coal (100 per day) and ash (1 per 7 minutes) trucks on roads (many homes along rds)
- particulates pile up along edge of road



Particulate build-up on sills and siding of a home ~1 mi away

Water quality concerns

- selenium in fish tissue downstream of ash ponds was 4-6X greater than EPA safe criterion of 8 ppm (source WVDEP report)

Avg. Water Column Conc. (ppb)	Avg. Fish Tissue Conc. (ppm)	Avg. Sunfish Tissue Conc. (ppm)	Avg. Minnow Tissue Conc. (ppm)
39.65	33.21	15.83	41.23

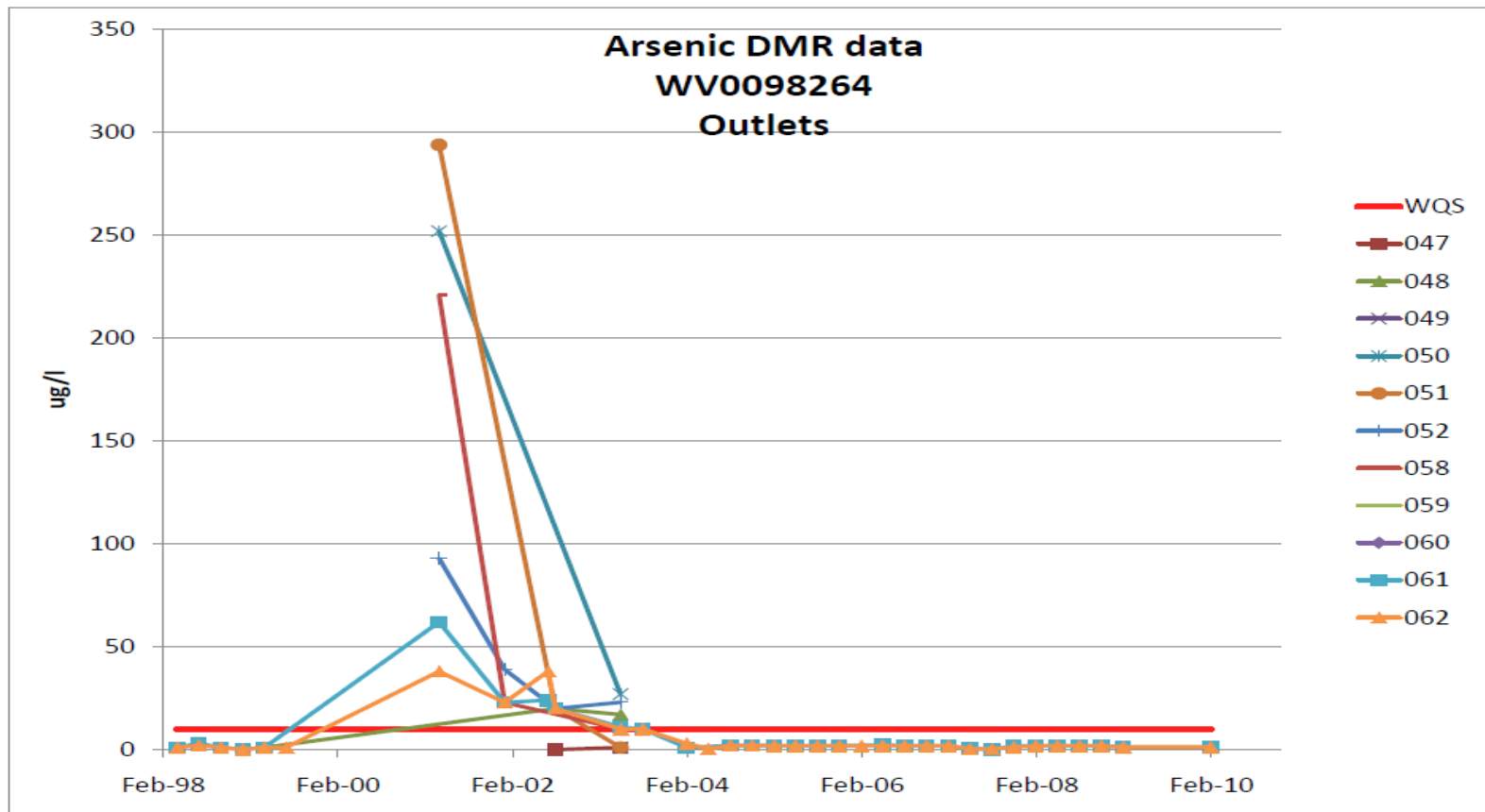
- Preston county study – arsenic, lead, selenium, thallium concentrations 2-140X greater than WV State water quality standards in water run off from coal ash sites

