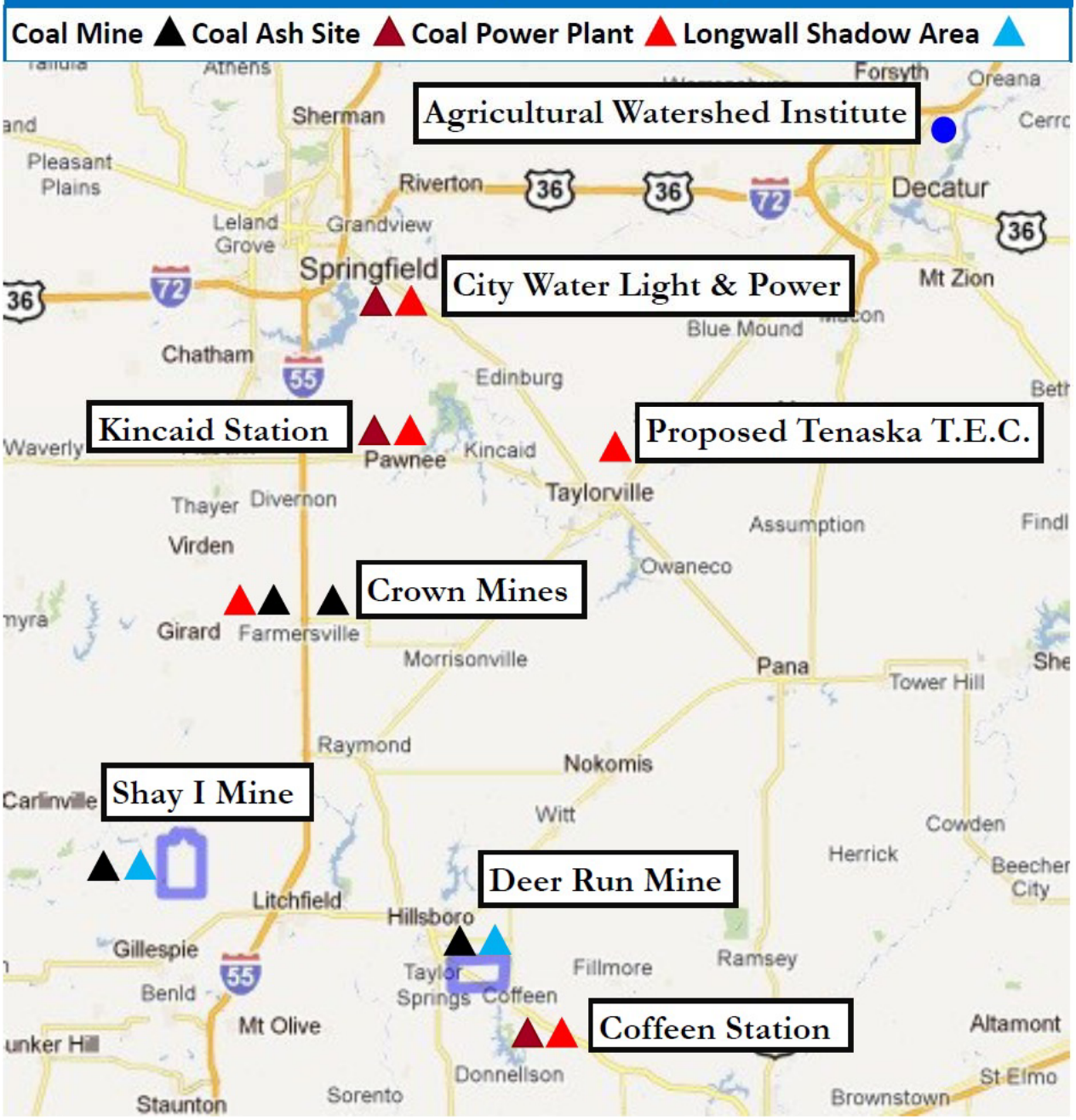
Coalfields to Clean Energy Tour

Heartland Coalfield Alliance &
Students for Environmental Concerns

Central Illinois, October 1st, 2011



City, Water, Light and Power (CWLP) Plant

Input/Output: 2010 1.4M tons of Illinois coal burned/yr to produce up to 548 MW (Up to 698 MW with additional natural gas, diesel and oil-fired combustion turbines – 10 active generating units in all)
Owner: Municipally owned electric and drinking water utility
Location: Springfield, Sangamon County
Waste disposal: Coal ash stored onsite in ash impoundments that discharge to the Sangamon River. Leaking of coal ash pollutants into groundwater and river well established. Scrubber sludge piped over 1 mile to Springfield Metropolitan Sanitary District's Spring Creek facility for blending and discharge to Spring Cr, and Sangamon River.
Of note: Documented groundwater contamination and leaking ash ponds. Wet ash system uses up to 6 MGD of water for transporting and storing coal ash - water that could be used as a public drinking water supply that would reduce the need to build a new reservoir as currently proposed by the City of Springfield. Agreement reached with Sierra Club set air emission limits, resulted in 18% wind power for customers, and increased energy efficiency spending tenfold.

Crown I, II and III Mines

Mine Type: Underground, room and pillar
Owner: Springfield Coal Company, LLC
Location: Montgomery and Macoupin Counties
Production: Crown III 1.3-1.4M tons/yr, peaked 2001 at 2.4M tons/yr, Crown I operated 1951-1971, Crown II shuttered in 2006.
Waste disposal: Coal waste, coal slurry, coal ash disposed of onsite in aboveground impoundments. Underground injection option
Of note: One of only two remaining union-labor mines in Illinois. Wastewater drains to streams designated by state as "biologically significant". Resident health issues from fugitive coal ash dust. Auburn's Rural Electric Convenience Cooperative constructed 900 KW turbine in 2009 atop leaking gob pile at Crown I.

Shay I Mine

Type: Underground with active room and pillar, inactive longwall
Mine Owner: Macoupin Energy, LLC (subsidiary of Cline Coal)
Location: Macoupin County
