

Water You Doing? Comparing the Intergovernmental Responses to the *Gold King Mine* and *TVA Coal Ash Spills*

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Research Questions

- ▶ What are the legal frameworks and policies governing disaster recovery?
- ▶ Why do we see differences in terms of intergovernmental cooperation and conflict as stakeholders recovered from spills at the Kingston Coal Plant and the Gold King Mine?

Literature and Methods

Literature

- ▶ Wright (1988) Overlapping Federalism
- ▶ Focusing on intergovernmental cooperation and coordination

Methods

- ▶ Comparative Case Study
 - ▶ EPA Gold King Mine Spill
 - ▶ TVA Coal Ash Spill

Wright's third model of overlapping authority, moves beyond classical conceptions of federalism by suggesting that contemporary IGR involves "complex multi-unit interactions beyond the nation-state relationship" (Agranoff & Radin 2015, 141)

CERCLA and NIMS

- ▶ Regulatory and Organizational Framework Structure
 - ▶ CERCLA
 - ▶ Time Critical vs. Non-Time Critical
 - ▶ NCP, NIMS-ICS

National Map of Spills



TVA Coal Ash Spill

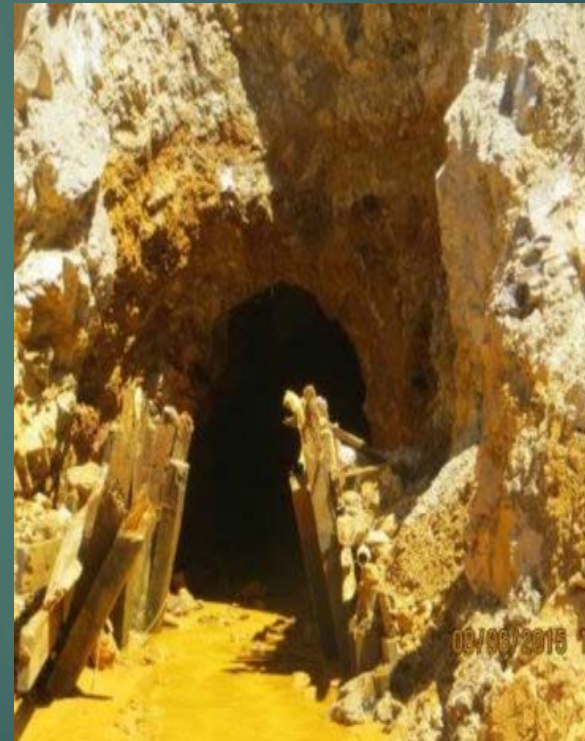


TVA Spill Key Events



Date/Time	Major Event	Actor(s)	Phase
December 22, 2008, 1:00am	Northwestern dike used to contain coal ash failed. 5.4 million CY of coal ash were released into the surrounding area.	TVA Kingston Fossil Plant EPA immediate OSC coordinated response	Time Critical
January 12, 2009	TDEC issued a Commissioner's Order to TVA requiring comprehensive assessment and clean up	TDEC (Tennessee Dept. of Environment and Conservation) EPA	Time Critical
January 21, 2009	TVA submits written notification of toxins discharged in the spill	TVA reporting to the TERC (Tennessee emergency response commission)	Time Critical
May 11, 2009	TVA and EPA file an AOAC to govern the clean up and necessary orders TVA Spill declared Super-Fund site	TVA EPA TERC and TDEC	Time Critical
May 2010	Removal of 3.5mil CY of ash completed	TVA EPA TDEC	Time Critical
From May 2010 to December 2014	Phase 2 & 3 non time critical removal gathering a total of 2.3mil CY of coal ash and assessment of risk from ash remaining in the environment	TVA EPA TDEC	Non-Time Critical

Gold King Mine Spill



Gold King Spill Key Events



Date	Major Event	Actor Entrance	Phase
Aug 5, 2015	Approximately three million gallons of acidic and heavy metal contaminated mine sludge accidentally released CDP-WQCD alerts affected downstream users	EPA, WQCD, Silverton, Durango, Southern Ute Tribe	Time Critical
Aug 6, 2015	EPA issues first public statement and open JIC La Plata County and other locales issue order restricting river use. Alternative water supplies, Mine wastewater arrives in Durango.	EPA, CDP-WQCD, La Plata County, nearby localities	Time Critical
Aug 8-9, 2015	CDP- WQCD sampling data shows pH and metal concentrations decreasing to pre-event conditions. Mine wastewater reaches near Farmington, NM.	EPA, Navajo Nation, Colorado, Arizona, Utah, San Juan County	Time Critical
Aug 14, 2015	City of Durango resumes using Animas River Irrigation intakes remain closed in Tribal Areas	Federal: EPA, Navajo Nation, Colorado, La Playa County, Durango	Time Critical
Sept 2015 – Oct 2016	EPA announces a temporary treatment plant, actors continue sampling and remedial investigations September 7 (EPA declares GKM Superfund Site)	EPA	Time Critical
Nov 2016 – Jan 2017	EPA initiates transition to non-time critical as Gladstone TTP continues to treat water and EPA continues remedial investigations		Non-Time Critical

