

Members

Rep. Ryan Dvorak, Chairperson
Rep. David Wolkins
Rep. Matt Pierce
Rep. Timothy Neese
Sen. Beverly Gard
Sen. Frank Mrvan
Sen. Edward Charbonneau
Sen. Karen Tallian
Doug Meyer
Dave Wyeth
Dwayne Burke
John Hardwick
Art Umble
Calvin Davidson
Jon H. Moll
Thomas Easterly
Heather Hill



ENVIRONMENTAL QUALITY SERVICE COUNCIL

Legislative Services Agency
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Robert Bond, Attorney for the Council
Bernadette Barlett, Fiscal Analyst for the Council

Authority: IC 13-13-7

MEETING MINUTES¹

Meeting Date: September 21, 2010
Meeting Time: 1:00 P.M.
Meeting Place: House Chamber, State House, 200
W. Washington St.
Meeting City: Indianapolis, Indiana
Meeting Number: 3

Members Present: Rep. Ryan Dvorak, Chairperson; Rep. David Wolkins; Rep. Matt Pierce; Sen. Beverly Gard; Sen. Frank Mrvan; Sen. Karen Tallian; Dwayne Burke; John Hardwick; Calvin Davidson; Jon H. Moll.

Members Absent: Rep. Timothy Neese; Sen. Edward Charbonneau; Doug Meyer; Dave Wyeth; Art Umble; Thomas Easterly; Heather Hill.

1. Call to Order Rep. Dvorak called the meeting to order at 1:10 P.M.
2. E-Waste: Update on P.L. 178-2009 (HEA 1589) A presentation entitled E-waste Recycling Update IC 13-20.5 (Exhibit 1) was made by Carey Hamilton, Executive Director, Indiana Recycling Coalition. In response to questions from Council members, Ms. Hamilton:
 - ◆ Indicated that the state does not fund the e-waste program.
 - ◆ Stated that e-waste recycling locations will be posted on the IDEM and Indiana Recycling Coalition websites.

¹ These minutes, exhibits, and other materials referenced in the minutes can be viewed electronically at <http://www.in.gov/legislative> Hard copies can be obtained in the Legislative Information Center in Room 230 of the State House in Indianapolis, Indiana. Requests for hard copies may be mailed to the Legislative Information Center, Legislative Services Agency, West Washington Street, Indianapolis, IN 46204-2789. A fee of \$0.15 per page and mailing costs will be charged for hard copies.

Rep. Mary Ann Sullivan expressed her thanks to the legislators and stakeholders involved in the process of enacting the e-waste program and her satisfaction with reports that indicate that the program is off to a good start.

3. Coal Combustion Waste A presentation entitled Coal Combustion Residues (CCR) Update (Exhibit 2) was made by Richard Meiers, Principal Environmental Scientist, Duke Energy. In response to questions from Council members, Mr. Meiers:

- ◆ Explained the extent to which CCR include hazardous waste.
- ◆ Described inspection requirements for CCR sites.
- ◆ Described current U.S. Environmental Protection Agency (EPA) rulemaking, including the differences between RCRA Subtitle C and RCRA Subtitle D proposals.
- ◆ Indicated which entities are subject to federal CCR regulation.
- ◆ Explained the difference between wet handling and dry handling of CCR.
- ◆ Discussed the environmental issues related to the spill of CCR into the Emory River at the Tennessee Valley Authority's Kingston Fossil Plant in Roane County, Tennessee.
- ◆ Discussed issues related to disposal of CCR in abandoned mines and surface impoundments.
- ◆ Described Duke Energy's Voluntary Action Plan for water monitoring at CCR surface impoundments and the company's actions in certain cases to address CCR issues.

A presentation entitled Federal Standards for Coal Combustion Waste are Long Overdue (Exhibit 3) was made by Jeff Stant, Environmental Integrity Project. The presentation refers to excerpted pages from *In Harm's Way: Lack of Federal Coal Ash Regulations Endangers Americans and Their Environment* (Exhibit 4). In response to questions from Council members, Mr. Stant:

- ◆ Explained the history of EPA's determinations of the extent to which CCR should be considered hazardous waste.
- ◆ Described the minimal potential impact of greater CCR regulation on electric utility rates.
- ◆ Described the differences between RCRA Subtitle C and RCRA Subtitle D proposals and expressed his support for the RCRA Subtitle C approach.
- ◆ Described the extent to which encapsulated CCR can be put to safe uses.
- ◆ Discussed the extent to which ground water is monitored at Indiana surface impoundments.
- ◆ Discussed environmental issues related to CCR in Pines, Indiana.

Tim Maloney, Hoosier Environmental Council (HEC), expressed the HEC's view that CCR need to be better regulated and the HEC's support for the RCRA Subtitle C proposal. He indicated that Indiana has inadequate inspection and monitoring of CCR surface impoundments. He believes that certain uses of encapsulated CCR can be safe. In response to questions from Council members, Mr. Maloney:

- ◆ Described some of the uses of CCR in Pines, Indiana, that resulted in environmental problems.
- ◆ Discussed health and contamination issues related to the Kingston Fossil Plant spill.

4. Dedicated conservation funding Jennifer Boyle, Executive Director, Indiana Association of Soil & Water Conservation Districts, made a presentation (Exhibit 5) that includes

background and a comparison of surrounding states' natural resources conservation funding mechanisms.

Lynn Dennis, Director of Government and Community Relations, Nature Conservancy, made a presentation (Exhibit 6) that includes a proposed concurrent resolution for establishment of a Sustainable Natural Resource Funding Advisory Committee (Exhibit 7) and supporting information from Iowa (Exhibit 8).

In response to questions from the Council, Ms. Dennis discussed the preference for conservation funding through a trust fund that does not revert to the state general fund.

5. Application of AOPA to the Office of Environmental Adjudication Kathy Lucas, Environmental Law Section, Indiana State Bar Association, discussed the following legislative proposals from the Environmental Law Section:

1. Specify that an environmental law judge has the same authority and responsibilities as an administrative law judge (Exhibit 9).
2. Establish additional grounds for disqualification of an administrative law judge and replacement procedures (Exhibit 10).
3. Provide that the proceedings before an administrative law judge are de novo (Exhibit 11).
4. Provide that settlement of an administrative matter results in the issuance of a final order that effectuates the settlement (Exhibit 12).
5. In administrative proceedings, conform electronic service procedures (Exhibit 13) and summary judgment procedures (Exhibit 14) to the procedures under the Indiana Rules of Trial Procedure.

In response to questions from members of the Council, Ms. Lucas indicated that the Environmental Law Section has not considered potential statutory "revolving door" limitations on administrative law judges who transfer to the private sector.

6. Next Meeting The next meeting of the Council will be held at 1:00 P.M. October 14, 2010, in the House Chamber, State House.

7. Adjournment Rep. Dvorak adjourned the meeting at 3:10 P.M.

EXHIBIT 1
EQSC
SEPTEMBER 21, 2010

E-waste Recycling Update

IC 13-20.5

Carey Hamilton
Executive Director
Indiana Recycling Coalition





Overview

- Who is participating?
- What are the goals?
- What are the positive impacts/highlights?
- What issues are not addressed by IC 13-20.5?



Collection and Recycling Efforts

Goal for the program year 2010:

22,241,269 lbs of e-waste

= 3.46 lbs per capita

- OEM (Original Equipment Manufacturer) goal based on 60% of weight, by sales, to IN households during calendar year 2009
- Each OEM must meet their collection and recycling goal during the program year (April 1, 2010 through March 31, 2011)



Stakeholders

- 62 registered OEMs of televisions, computer monitors and laptops
- 96 collectors with 287 collection site locations.
- 50 recyclers
 - 15 Indiana recyclers



acer®



amazon.com™



Westinghouse

DELL

SHARP



RadioShack
CORPORATION



ASUS



NOKIA
Connecting People



Growing Electronic Device Market

Incorporating OEMs of netbooks, notebooks, tablet PCs, and e-readers as items that meet the definition of computer monitor under the Indiana E-Waste Law (IC 31-20.5)



Positive Impacts of IC 13-20.5

- Environmentally responsible recycling
- More rural collections
- Record of collection events
- Reduced cost to general public
- Reduced local government expenses
- New recycling jobs



E-waste Recycling by County

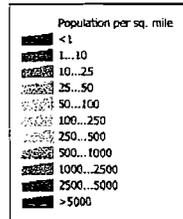
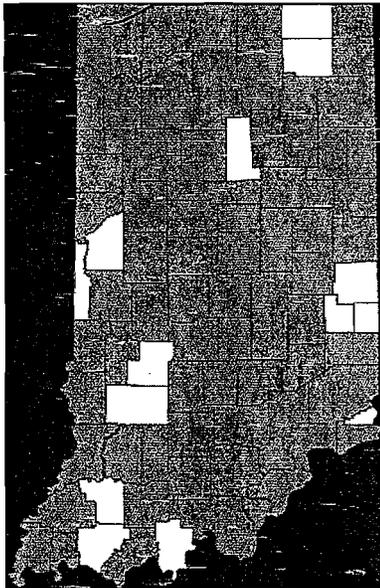
75 of 92 counties have e-waste collection,
including:

- Permanent collection sites
- Special collection events (monthly, annually).
- Retailer take-back programs (i.e. Best Buy, Staples, Office Depot).

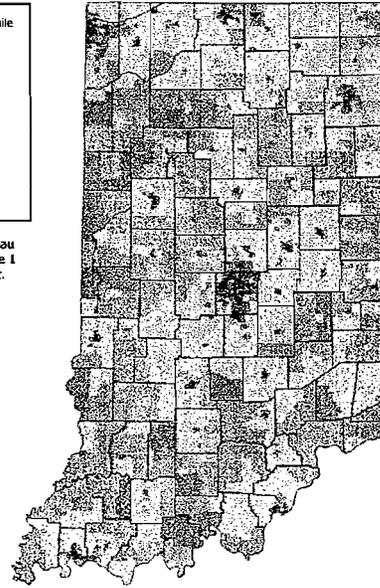


Indicates counties with eWaste collection program

Population density of Indiana



Source: U. S. Census Bureau
Census 2000 Summary File 1
population by census tract.