Production: Designed to produce 3+ M tons/yr. Mine shipped 2.7M tons in 2007.
Waste disposal: Coal waste, coal slurry, coal ash disposed of onsite in aboveground impoundments. Underground injection option sought, currently being opposed by residents.
Of note: Slurry ponds were built in floodplain. Documented groundwater and surface water contamination from onsite slurry disposal. Local residents have complained to agencies regarding creek contamination with little response. Under ExxonMobil, mine was called Monterey 1 and was a union mine employing over 300 miners. Cline only operates non-union mines. Area was subsided by longwall mining before 2006. This has led to large scale depopulation of the area, along with major damage to roads, railroad, and surface drainage on farmland.

Deer Run Mine

Mine Type: Underground, longwall
Mine Owner: Hillsboro Energy, LLC (subsidiary of Cline Coal)
Location: Hillsboro, Montgomery County
Production: New mine projected to extract 8-10M tons/yr. for over 20 years
Waste disposal: Coal waste and coal slurry disposed of onsite in aboveground impoundments.
Of note: Nearly 5,000 acres of farmland, streams, roads and homesteads will be subsided by 4-6 feet. Wastewater drains to streams designated by state as "biologically significant". Surface facilities are ~600ft from hospital; dust and smoke from smoldering coal pile were reported this summer. Citizens Against Longwall Mining and Illinois Sierra Club have ongoing administrative appeal of the mining permit, and are also fighting the proposed high hazard coal slurry impoundment that would be within the city limits of Hillsboro.

Agricultural Watershed Institute

Pilot Plots: Carrying out a pilot scale project to demonstrate the feasibility of growing perennial energy grasses for both renewable energy and conservation benefits, including wildlife habitat, soil conservation, water quality protection, and greenhouse gas reduction.
Location: Decatur, Macon County
Of note: Burning renewable biomass could reduce the coal feedstock used at existing coal fired power plants. Perennial grasses could also be used as a feedstock for existing local pelletized fuel industry, which generates pellets for home heating.

