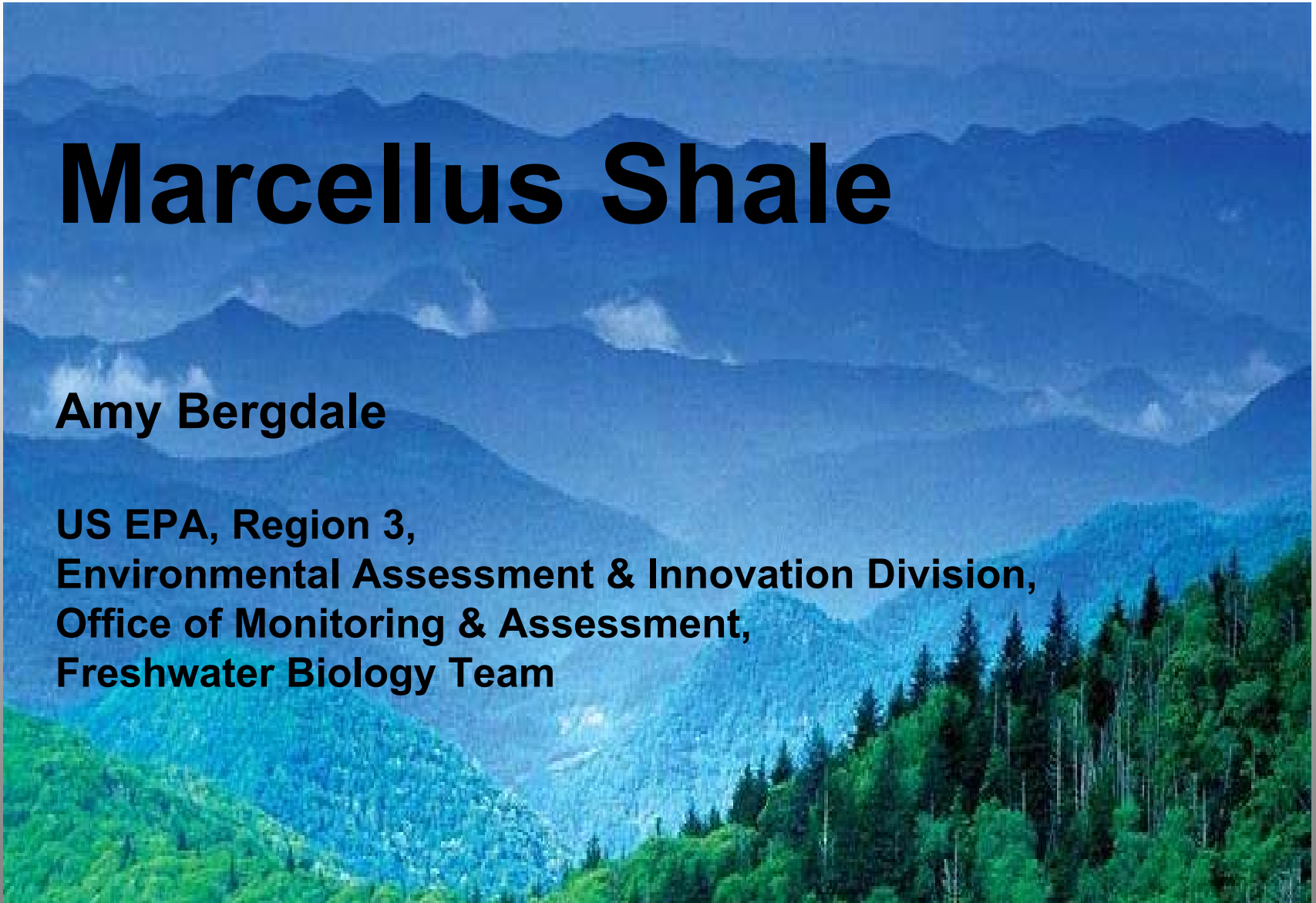


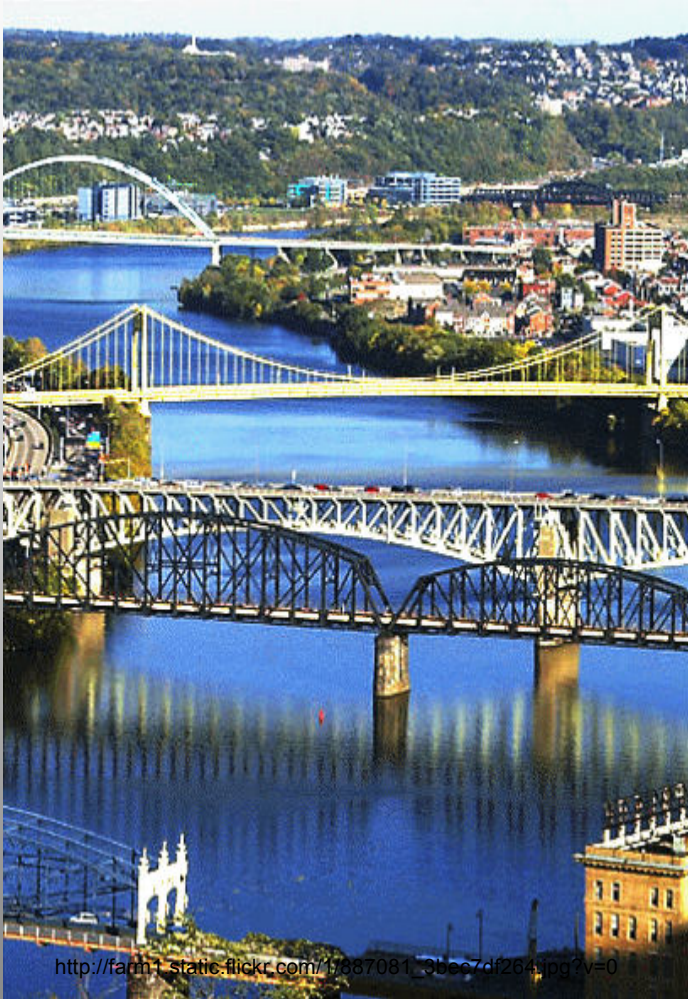
Marcellus Shale

Amy Bergdale

**US EPA, Region 3,
Environmental Assessment & Innovation Division,
Office of Monitoring & Assessment,
Freshwater Biology Team**



2008 Events that Impacted Pittsburgh District Water Management



- **October 10.** Hatfield Power Plant Failed air emissions requirements, businesses not meeting state mandated criteria, intake concentrations higher than criteria. etc

- **October 22.** Start of Monongahela River high TDS Event. PA State Total Dissolved Solids (TDS) Drinking Water Criteria of 500 mg/l exceeded.

- **October 22 -27.** Special release from Stonewall and Tygart Reservoirs to mitigate elevated TDS in PA

- **November 7.** W PA Drought Watch Declaration

- **December 10.** Union Township issued a bottled water advisory, water supply of 850,000 affected

- **December 12.** High Runoff, TDS began to decrease

Underground Injection - PA

County	Injection Formation	Injection Pressure	Injection Volume (Bbls/Month)	API
Beaver	Huntersville/Oriskany	1300	21,000	37-017-20027
Clearfield	Oriskany	3240	4260	37-033-00053
Greene	Mine Void	0	150,000	
Erie	Gatesburg	1570	45,000	37-049-24388
Indiana	Balltown	1930	3600	37-063-20246
Somerset	Oriskany	3250	27,000	37-111-20059
Clearfield	Oriskany	1450	4200	37-033-22059
Somerset	Huntersville/Oriskany	3218	30,000	37-111-20006
		TOTAL	285,060	