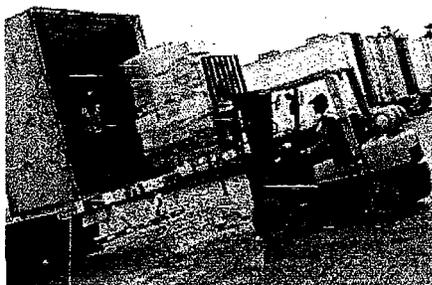


Community Collection Programs



Of the 75 counties with collections:

- 54 are non-metropolitan counties
- 40 have 2 or more collection opportunities in the county, including annual events





OEM Recycling Programs

- OEMs working with 22 electronics recyclers
- 2 conglomerates representing 22 OEMs working together to achieve recycling goal
- Most OEMs contracting with a recycler - recyclers find material
- Mail-back programs - serve smaller OEMs with low collection and recycling goals



Key to Recycling Plans

- OEMs pays a recycler to collect and recycle e-waste based on their recycling goal
- The recycler then usually passes on \$ savings to local collection programs
 - Some collectors including local governments are already realizing reduced costs



New Jobs

A recent example of job growth:

Expansion project incentivized by a RMDB

grant - Electronic Recyclers International-Indiana, Inc. (ERI) –

Indpls. Amount awarded: \$100,000 Project cost: \$4.5 million

- Current IN employment - 50. **ERI will hire 100 new employees**
- ERI will build a Midwest hub to process e-scrap on-site, increasing capacity more than 300% during the next year. Currently the Indianapolis facility processes appr. 800,000 lbs/month of e-waste.
- **ERI cited Indiana's e-waste law as a key reason for their expansion plans**



Remaining Issues:

- 17 counties not currently served in any capacity
- Fees remain to recycle cathode ray tubes (CRTs)
- Small businesses – likely pay for electronics recycling

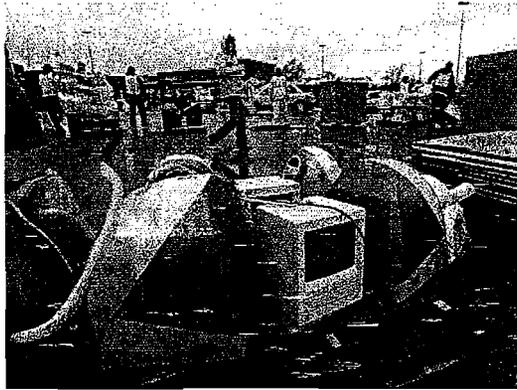




Remaining Issues:

Schools - Some schools have partnerships with electronics manufacturers for take-back.

- Others likely still pay to recycle electronics.



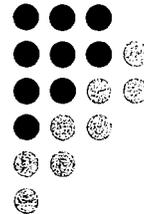
Questions?

EXHIBIT 2
EQSC
SEPTEMBER 21, 2010

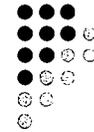
Coal Combustion Residues CCR Update

Richard J. Meiers

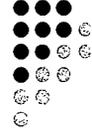
Environmental Quality Service
Council Meeting
September 21, 2010



CCR Regulatory Status



- CCR - Coal Combustion Residues
 - Flyash, bottom ash, boiler slag, and FGD solids
- In Indiana CCRs are subject to 329 IAC Article 10, 11 and 12 Solid Waste Regulations



CCR Regulatory Timeline

1976 RCRA

1980 Bevill Amendment

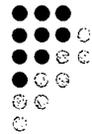
- ◉ exempted CCR from hazardous waste until further studies completed

1988 EPA Report to Congress

- ◉ “EPA does not intend to regulate under Subtitle C”

1993 Regulatory Determination

- ◉ “regulation ... as hazardous waste under RCRA Subtitle C is unwarranted”



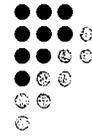
CCR Regulatory Timeline

1999 EPA Report to Congress

- ◉ “disposal ... should remain exempt from RCRA Subtitle C”

2000 Regulatory Determination

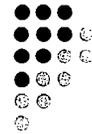
- ◉ “regulation ... under Subtitle C of RCRA is not warranted”
- ◉ no additional regulations are warranted for beneficial use
- ◉ “determined need to establish national regulations under subtitle D of RCRA to fill gaps in state regulatory programs”



CCR Regulatory Timeline

Kingston TN December 2008

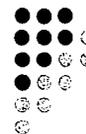
- Failure of dikes on a ash pond and spill of CCR into the Emory River at TVA plant
- Congressional pressure was put on EPA to develop regulations within the year
 - EPA - ICR (2009) on all ponds used to store CCR
 - EPA Inspections of all dams and dikes to be completed the end of 2010



CCR Regulatory Timeline

EPA published the current proposal in the Federal Register on June 21, 2010

- 90 Day comment period
- 5 public hearings in 5 different cities
- Extended comment period until November 19 to accommodate three more public hearings



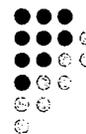
CCR Rule Proposal

Two Options

- Hazardous Waste Regulation
 - RCRA Subtitle C (Special waste listing)
- Non Hazardous Waste Regulation
 - RCRA Subtitle D
 - Co Proposal – Subtitle D prime

Key issues

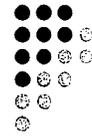
- Federal enforceability
- Wet handling (Impoundments)



CCR Rule Proposal Applicability

- CCR generated by electric utilities and independent power producers
 - Does not include CCR generated in boilers at universities and manufacturing facilities
- CCR disposed in surface impoundments and landfills
 - DOI and EPA will address the placement of CCRs in mines in a separate regulatory action

CCR Rule Proposal Enforcement



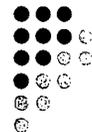
Subtitle C

- Permitting
- State with RCRA authority and Federal enforcement

Subtitle D

- Self implementation
- Enforcement through citizen suits
 - States can act as citizens
 - EPA will retain enforcement through RCRA's eminent and substantial endangerment authority

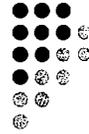
CCR Rule Proposal Components



The mechanism for protection of human health and the environment is similar under both options

- Location Restrictions
- Operating Criteria
- Design Criteria (e.g., liners)
 - Existing Landfills (constructed) will be allowed to continue to operate.
- Groundwater Monitoring
- Closure / Post Closure – Financial Assurance
- Impoundment Integrity

CCR Rule Proposal Surface Impoundments



Subtitle D

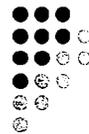
- Existing units must have solids removed and be retrofitted with a composite liner or cease receiving CCRs within 5 years

All unlined units must close

Subtitle D prime

- Existing units can remain in service if demonstrated that unit is stable and protective of ground water

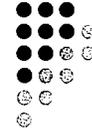
CCR Rule Proposal Surface Impoundments



Subtitle C

- Must meet land disposal restrictions and be in compliance within 5 years
 - Universal treatment standards
 - All CCR must have a moisture content of less than 50%
- All surface impoundments that were closed prior to the rule must be reclosed to meet proposed closure criteria

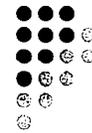
CCR Rule Proposal Landfills



Subtitle C and subtitle D

- Existing Landfills can remain in service regardless of existing controls
 - Requires groundwater monitoring when absent
- Liner requirements for lateral expansion and new landfills
 - Liner criteria the same for both options

CCR Rule Proposal Beneficial Reuse

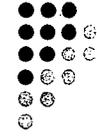


EPA is proposing to maintain Bevill exemption under the Subtitle C option for CCR beneficially reused in encapsulated applications

- Flyash used in production of Portland cement
- Flyash used in ready mix concrete
- FGD (gypsum) used in wallboard

Exemption does not include FGD used in agricultural applications or engineered fills for road construction

CCR Rule Proposal Impact on CCR Utilization



Subtitle D

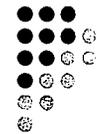
- Business as usual with little impact

Subtitle C

STIGMA

- End users of CCR are already being impacted by the loss of contracts due to fear that EPA will regulate CCR as a hazardous waste
- Utilities are concerned with the liability and risk of providing materials into commerce

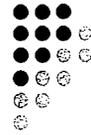
Indiana Energy Association Supports Subtitle D Prime



The IEA supports developing federal regulations for coal combustion residuals under RCRA's Subtitle D non-hazardous waste program.

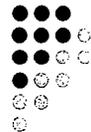
Subtitle D prime, with the appropriate adjustments as proposed, provides the best balance of clean energy with affordability and reliability

Indiana Energy Association Opposes Subtitle C



- Increases electricity cost for no additional protection of human health and the environment
- Cripples beneficial reuse industry
 - Loss of jobs
 - More CCR into landfills
- Small coal fired power plants at risk of shutdown which could impact reliability

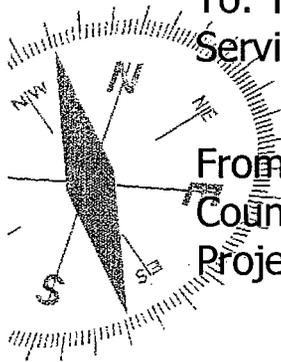
Questions?



Richard J. Meiers
317-838-1955
jim.meiers@duke-energy.com

EXHIBIT 3, EQSC, SEPTEMBER 21, 2010

Federal Standards for Coal Combustion Waste are Long Overdue.



To: The Indiana Environmental Quality
Service Council, September 21, 2010

From: Tim Maloney, Hoosier Environmental
Council & Jeff Stant, Environmental Integrity
Project

*130 million tons of CCW is generated annually in the US. It would fill the box cars of a train from Washington, DC to Melbourne Australia.

*CCW has concentrated trace elements such as arsenic, cadmium, lead, selenium, boron, and molybdenum that leach in toxic amounts.

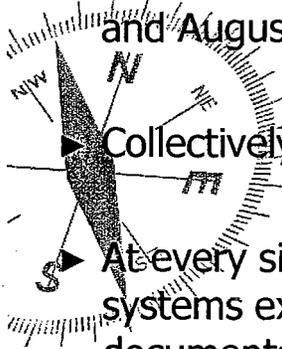
*Failure by states to set safeguards for CCW disposal has resulted in the contamination of water supplies, threats to human health and violation of property rights in 34 states including Indiana.

*Minimum national, common-sense standards for the disposal of CCW will protect public health and the environment and encourage more recycling of CCW.