Findings

EPA Gold King

- ▶ Time Critical
 - ▶ Generally Cooperative
 - ▶ Conflict ensues after emergency response
 - ▶ 3 lawsuits
 - ▶ NM sues CO and EPA
 - ▶ Navajo Nation sues EPA
 - ▶ UT is expected to sue EPA
- ▶ Non-Time Critical
 - ▶ Conflictual

TVA Kingston

- ▶ Time Critical
 - ▶ Cooperative
- ▶ Non-Time Critical
 - ▶ Cooperative

Explanations for Cooperation

- ▶ Clear regulatory and organizational framework for time-critical actions under CERCLA, NIMS-ICS (initial actions)
 - ▶ Protection of public health and environment from exigent dangers
- ▶ Information Sharing/Testing
 - ▶ Low political/economic costs

Explanation for Conflict

- ▶ Scope of Disaster
 - ▶ 6 miles and 200 miles and multiple jurisdictions
 - ▶ Number of Actors Impacted
- ▶ Timeline
 - ▶ Conflict began after initial efforts contained spill
- ▶ Historical Experiences

Contributions and Future Directions

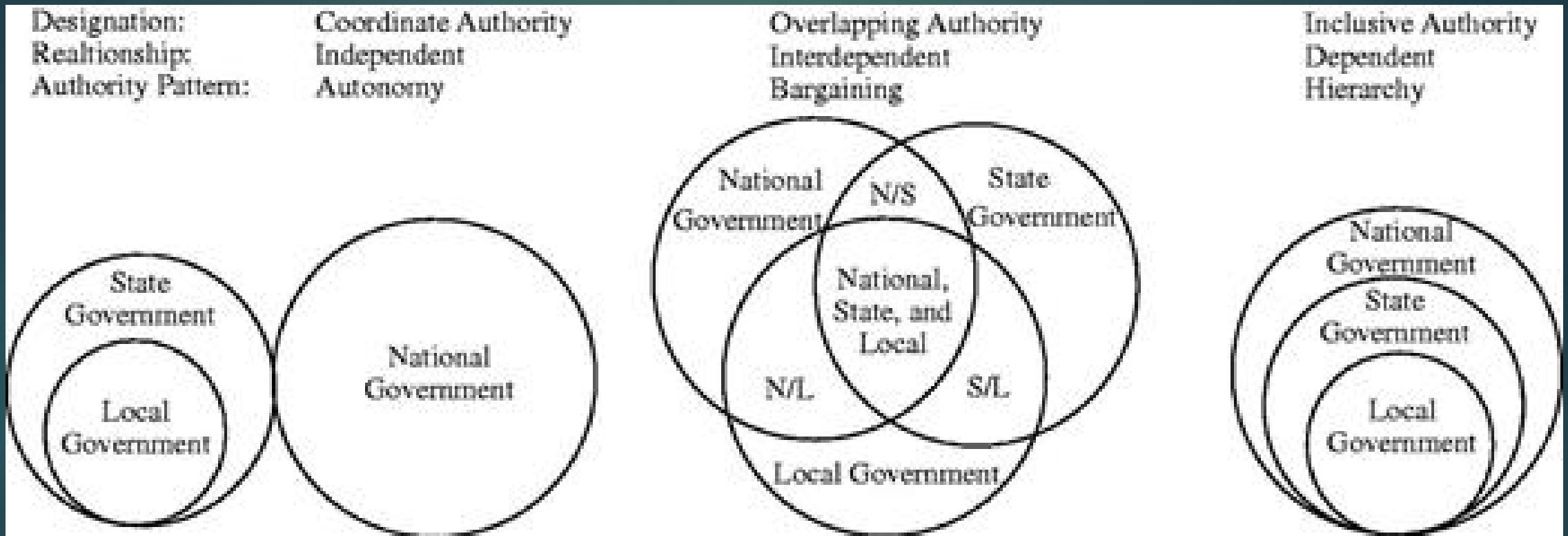
- ▶ Data supports overlapping model even under same law (CERCLA, NIMS-ICS)
- ▶ Begin process of understanding factors contributing to challenges within overlapping federalism
- ▶ Expanded federalism into under-researched area – environmental disaster recovery.

Questions?

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Deil Wright (1988)



Source: Deil Wright (1988) as cited in Agranoff & Radin (2015)