- Many other sites thruout US documenting contamination from heavy metals leaching from fly ash sites (Nat. Acad. of Science)

- Even data from Mon County suggests water quality problems (see next 2 slides)

Scott's Run -- outlet data from 5-10 year old minefills with ash addition (from WVDEP database)

- arsenic tested at only 11 of 62+ outlets
- even with few samples tested, arsenic levels often exceeded WV state water quality standards (WQS red line)

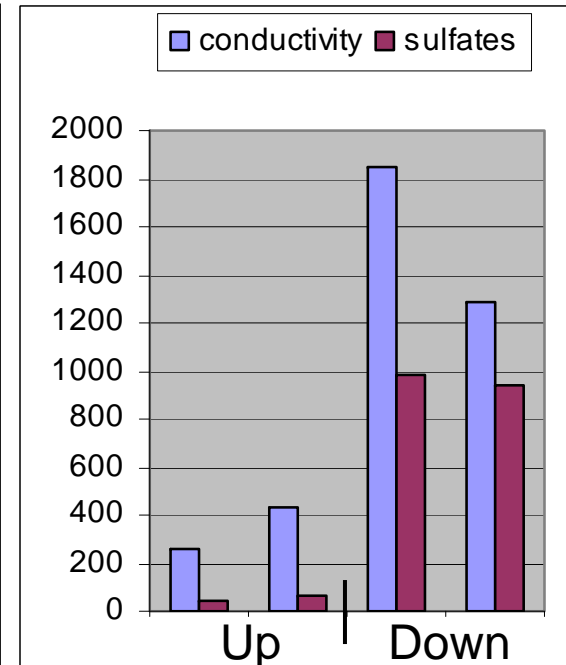
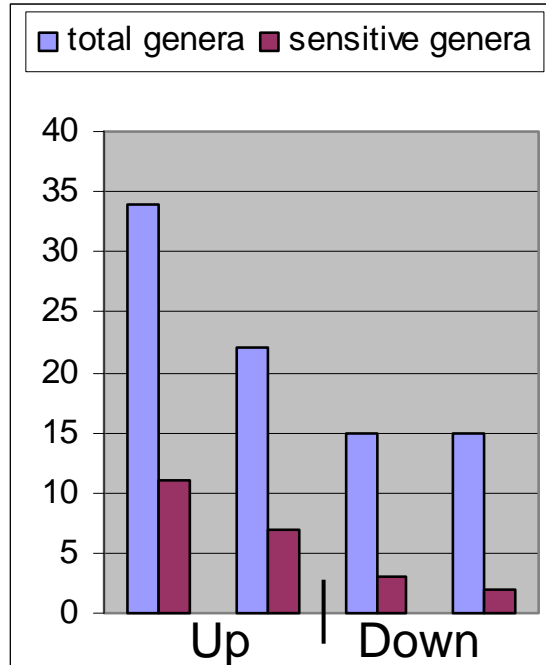


Scott's Run data (source WVDEP)

Only 4 data points sampled but follow predicted pattern:

- macroinvertebrate diversity greater upstream of coal ash mines

- water quality (conductivity, sulfates, TDS) also better upstream



And where does this water flow ??

Into the Monongahela River !!

WV Narrative Water Quality Standards state:

NPDES Permit limits must ensure compliance against discharges of . . .

“materials in concentrations which are:

- harmful . . . to . . . aquatic life”
(47 C.S.R. § 2-3.2.e)**
- or that cause “significant adverse impact to the . . . biological components of aquatic ecosystems. . .”
(47 C.S.R. § 2-3.2.i)**

Clearly, the mines in Mon County that use fly ash are violating WV water quality standards but WVDEP is ignoring the data

Coresco sites near Madsville

- existing ~140 acre ash dump; application for renewal
 - upper half of photo is ash
 - note large dozer near center top of ash pile



- new 338 acre SMCRA permit application with NO mining (ash dump)
 - dump ~81 million tons of fly ash over 25-30 yrs
 - result: unlined ash pile 500ft thick

WVDEP Informal Conference

question and comment period for 2 Coresco permits

6:00 pm, Monday, October 17

Granville Volunteer Fire Dept social hall



power plants would rather dump for free than have to pay for liners and treatment of run-off that would keep toxic metals and TDS out of our surface and ground water.