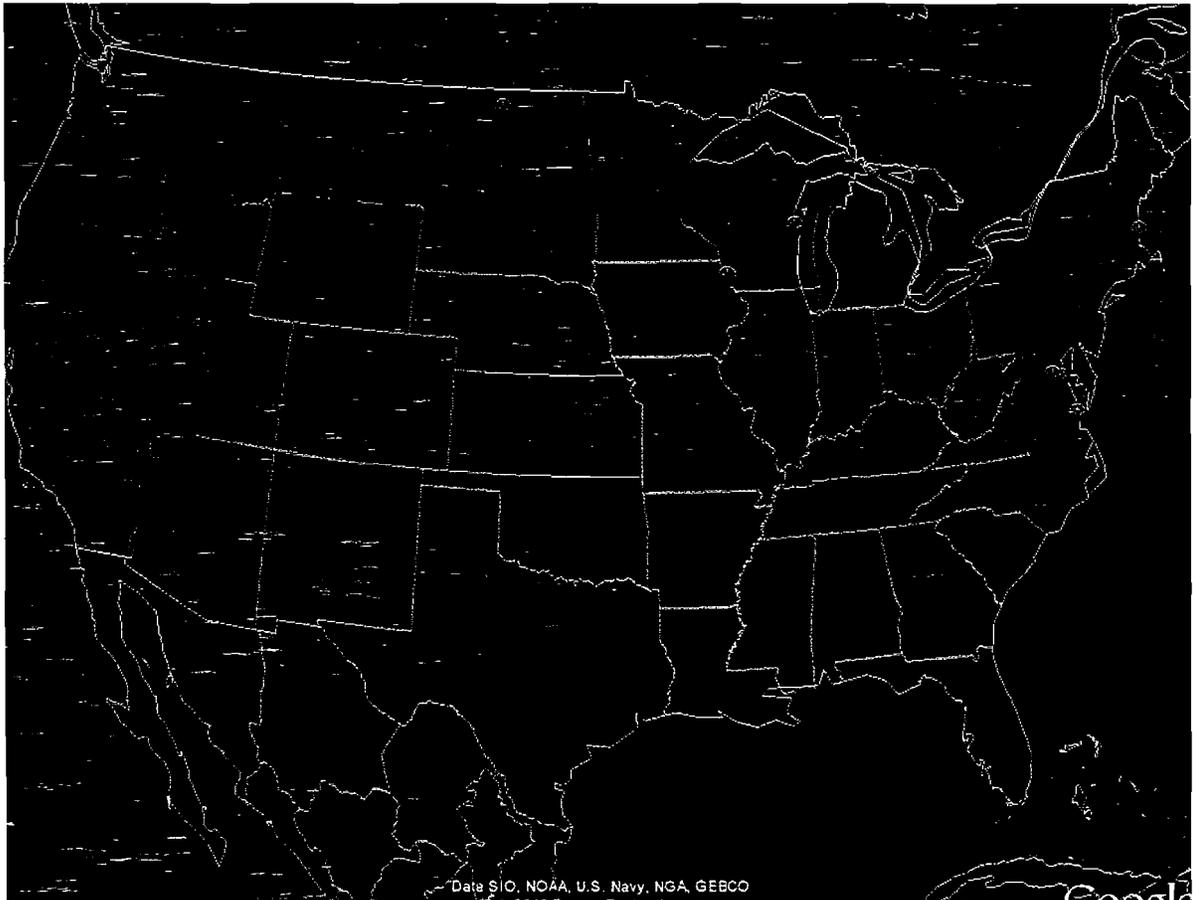
Contamination is pervasive and growing.

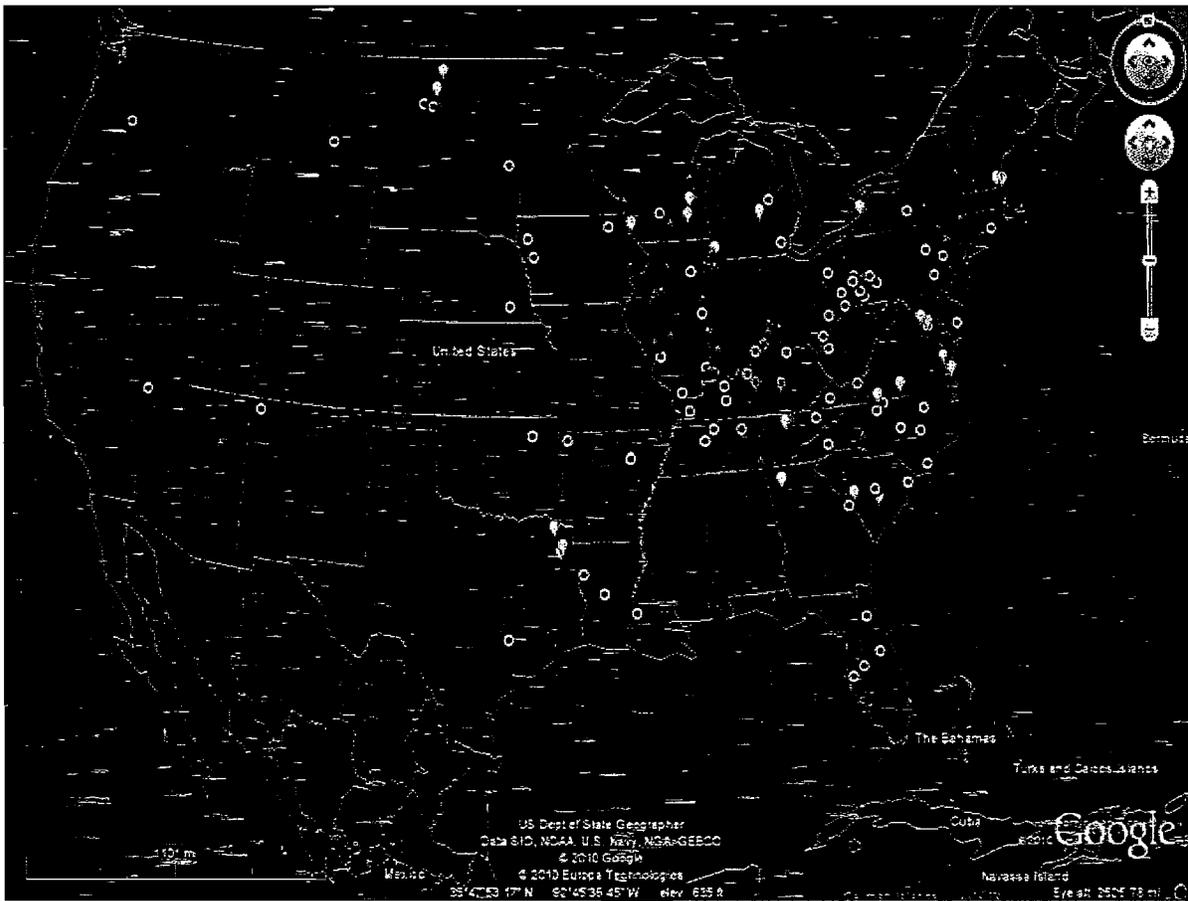
- ▶ In 1999 EPA acknowledged 7 sites in its Report to Congress.
- ▶ EPA acknowledged damage at 67 sites as of July 2007.
- ▶ EIP has documented damage at 70 more sites in February and August, 2010.



- ▶ Collectively these comprise 137 sites in 34 states.

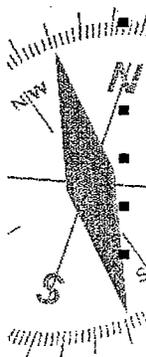
- ▶ At every site in which competent groundwater monitoring systems exist, degradation of groundwater is being documented.





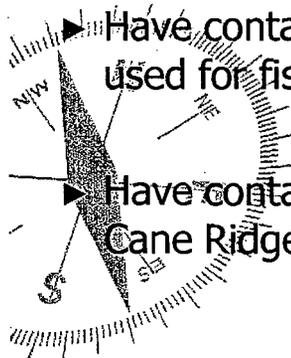
Indiana is not immune to this damage.

- ▶ The entire Town of Pines is a superfund site due to contamination from coal ash.
- ▶ Six more sites are recognized by EPA as "potential damage cases":
 - Michigan City – Arsenic more than 100 times DWS.
 - Bailly – Cowles Bog in IDNLS contaminated with radioactivity and metals.
 - R.M. Schafer – Sulfate up to 120 times SDWS.
 - AB Brown – Sulfate up to 200 times SDWS.
 - Petersburg – Sulfate and TDS
 - Merom – Lead, barium, cadmium, chromium exceeding DWS



Gibson's ash ponds

- ▶ Have contaminated E. Mt Carmel wells with boron, manganese, aluminum, sulfate and sodium exceeding Health Advisories, Drinking Water Advisories, and secondary DWS.

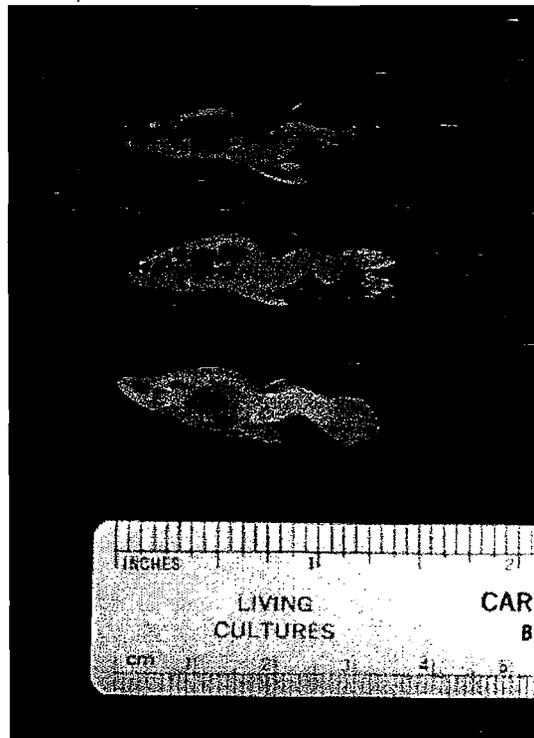
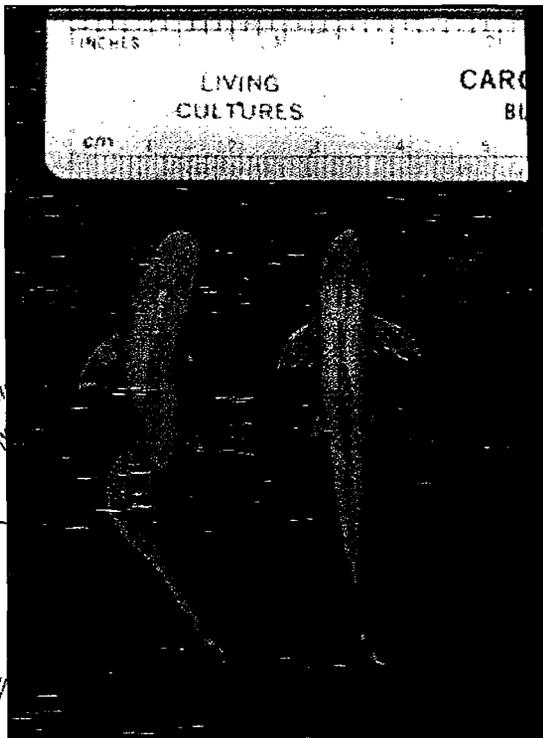


- ▶ Have contaminated fish in the cooling water lake once used for fishing with unsafe levels of selenium.

- ▶ Have contaminated fish and federally endangered terns in Cane Ridge Wildlife Management Area.

Spinal Deformation in Mosquito Fish from Coal Ash Contamination in Belews Lake, North Carolina

Dr. Dennis Lemly, US Forest Service

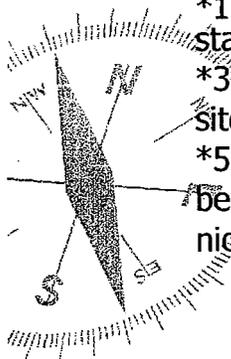


Blowing ash is a constant problem.



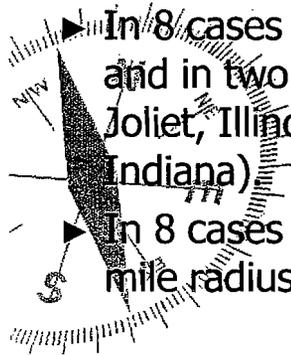
The contamination is toxic.