Coffeen Power Station

Input: 2M tons of coal burned/yr to produce 950 MW
Owner: Ameren Energy Resources
Location: Montgomery County
Waste disposal: Scrubber sludge stored in lined cells onsite. Capped and closed ash pond leaking onsite to tributary stream of Coffeen Lake. New lined landfill for current coal ash disposal. MSHA fines and resident concerns for current US Minerals bottom ash reuse site.
Of note: Documented 1) groundwater contamination, 2) leaking ash pond, 3) health concerns with fugitive coal ash dust, 4) private wells in use in area, 5) Coffeen Lake has heavy fishing pressure despite fish consumption advisory due to mercury pollution

Kinkaid Station

Input: Over 1M tons of coal burned/yr to produce 1,158 MW
Owner: Dominion
Location: Christian County
Waste disposal: Coal ash stored in onsite ponds adjacent to Lake Sangchris
Of note: No groundwater monitoring data available. Lake Sangchris is relied on as a fishing and recreational resource.

Itinerary

9:00 am Depart Champaign

10:00 am Arrive Agricultural Watershed Institute, Decatur. AWI is in the first season of a pilot project to produce biofuels from native prairie plants.

11:30 am Arrive CWLP, Springfield. Discuss history of Sierra Club's efforts to implement air pollution controls at the plant, as well as ongoing coal ash contamination and water usage issues.

12:45 pm Crown I, east of Farmersville - shuttered underground mine with visibly leaking gob pile (coal refuse). Set the stage with historical mining, disposal practices. Crown III, west of Farmersville across I-55. 1 of only 2 union mines left in the state. Underground, room and pillar, with coal slurry and ash disposal. Residents complain of dust problems, no pollution controls to prevent groundwater contamination. (Rest stop at gas station).

2:15 pm Shay I, south of Carlinville. Existing underground mine with historical longwall and current room and pillar methods. Can see subsided ground, along with massive refuse disposal areas leaking into stream & groundwater.

4:00 pm Deer Run Mine in Hillsboro. New longwall mine - a glimpse of what's to come with the next generation of high extraction coal mines moving into the Midwest.

5:30 pm Dinner at E-52's in Litchfield with Citizens Against Longwall Mining.

7:30 pm Springfield drop off.

9pm Return to Champaign

Additional Resources

Epstein et al. (2011) "Full cost accounting for the life cycle of coal" *Annals of the New York Academy of Sciences* 1219: 73–98
http://solar.gwu.edu/index_files/Resources_files/epstein_full%20cost%20of%20coal.pdf

Coal's Assault on Human Health by Physicians for Social Responsibility
http://www.psr.org/resources/coals-assault-on-human-health.html

Coal Ash: The toxic threat to our health and environment by Physicians for Social Responsibility
http://www.psr.org/assets/pdfs/coal-ash.pdf

Hitt, N.P. and M. Hendryx (2010) "Ecological Integrity of Streams Related to Human Cancer Mortality Rates" *EcoHealth* 7: 91-104,
http://springerlink.com/content/lu7wgk595v1hhm64/fulltext.pdf

IDNR OMM LRD ArcIMS Illinois Coal Mine Permit Viewer
http://dnrgis.state.il.us/website/Mpermit/viewer.htm

Coal Diver
http://coaldiver.org/

Heartland Coalfield Alliance
http://heartlandcoalfieldalliance.org

Canton Area Citizens for Environmental Issues
http://savecantonlake.com

Citizens Against Longwall Mining
http://citizensagainstlongwallmining.org

Citizens Coal Council
http://citizenscoalcouncil.org/

Eco-Justice Collaborative
http://ecojusticecollaborative.org/

Faith in Place
http://faithinplace.org/

Illinois Sierra Club
http://illinois.sierraclub.org

Prairie Rivers Network
http://prairierivers.org

Stand Up To Coal
http://standuptocoal.org