- ▶ At everyone of the 35 sites with groundwater monitoring data in EIP's latest report, *In Harms Way*, (Aug. 2010) drinking water standards were exceeded in downgradient groundwater.
- ▶ Exceedances were as high as:
 - *341 times the standard for arsenic at a Pennsylvania site.
 - *170 times the standard for cadmium and 179 times the standard for lead at another PA site.
 - *37 times the standard for selenium at an Oklahoma site.
 - *52 times the standard for antimony, 30 times for beryllium, 17 times for chromium, and 22 times for nickel at an Ohio site.



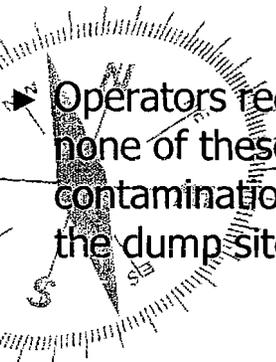
People are endangered.

- ▶ At the five sites in the latest report in which offsite drinking water wells were checked, contamination was confirmed in every case.
- ▶ Additionally, in at least 13 of the cases, contamination is heading for private wells within 2 miles.

- 
- ▶ In 8 cases there are 25 or more private wells within 2 miles and in two cases 90 wells exist within a mile of the site (in Joliet, Illinois and Uniontown Ohio, similar to Pines, Indiana)
 - ▶ In 8 cases there are at least 5 public wells within a five mile radius of the site.

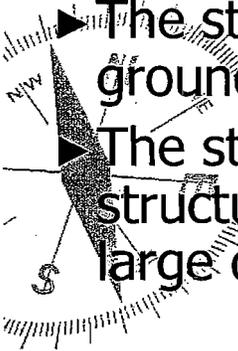
States are not preventing the contamination.

- ▶ Contamination is acknowledged by states at 21 of the 35 sites in latest report with groundwater monitoring.
- ▶ Operators only required to determine extent of contamination at 6 of these sites.

- 
- ▶ Operators required to clean up the contamination at none of these sites -- even when it is acknowledged that contamination has moved beyond the property lines of the dump sites.

Indiana's safeguards are totally inadequate.

- ▶ Indiana has 50 ash ponds, more than any other state.
- ▶ The state has no authority to require liners or groundwater monitoring at them.
- ▶ The state cannot even keep them out of groundwater that is used for drinking water.
- ▶ The state has no authority to regulate any structural fills of coal ash, no matter how large or where they are put.



EPA's C regulatory proposal

- ▶ Would establish requirements for existing and new landfills.
- ▶ Would phase out ash ponds over 7 years.
- ▶ Would require enforceable permits for all ash disposal sites, that include covers, liners, leachate collection, monitoring and cleanup standards.
- ▶ Would exempt CCW used for encapsulated beneficial uses from being considered waste.
- ▶ Would protect surrounding property owners and is needed by the state.

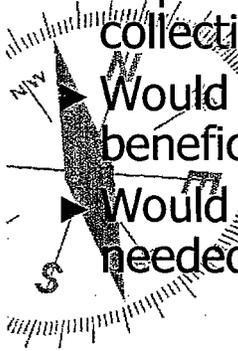


EXHIBIT 4
EQSC
SEPTEMBER 21, 2010

IN HARM'S WAY: *Lack Of Federal Coal Ash Regulations Endangers Americans And Their Environment*



2010

Thirty-nine New Damage Cases of Contamination from
Improperly Disposed Coal Combustion Waste

Environmental Integrity Project, Earthjustice and Sierra Club

August 26, 2010

Jeff Stant, Project Director, Editor and Contributing Author

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Jeff Stant, Director of Environmental Integrity Project's Coal Combustion Waste Initiative served as the Director of the project and senior editor of the report as well as a contributing author.

Lisa Evans, Senior Administrative Counsel for Earthjustice, served as a contributing editor and provided input and direction on the content of the report.

Eric Schaeffer, Executive Director of the Environmental Integrity Project (EIP), provided oversight central to the direction of investigations and contents of the report.

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R. John Dawes of EIP was the chief investigator of private and public wells in the site reports, constructed maps and exhibits and assisted in report editing.

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In Harm's Way

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EXECUTIVE SUMMARY

An investigation led by expert hydrogeologists has identified 39 more coal combustion waste (CCW) disposal sites in 21 states that have contaminated groundwater or surface water with toxic metals and other pollutants. Their analysis is based on monitoring data and other information available in state agency files and builds on a report released in February of 2010, which documented similar damage at 31 coal combustion waste dumpsites in 14 states.¹ When added to the 67 damage cases that the U.S. Environmental Protection Agency (USEPA) has already acknowledged, the total number of sites polluted by coal ash or scrubber sludge comes to at least 137 in 34 states. This total represents nearly a three-fold increase in the number of damage cases identified in EPA's 2000 Regulatory Determination on the Wastes from the Combustion of Fossil Fuels.²

Drinking Water Standards Routinely Exceeded On-site, Sometimes by Orders of Magnitude

At every one of the 35 sites with groundwater monitoring wells, on-site test results show that concentrations of heavy metals like arsenic or lead exceed federal health-based standards for drinking water. For example, arsenic levels were above the 10 microgram per liter "maximum contaminant level" (MCL) at 26 of 35 sites, with concentrations reaching as high as 3,419 micrograms (over 341 times the standard) at the Hatfield's Ferry site in Pennsylvania. Table A presents a summary of results for select contaminants.

Table A: Summary of On-Site Monitoring Results for Select Contaminants

Pollutant	# Of Sites Above MCL	MCL	Highest Value (µg/L)	Site	Owner/Operator
Alpha Particles	2	15 pCi/L	128 pCi/L	Muskingum (OH)	American Electric Power d/b/a Ohio Power Company
Arsenic	26	10 µg/L	3,419 µg/L	Hatfield's Ferry (PA)	Allegheny Energy
Beryllium	3	4 µg/L	23 µg/L	Gallatin (TN)	Tennessee Valley Authority
Cadmium	9	5 µg/L	850 µg/L	Bruce Mansfield [Little Blue] (PA)	FirstEnergy
Chromium	4	100 µg/L	225 µg/L	Northeastern (OK)	American Electric Power d/b/a Public Service Company of Oklahoma
Lead	11	15 µg/L	2,690 µg/L	Bruce Mansfield [Little Blue] (PA)	FirstEnergy
Selenium	11	50 µg/L	1,320 µg/L	Big Cajun 2 (LA)	NRG Energy d/b/a Louisiana Generating
Thallium	2	2 µg/L	10 µg/L	Uniontown (OH)	Hyman Budoff / Merle & Charles Kittinger

Drinking Water at Risk

Where off-site sampling of private wells occurred, contaminated drinking water was found in every case.

States do not generally require off-site monitoring of drinking water wells beyond the fenceline, even when there is documented contamination at the property boundary. Nevertheless, at four of the five sites examined in this report for which such monitoring data are available, test results show violations of the federal MCL or a federal or state health advisory at one or more wells used for drinking water. At the fifth site (Joliet 9 (IL)), although off-site monitoring data are limited and consequently violation of federal or state standards are not confirmed, at least 18 nearby drinking water wells were closed due to boron contamination.

Table B summarizes the four sites where testing of off-site private drinking water wells occurred.

Table B: Heavy Metal Contamination in Off-Site Private Wells

Site	Number of Wells Contaminated/Abandoned	Contaminants	Response Action Taken
Bruce Mansfield [Little Blue] (PA)	22	aluminum, antimony, arsenic, barium, boron, cadmium, chromium (hexavalent), fluoride, iron, lead, manganese, selenium, and thallium	Alternative drinking water source provided
Cayuga Generation Plant (NY)	1	iron, lead, manganese, zinc	Contaminated well purchased
Oak Creek Power Plant (WI)	12	molybdenum and boron	Provision of bottled water
Industrial Excess Landfill (OH)	Unknown number of private wells/11 off-site monitoring well clusters in residential areas were contaminated	antimony, arsenic, beryllium, cadmium, chromium, lead, nickel and thallium	100 homes placed on public water, Superfund action in progress

State records indicate the potential for more private wells to be contaminated.

Contaminated groundwater underneath at least 15 of the 39 sites is within two miles of private wells, according to monitoring data and public information on private well locations at the following CCW dumpsites: Independence (AR), Joliet 9 (IL), Lansing (MI), Cayuga (NY), Cardinal (OH), Gavin (OH), Muskingum (OH), Uniontown (OH), Northeastern (OK), Boardman (OR), Bruce Mansfield (PA), Hatfield's Ferry (PA), Big Stone (SD), Fayette Power Project (TX), and Oak Creek (WI). Public information on private drinking water wells is often incomplete or out of date, but for at least eight of these CCW disposal sites – Joliet 9, Gavin, Lansing, Muskingum, Uniontown, Bruce Mansfield, Fayette Power Project and Oak Creek – there are 25 or more private drinking water wells at or within two miles of the site. At Joliet 9 and Uniontown, there are 90 or more private drinking water wells within a mile of the contaminated CCW disposal sites.

CCW contaminants may threaten public water wells or intakes, potentially requiring expensive cleanup.

Public wells that serve local communities have tremendous pumping capacities that often change the direction of groundwater flow and pull contaminated water into the public's water supply. These pollutants must be removed at drinking water treatment plants, sometimes at great expense, to meet federal and state standards for safe drinking water. At least 18 of the 39 contaminated sites are located within five miles of a public groundwater well that could potentially be affected by CCW pollutants. In fact, there are at least five public water wells within a 5-mile radius of at least eight of those sites, namely: Flint Creek (AR); Montville (CT); Lansing (IA); George Neal North (IA); George Neal South (IA); Big Cajun (LA); Cardinal (OH); and Fayette Power Project (TX).

In several cases (e.g., Hatfield's Ferry (PA), Gallatin (TN), and Johnsonville (TN)), CCW disposal sites are leaking their toxic cargo into rivers just upstream from intakes for public water systems. Often, metals like arsenic are discharged to rivers through adjacent groundwater. For example, monitoring wells in an aquifer that flows from the Hatfield's Ferry (PA) site to the Monongahela River, less than half a mile away, have consistently measured arsenic at levels substantially above the MCL for the last five years. The contaminated groundwater discharges to the river are across from the water supply intake for the community of Masontown. Although historically, Pennsylvania has only required this public water system to test for arsenic every eight years, even in this limited testing, arsenic 2-3 times higher than the federal drinking water standard was found in the intake water at least twice since 2000. Groundwater discharges from CCW dumps may load drinking water sources with additional contaminants that must ultimately be removed from the water supply at public expense.

Illegal open dumping in violation of federal law may be occurring.

As many as 27 of the 35 sites where groundwater is contaminated may be illegal open dumps according to federal law, based on the high levels of metals found in the groundwater.ⁱⁱⁱ When concentrations of certain pollutants exceed limits established under "Subtitle D" of the Resource Conservation and Recovery Act, the law requires that the operator close the dump, stop the flow of contamination, or obtain a waiver from the state if certain criteria are satisfied. For example, at the two sites described above where off-site drinking water wells have been contaminated with arsenic, and other sites where monitoring wells hundreds of yards downgradient of the ash have been contaminated with heavy metals, such as the Spurlock (KY), Hatfield's Ferry (PA), and Northeastern (OK) sites, it is likely that federally prohibited "open dumping" has occurred. However, because open dumping regulations are part of subtitle D of the Resource Conservation and Recovery Act (RCRA), USEPA has no authority to enforce these standards. And even though states have the authority to enforce the prohibition, it appears that some states may have ignored the federal law and allowed illegal CCW dumps to operate and contaminate drinking water sources. The failure of states to enforce Subtitle D guidelines and the failure of plant operators to comply with those requirements indicate that "guidelines" under subtitle D of RCRA are insufficient to guarantee compliance with federal safeguards.

A Clear and Present Danger

Most damaged sites are still active and virtually all show recent evidence of contamination.

The contaminated CCW sites identified cannot be dismissed as a legacy of past practices that are no longer allowed today. Almost all of the facilities described in the report are active CCW disposal sites. The contamination is documented by recent data (from 2007 or later) at 32 of the 35 sites for which groundwater monitoring results are available. Even the few closed sites show that contamination often continues and even

worsens for generations after disposal ceases. For example, nearly 40 years after CCW disposal stopped at the Montville site (CT), average concentrations of arsenic in groundwater collected in 2007-2009 still exceed the MCL by 21 times and are higher than measurements taken ten years ago.

See No Evil, Hear No Evil

Many states require no groundwater monitoring at all.

The USEPA's 2000 Regulatory Determination noted that damages from CCW disposal sites were likely to be more widespread than the limited evidence available, due to the lack of groundwater monitoring at so many locations, especially coal ash ponds.^{iv} Ten years later, this basic deficiency is still widespread.

Large coal ash-generating states like Alabama, Arizona, Georgia, Indiana, Ohio, Mississippi, Missouri, New Mexico, and Tennessee, to name a few, require no monitoring by law at coal ash ponds, at least while they are still in operation. Although data were available for the Lower Colorado River Authority's ash pond, most CCW disposal sites in Texas are exempt from any regulation or monitoring by the state. States whose regulations fail to require monitoring at coal ash ponds, both old and new, accounted for approximately 70% of the coal combustion waste generated nationwide in 2008.^v A few of these states require monitoring only at new ponds, but since 75 percent of waste ponds are over 25 years old and 10 percent are over 50 years old, these state regulations leave a large and dangerous gap.^{vi}

Many states, such as West Virginia, had limitations in their data that made further examination useless. Mississippi, Alabama, and Georgia either require no monitoring of their numerous ash ponds or monitoring only after the ponds have been closed, a rare event as most ponds are operated perpetually as "storage" sites. Monitoring data from state files in Georgia were so minimal that no assessment of impacts could be made.^{vii} In Minnesota and Illinois, the state agency either refused to respond to our request for site files under the Freedom of Information Act or responded that no data were available, despite the presence of substantial data.^{viii} The regulation of CCW in these states is so weak, or the staff so uncooperative, that it is often impossible to determine the extent of contamination at CCW sites.

Even when the groundwater is periodically sampled for pollutants, state agencies usually fail to look beyond CCW property boundaries to see how far that pollution has traveled. Off-site data were available at only 8 of the 35 sites evaluated in this report, despite clear evidence at 28 of the sites that contaminants had migrated away from coal ash ponds or landfills and toward the property boundary, and despite the fact that private or public drinking water wells were located downgradient and in close proximity to sources of contamination at many of the sites.

Cleanup: Whose Responsibility?

States agencies have not required polluters to cleanup even as contamination increases.

Power companies that own or operate coal ash disposal sites that contaminate groundwater ought to be required to clean them up. At 21 sites examined in this study, the evidence of groundwater contamination was serious enough to cause a state agency to require additional monitoring and some assessment of its causes. But as noted earlier, monitoring beyond the operator's fence line was rare, and only at five sites have polluters attempted to determine how far the contamination has traveled and at what concentrations (at Montville (CT), Joliet 9 (IL) Uniontown (OH), Venice (IL), and Oak Creek (WI)).

At no site did a state require the power company to stop the contamination, let alone clean it up. In isolated cases, citizens were provided with alternative sources of drinking water, or groundwater may have been

cordoned off from further use as drinking water. At Uniontown (OH), many domestic well users have been left to fend for themselves, even though monitoring data documented flows heavily contaminated with metals from the Industrial Excess Landfill moving toward their wells until such monitoring was stopped in 2004.

Too often, state agencies routinely accept claims by utilities that contaminant increases are the result of sampling anomalies, or that "nature" is responsible for heavy metal concentrations that are in fact far above background levels. Without further investigation of the flimsy evidence, states let operators return to reduced monitoring or stop monitoring altogether. And in the meantime, power companies may quietly purchase surrounding property where wells are contaminated, often without alerting the state or the community that a danger exists.

Ecological damages have been ignored or not addressed in Clean Water Act permits.

Four sites in the report demonstrate clear damage to off-site aquatic life that has been documented in peer-reviewed research or by government scientists:

- A U.S. Fish and Wildlife Service study found that aquatic life in Lake Erie was harmed by discharges with high selenium, arsenic and other metal concentrations from an ash basin at the J.R. Whiting Plant in Michigan.
- A catastrophic release in June 1967 from a coal ash pond at the Clinch River Plant in Virginia killed an estimated 217,000 fish a distance of 90.1 miles downstream and left the river ecosystem damaged for 35 years.
- Fly ash pond discharges containing high concentrations of cadmium and selenium from the Glen Lyn plant in Virginia resulted in dramatically reduced diversity of benthic macroinvertebrates in a mountain stream.
- High concentrations of metals and sediments from ash ponds at Wisconsin's Columbia Station virtually eliminated aquatic insects for 2.2 miles downstream in the 1970s.

One of the most basic steps to protecting the off-site environment at CCW disposal sites is to set limits on the discharge of leachate or wastewater that are based on best available treatment standards, and which are also designed to protect rivers or streams. Few CCW sites are subject to Clean Water Act permits that monitor, much less limit, the full range of toxic metals that are discharged from CCW disposal sites. The limited data available show violations of the few discharge limits that are in place for the Hatfield's Ferry and Bruce Mansfield sites in Pennsylvania and the Cardinal and Gavin sites in Ohio. Water quality criteria for metals in waters receiving discharges from the Bruce Mansfield and Gavin sites are being exceeded, but most waterways next to power plants are not monitored enough to make such determinations.

Of the 39 sites examined in our report, we found two, Gavin and Hatfield's Ferry, where state agencies or operators examined the toxic effects of surface discharges on life in receiving waters. At both sites the discharges had adverse impacts on stream life. Yet PADEP has yet to require a treatment of the discharges at Hatfield's that will stop the impacts. Furthermore despite the acutely toxic effect of those discharges on insect and fish life at Gavin, Ohio EPA has implemented relaxed surface water quality standards for beryllium, cadmium, chromium, lead, selenium, and other pollutants in Kyger Creek that appear to accommodate contaminated discharges from the ash landfill and closed ash pond.

Lax regulation of coal ash disposal sites that drain into large rivers ignores the long-term build-up of metals from such discharges in river ecosystems. But discharges from TVA's Shawnee (KY), Gallatin, and Johnsonville

(TN) sites along the Ohio, Cumberland, and Tennessee Rivers, respectively, the Big Cajun (LA) and Lansing (IA) sites along the Mississippi River or the Leland Olds (ND) site along the Missouri River, may contribute to harmful concentrations of metals that will be difficult to reverse.

Contamination Is a Warning for Use of Coal Ash as Structural Fill and Minefill

The finding of heavy metal contamination in onsite wells at all of the sites with groundwater monitoring should serve as a warning to USEPA and state regulators that use of coal ash as fill poses a real and substantial danger to drinking water sources. At fill projects, there are no liners or monitoring wells. Often fill sites are in or near residential areas where the contaminants need only travel a short distance to drinking water wells.^{ix} According to the American Coal Ash Association, use of coal ash as fill is pervasive -- over 20 million tons of coal ash per year are used as structural fill and minefill, representing more than a third of the total coal ash reused in the U.S.^x In light of the significant contamination described in this report, the USEPA must require every fill site to employ effective safeguards, such as liners, monitoring, and leachate collection systems, to prevent off-site migration of dangerous contaminants.

Conclusion: Federally enforceable regulations are necessary to stop the growing harm

The threat to public health and damage to the environment documented in this report provides additional evidence of the accumulating harm from poorly regulated CCW disposal sites. The quantum leap in coal ash sites with documented contamination from seven sites identified by EPA in its Report to Congress in 1999^{xi} to 137 sites today that are recognized by USEPA or presented in this and our previous report demonstrates that when adequate monitoring systems are established and their results are publicly accessible, contamination is invariably found at virtually every coal ash pond and landfill currently operating. Yet data from more than half (200) of the major disposal sites used by power plants in 25 states, could not be examined by EIP staff and experts, either because groundwater monitoring is lacking (8 states), agencies have refused to respond to Freedom of Information Act Requests (5 states), or due to time and resource constraints (12 states). Expecting monitoring data and other technical information at most CCW sites to be readily available to citizens when EIP's professionals had such difficulties obtaining it is unrealistic.

Our examination shows that contamination of the environment and water supplies with toxic levels of arsenic, selenium, lead, cadmium, boron, molybdenum, and other pollutants is pervasive at America's CCW disposal sites because states are not preventing it. When contamination is documented repeatedly in monitoring at these sites, state agencies do not respond, or they allow operators and their hired consultants to explain it away without substantiation as somebody else's fault, a sampling problem, or even nature's doing. The states almost never require the extent of the contamination to be determined, rarely sample off-site wells -- even nearby private drinking water wells that are in the path of the contamination -- and almost never require that contamination be cleaned up.

The avalanche of data should give the federal government the information it needs to set federally enforceable standards that protect the public health, guarantee citizens the right to know what is being dumped in their drinking water and the ability to do something about it, and take action to order cleanup of the worst sites. The evidence is in. It is past time for the U.S. Environmental Protection Agency to act.

ⁱ The Environmental Integrity Project (EIP) and Earthjustice. 2010. Out of Control: Mounting Damages from Coal Ash Waste Sites (Feb. 24, 2010), http://www.environmentalintegrity.org/news_reports/news_02_24_10.php.

ⁱⁱ U.S. Environmental Protection Agency (USEPA). 2000. Final Regulatory Determination on Wastes from the Combustion of Fossil Fuels, 65 Fed. Reg. 32,214, 32,225 (May 22, 2000).

ⁱⁱⁱ See 40 C.F.R. § 257.3-4 (providing that“(a) A facility or practice shall not contaminate an underground drinking water source beyond the solid waste boundary or beyond an alternative boundary specified in accordance with paragraph (b) of this section.”).

^{iv} USEPA, *supra* note ii.

^v USEPA. 2010a. Regulatory Impact Analysis for EPA’s Proposed RCRA Regulation of Coal Combustion Residues (CCR) Generated by the Electric Utility Industry (Apr. 30, 2010), (Appendix E and analysis of state regulations by Earthjustice, Environmental Integrity Project and Southern Environmental Law Center, August 2010).

^{vi} USEPA. 2010b. EPA’s Proposed Rule for Coal Combustion Residuals, Betsy Devlin, Associate Director, Materials Recovery & Waste Management Division, USEPA at 4 (Aug. 5, 2010), available at <http://www.epa.gov/osw/nonhaz/industrial/special/fossil/ccr-rule/ccr-webinar.htm>.

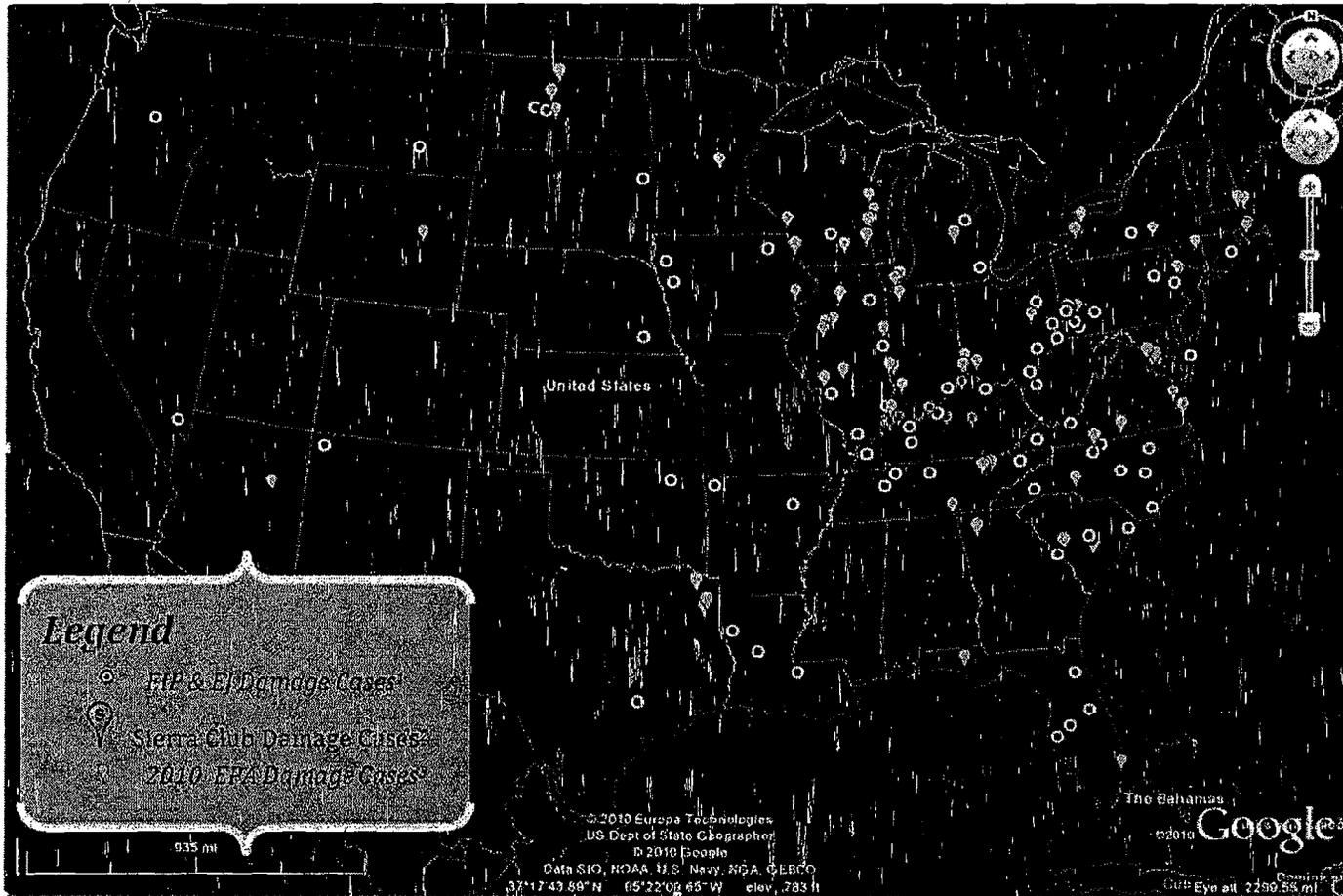
^{vii} Staff and volunteers of Greenlaw retrieved what monitoring data they could from files in Georgia for our researchers but it was so minimal that no assessment of impacts could be made.

^{viii} Staff of the Prairie Rivers Network found substantial monitoring data when they visited the file room at the Illinois Environmental Protection Agency.

^{ix} According to EPA, large fill sites are associated with 7 proven damage cases and 1 potential damage case. (See, for example, the Battlefield Golf Course in Chesapeake, VA, where 1.5 million yards of fly ash were used as fill for construction of a golf course and Town of Pines, IN). 75 Fed. Reg. 35155.

^x American Coal Ash Association, 2008 Coal Combustion Product (CCP) Production & Use Survey Report, available at <http://acca.affiniscape.com/displaycommon.cfm?an=1&subarticlenbr=3>.

^{xi} USEPA. 1999. Office of Solid Waste & Emergency Response, Report to Congress: Wastes from the Combustion of Fossil Fuels (Mar. 1999).

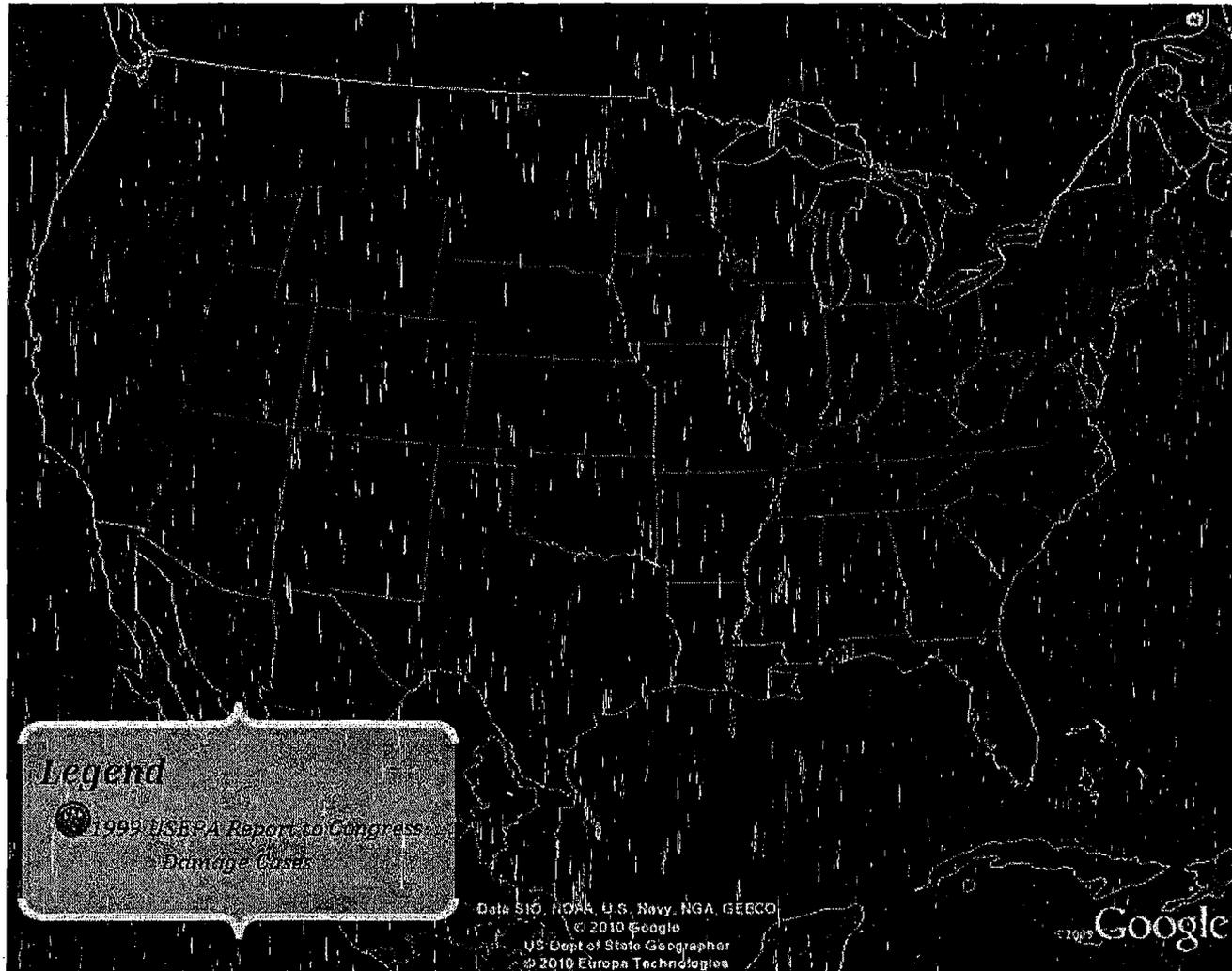


¹ These damage cases include the 39 documented in this report and the 31 cases described in: The Environmental Integrity Project (EIP) and Earthjustice. 2010. Out of Control: Mounting Damages from Coal Ash Waste Sites (Feb. 24, 2010), http://www.environmentalintegrity.org/news_reports/news_02_24_10.php.

² See Sierra Club, Kentucky Waterways Alliance, Global Environmental, LLC. 2010. Slow Motion Spills: Coal Combustion Waste and Water in Kentucky (May 2010), available at http://kentucky.sierraclub.org/resources/Environmental_Research/Coal_Combustion_Waste_and_Water_In_KY_042110.pdf.

³ See USEPA. 2010. Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities; Proposed Rule, 75 Fed. Reg. 35128, (June 21, 2010), and USEPA. 2007. Office of Solid Waste, Coal Combustion Waste Damage Case Assessments (July 9, 2007).

NATIONAL COAL COMBUSTION WASTE DAMAGE CASES MAPS



Entity/Company – Location

Union Electric Company/Ameren Energy d/b/a AmerenUE - Venice Power Station Ash Ponds
701 Main St
Venice, IL 62090
St. Clair and Madison Counties
Latitude: 38.653694 Longitude: -90.172728

Determination

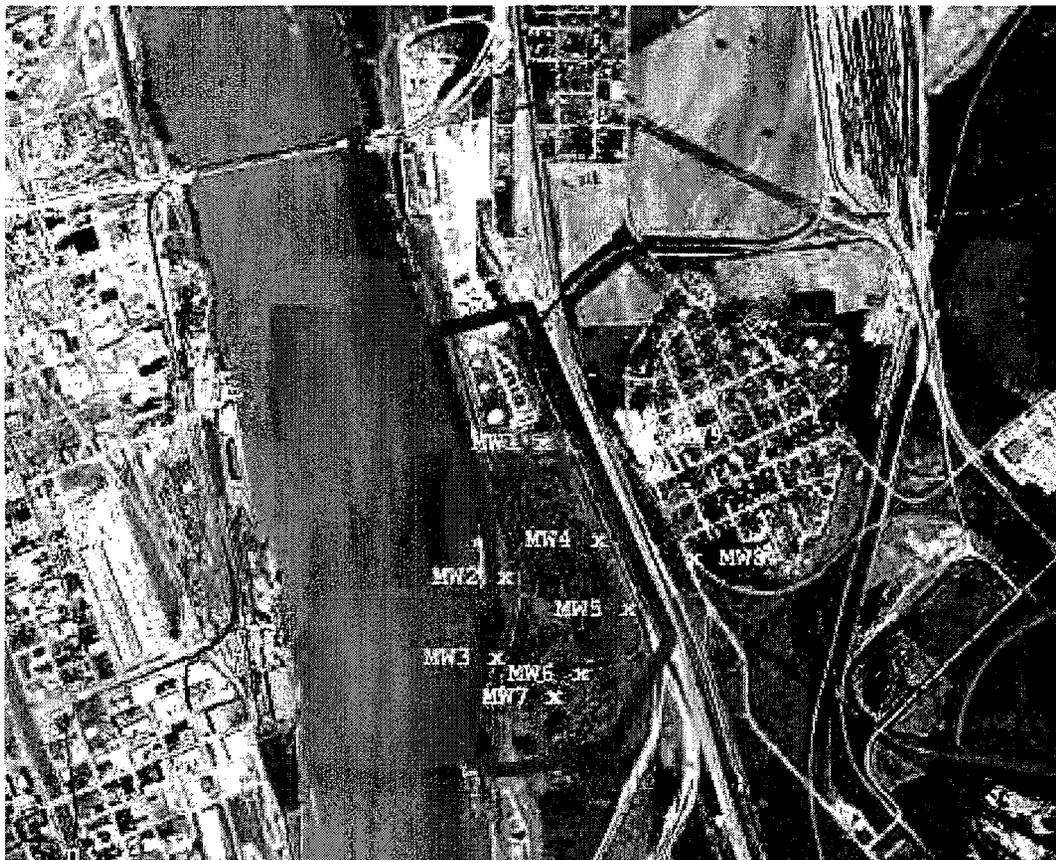
Demonstrated damage to groundwater off-site (400 feet east of ash ponds & beyond property line)

Probable Cause(s)

Leaching of coal combustion waste (CCW) contaminants from unlined CCW ponds

Summary

Inactive and unlined coal ash ponds at the AmerenUE Venice power plant on the east side of the Mississippi River created a contaminant plume of boron that exceeds Illinois Class I (potable) groundwater standards, extending 475 feet south of the ponds. A contaminant plume of arsenic that exceeds Class I standards extends beyond the boron plume and contains concentrations as high as 38 times the federal MCL, 400 feet beyond the ash ponds. The ash ponds stopped receiving CCW in 1977 when the plant switched from burning coal to oil. The contaminant plumes were discovered in the late 1990s when groundwater monitoring was required as part of a permit to resume operation of the Venice Plant in 1995. AmerenUE has proposed a state "Groundwater Management Zone" (outlined in red on the map below) to contain contaminant plumes within the property.



Test of Proof

A review of groundwater monitoring data submitted by AmerenUE to the Illinois Environmental Protection Agency (IEPA) from 1996 to 2009 found the following:

- **Arsenic.** The Illinois Class I groundwater standard for arsenic is 0.05 mg/L, five times higher than the federal Maximum Contaminant Level (MCL) of 0.01 mg/L. The average concentration of arsenic exceeded the Illinois standard in MW5 (0.054 mg/L) and MW6 (0.077 mg/L) on the north and south edges of the ash ponds, respectively. MW7, set 200 feet south of the edge of the ash ponds, had even higher average arsenic concentrations (0.086 mg/L, 8.6 times the MCL, with a maximum of 0.215 mg/L, 21 times the MCL). Other monitoring wells where average concentrations exceeded the MCL included MW1 on the north edge of the ash pond (0.026 mg/L) and MW4 on the east edge (0.024 mg/L). Arsenic concentrations in monitoring wells west of the ash ponds and east of the river were lower, suggesting that the dominant flow of groundwater is to the east away from the river (MW2 exceeded the MCL in 3 out of 30 samples, with a maximum of 0.24 mg/L, and MW3 exceeded the MCL in 2 out of 24 samples, with a maximum of 0.26 mg/L). A dominant flow to the east away from river is also suggested by common, and in some cases substantive, exceedances of the arsenic MCL in MW8 (7 out of 39 samples, maximum of 0.31 mg/L) and MW9 (11 out of 39 samples, maximum of 0.38 mg/L, 38 times the MCL). Both MW8 and MW9 are off-site about 400 feet east of the CCW ponds, and, as discussed below, concentrations of contaminants are affected by seasonal changes in flow direction.
- **Boron.** The standard for boron in Illinois for Class I (potable) water is 2.0 mg/L. The average concentration of boron exceeded the state standard in all monitoring wells set at the northern (MW1, 22.5 mg/L, more than 10 times the MCL), eastern (MW4, 19.2 mg/L and MW5 5.2 mg/L) and southern (MW6, 3.8 mg/L) edges of the ash ponds. MW7, set 200 feet south of the edge of the ash ponds, had a somewhat lower average boron concentration (2.6 mg/L). MW2, west of the ash ponds, also had a high boron concentration (5.4 mg/L). Wells MW3 (west) and off-site MW8/MW9 (east) had one or zero exceedances of the state standard since monitoring began, although these wells show concentrations of boron above what would be expected natural background levels. As discussed later, elevated boron both east and west of the ash pond system can be explained by seasonal variations in groundwater flow direction.
- **Cadmium.** The MCL for cadmium (0.005 mg/L) was exceeded three times in early sampling of MW1, but has not been exceeded since April 1999. There were no other MCL exceedances for cadmium in other wells.
- **Iron.** The Illinois Class I groundwater standard for iron is 5.0 mg/L. Iron concentrations have exceeded this standard at MW6 (maximum of 27.5 mg/L), MW7 (maximum of 17.8 mg/L) and MW9 (maximum of 23.3 mg/L).
- **Manganese.** The Illinois Class I groundwater standard for manganese is 0.015 mg/L. Manganese concentrations have exceeded this standard in all wells. Wells with exceptionally high manganese concentration (more than 1.5 mg/L, 100 times the standard) include: MW1 (maximum of 4.82 mg/L), MW4 (maximum of 4.25 mg/L), MW6 (maximum of 3.56 mg/L), and MW7 (maximum of 5.59 mg/L).
- **Total Dissolved Solids (TDS).** The Illinois Class I groundwater standard for TDS is 1,200 mg/L, more than twice as high as the Secondary MCL (SMCL) of 500 mg/L. The Illinois standard for TDS was consistently exceeded in MW1 (maximum of 2,656 mg/L), and regularly exceeded in MW4 (maximum of 2090 mg/L). These exceedances are more than five and four times the federal SMCL, respectively.

The Supplemental Hydrogeological Assessment of the site performed by a consultant for AmerenUE states that there is little correlation between arsenic and boron concentrations in groundwater samples collected at the site, and uses this evidence, along with the fact that arsenic concentrations in field leachate samples collected at the ash ponds are a factor of 4 to 5 lower than observed in groundwater, to argue that the main source of the arsenic is not from the coal ash ponds (NRT, 2010). The Supplemental Hydrogeological Assessment for the site also identifies MW8 and MW9 east of the ash ponds as “upgradient” wells, apparently on the assumption that the dominant direction of groundwater flow is west toward the river (NRT, 2010).

However, several lines of evidence suggest that the ash ponds are the main source of arsenic, and that off-site MW8 and MW9 are not truly upgradient and are affected by contaminants from the ash ponds:

- Boron tends not to interact with aquifer solids and serves as a good indicator of the zone of influence of ash leachate on groundwater. Arsenic, on the other hand, is sensitive to redox conditions in the ash pore waters and aquifer, so a correlation between arsenic and boron in the same sample would not necessarily be expected.
- In Pleistocene aquifers, groundwater containing boron concentrations greater than 0.5 mg/L can be considered affected by leachate (Schleyer et al., 1992). In MW8, the average concentration of boron in samples taken from 1999 to 2009 was 0.68 mg/L and more recent sampling in MW8P averaged 1.48 mg/L, suggesting that this well, 400 feet "upgradient," has been affected by the ash ponds.
- This influence can be explained by the fact that when the Mississippi River is high, the groundwater gradient to the east is much steeper (river 8.34 feet higher than MW8 on July 26, 2008) than when the river is at normal flow (river 3.93 feet lower than MW8 on September 26, 2008), making it entirely possible for contaminants to reach these wells and farther east before the lower westward gradient is reestablished.
- The interpretation that the dominant direction of the flow of contaminants is to the east rather than the west is confirmed by the fact that the monitoring wells set between the ash ponds and the river (MW2 and MW3) have lower average concentrations of arsenic and boron than the wells east of the ash ponds (MW4 and MW5).

Although the consultant raises the possibility that there may be some contribution of arsenic from another source, none has been identified.

The boron contaminant plume with concentrations up to 2.0 mg/L extends a maximum of 475 feet south of the ponds. A contaminant plume of arsenic that exceeds Illinois Class I standards extends a bit beyond the boron plume. The "Groundwater Management Zone" (GMZ) proposed by AmerenUE extends somewhat beyond the boundaries of the contaminant plume and is located within the property boundaries of the power plant.

Constituents Involved

Arsenic, boron, cadmium, iron, manganese, total dissolved solids

At Risk Population

A potable well survey conducted within a 2,500-foot radius of the ash pond system boundaries has been performed (NRT 2009a). The map showing the locations of these wells was withheld by IEPA when it responded to the Freedom of Information Act (FOIA) request for information about the site, so the results of this survey cannot be reported here. AmerenUE (2010) notes that the City of Venice and Village of Brooklyn have enacted ordinances prohibiting the use of groundwater as a potable water supply, because the presence of industrial facilities in the area since the early 1900s has created multiple potential sources for groundwater contamination. However, the analysis presented here suggests that most, if not all, contaminants are being detected in monitoring wells associated with the ash pond system and come from the unlined ash ponds. Private and public well data for the state of Illinois is maintained on a county by county basis via an online database operated by the Illinois State Water Survey. Wells locations fall in a one- to five-mile area arranged by section, township, and range. It is not possible to plot well locations or distinguish which wells are downgradient of the site.

Incident and Date Damage Occurred / Identified

Arsenic and boron exceeded MCLs and SMCLs in the first round of groundwater sampling on July 27, 1996. When MW4, MW5, and MW6 were added to the network in December 1997, arsenic and boron also exceeded Illinois Class I groundwater standards in all three wells.

Regulatory Action

When the Venice Plant resumed operations in 1995, a condition for the operating permit was that hydrogeologic investigations be initiated to evaluate the impact of the ash pond system on groundwater. These investigations

were initiated in 1996 with the installation of three monitoring wells, and the monitoring well network was eventually expanded to include 17 monitoring wells at varying depths and locations in and around the ash pond system. As discussed above, contaminant plumes containing arsenic and boron at levels that exceed ILEPA Class I groundwater standards and federal MCLs have been defined within the boundaries of the Venice Plant facility.

In March 2010, as part of the plan for final closure of the ash ponds, AmerenUE proposed final capping and establishment within their property boundaries of a Groundwater Management Zone (GMZ) for containing the contaminant plumes.

Wastes Present

Coal ash and other CCW from boilers, wastewaters from the boilers and water treatment plant, and various other process waters plus storm water runoff

Type(s) of Waste Management Unit(s)

A series of unlined ponds, referred to as Ash Pond Nos. 2 and 3 and collectively as the "ash pond system," was constructed in the 1950s to receive wet-sluiced coal ash and other CCW from boilers, wastewaters from the boilers, water treatment plant, and various other process waters plus storm water runoff. When the plant stopped burning coal in 1977, the ash pond system contained about 1,425,500 cubic yards of waste. The ash pond system continued to receive process wastewater and storm water runoff until a new water treatment facility and outfall was constructed in 2005. The ash pond system has been out of service since 2005 (AmerenUE, 2010).

Active or Inactive Waste Management Unit

Inactive

Hydrogeologic Conditions

The ash pond system is underlain by about 80 feet of alluvial deposits associated with the Mississippi River. The upper 20 to 30 feet of alluvium contain alternating layers of silt, sand, and clay. The lower 60 to 50 feet consist primarily of sand and gravel. Groundwater flow in the region is controlled by the Mississippi River. During normal river stage, which lasts the majority of the year, groundwater flows west and discharges into the river. During high river stage, groundwater flow is reversed, flowing east, with the river recharging the aquifer. There is also a perched water table that is influenced by infiltration of precipitation that tends to dilute the concentrations of contaminants from the ash pond system in the shallower wells. As discussed above in the Test of Proof section, even though the seasonal eastward flow inland from the Mississippi River is of shorter duration than the westward flow toward the river, the higher gradient of the eastward flow has carried contaminants farther inland (400 feet to MW8 and MW9) than has been acknowledged by AmerenUE's consultants (Hanson Engineering, 2000).

Additional Narrative

The 500-MW Venice plant burned coal until it was converted to an oil-burning facility in the late 1970s. The plant's capacity dropped off in the 1980s, but it was reconditioned and reopened in 1995. AmerenUE was formed in 1998 with the merger of Union Electric and Illinois Public Service. A catastrophic fire in 2003 resulted in abandonment of the original power plant building and associated generating equipment. Beginning in 2004, three additional single-cycle combustion turbine generators (Units 3, 4, and 5) were installed north of the ash pond system, and the plant was reopened in 2005. The plant now operates only intermittently as a peaking facility.

Sources

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Entity/Company - Location

E.ON U.S. d/b/a Louisville Gas & Electric (LG&E) - Mill Creek Plant
14660 Dixie Highway
Louisville, KY 40272
Jefferson County
Latitude: 38.049444 Longitude: -85.9075

Determination

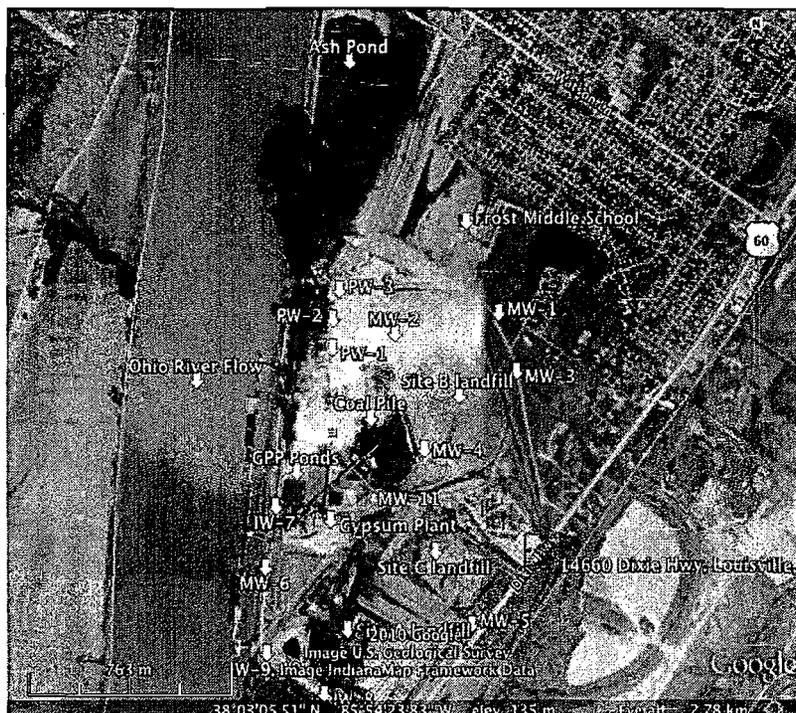
Demonstrated damage to groundwater moving off-site (Ohio River)

Probable Cause(s)

Leaching of coal combustion waste (CCW) contaminants to groundwater from three CCW landfill areas (A, B, and C) and the coal ash pond

Summary

Groundwater has been contaminated with arsenic at 1.5 times the federal Maximum Contaminant Level (MCL) in three wells downgradient from a CCW landfill and pond adjacent to the Ohio River at the Mill Creek Plant, approximately 15 miles south of downtown Louisville. Concentrations of total dissolved solids (TDS) have been up to 1,280 mg/L, more than 2.5 times the federal Secondary MCL (SMCL), and sulfate has been up to 717 mg/L, nearly 3 times the SMCL. Nine wells have groundwater parameter concentrations that have exceeded one or more drinking water standards. Although groundwater flows to the Ohio River, the horizontal extent of the contamination is approximately one-mile wide potentially affecting off-site human use of shallow groundwater in this urban area. Nevertheless, the Kentucky Division of Waste Management waived groundwater monitoring for CCW metals, has not required any assessment or corrective action, and has not conducted or required any off-site groundwater monitoring.



Test of Proof

The Mill Creek Plant became operational in 1972, and the Kentucky Division of Waste Management (KDWM) originally permitted the 185-acre CCW landfill in 1982, and horizontal expansions of the landfill occurred in 1990 and in 2009. The first two phases of the CCW landfill (Sites A and B) were permitted as an "inert" landfill, and the KDWM did not require a liner. The most recent expansion in 2009 was constructed with a clay liner that was designed to allow CCW leachate seepage but attenuate metals and other CCW contaminants (LG&E, 2005). CCW disposed of in the landfill includes fly ash, bottom ash, and FGD gypsum.

A "significant hazard" 79-acre coal ash pond was built in 1972, and four other process water ponds were commissioned in the late 1970s and early 1980s. The Mill Creek Power Plant disposed of bottom ash, fly ash, boiler slag, flue gas desulfurization (FGD) sludge, coal fines, process water drainage, and pyrites in the ash pond. Neither the KDWM nor the Kentucky Division of Water (KDOW) requires groundwater monitoring of the ash pond; however, plant production wells (PW-1, PW-2, and PW-3) south of the pond can be used as indicators of CCW constituent migration from the ash pond.

The KDWM requires groundwater monitoring of the CCW landfill and that monitoring shows that the groundwater contamination correlates chronologically with horizontal expansions of the landfill, and that concentrations of parameters have increased over time. The oldest groundwater data in the KDWM landfill file that includes any heavy metal concentrations in groundwater monitoring results date back to an August 1994 (LG&E, 1994) sampling event. Its results showed the following:

- **Arsenic** – exceeded the EPA MCL (0.01 mg/L) in three wells just south of the ash pond and between the oldest part of the ash landfill (Site B) and the Ohio River: MW-02 (0.014 mg/L); PW-1 (0.014 mg/L); and PW-3 (0.013 mg/L).
- **Sulfate** – the highest concentrations were in one well (PW-1) near the ash pond and the Site B landfill and in one well near the Site A ash landfill (MW-6). MW-6 is located adjacent to the Ohio River.
- **Calcium** – often a highly soluble parameter in CCW, the highest concentrations for calcium were in the two wells with the highest sulfate (PW-1 and MW-6), providing further evidence of contamination from ash or other CCW.

Groundwater monitoring results for a November 1995 sampling event also showed arsenic concentrations exceeding the MCL downgradient from the ash disposal areas. The MCL for arsenic was exceeded again in MW-2 (0.015 mg/L) and PW-1 (0.014 mg/L).

In June 1996, groundwater monitoring omitted arsenic and only included the following parameters: temperature, chloride, conductivity, chemical oxygen demand (COD), total organic carbon (TOC), sulfate, TDS, calcium, sodium, and copper (LG&E, 1996). The June 1996 results still indicated that the areas downgradient from the CCW landfill (Sites A and B) and nearest the coal ash pond had the highest concentrations of contaminants:

- **TDS** – concentrations exceeded the EPA SMCL (500 mg/L) at: MW-6 (959 mg/L, Site A landfill area); PW-1 (591 mg/L, Site B landfill and ash pond area); PW-2 (689 mg/L, Site B landfill and ash pond area); and PW-3 (910 mg/L, Site B landfill and ash pond area).
- **Sulfate** – concentrations exceeded the SMCL (250 mg/L) in MW-6 (383 mg/L) and PW-3 (439 mg/L).
- **Calcium and sodium** – the highest concentrations were associated with MW-6, PW-1, PW-2, and PW-3 that also had the highest sulfate, and TDS – like calcium, sodium is often a highly soluble parameter in CCW.

- **Copper** – concentrations were relatively unchanged between all wells, indicating that copper is not a good indicator for coal combustion wastes at this site.

A 1997 statistical analysis of groundwater compared the results of all monitoring wells to a designated background (also called “upgradient”) well, MW-1 (LG&E, 1997). MW-1 is to the west the Site B landfill, which is the oldest landfill at the site and is the most northwestern monitoring well at the site, likely placing it at the most upgradient position for shallow groundwater movement. The results indicated statistically significant increases (SSIs) in downgradient wells that are indicative of a release of CCW parameters to the groundwater as follows:

- **TDS** – statistical increases in MW-2, MW-3, MW-4, PW-1, and PW-3. MW-2, MW-4, and PW-1 are located between the Site B landfill and the Ohio River.
- **Sulfate** – statistical increases in MW-2, MW-4, MW-6, PW-1, and PW-3. MW-6 is located between the Site A landfill and the Ohio River.
- **Calcium** – statistical increases in MW-6 and PW-1.
- **Sodium** – statistical increases in MW-2, MW-3, MW-4, MW-5, MW-6, PW-1, and PW-3.

While MW-5 (east of Site A) and MW-3 (east of Site B) are located on the “upgradient” side of CCW disposal areas, they are located close to the CCW disposal areas and south of MW-1, and the significant increases in TDS at MW-3 and sodium at MW-3 and MW-5 may reflect the outward spread of contamination.

By 2006, LG&E had redefined what it considered to be a statistically significant increase in constituent concentrations. The file review did not indicate if the KDWM concurred with this re-definition. LG&E also concluded that the list of monitoring parameters being tested for each well was not reflective of CCW. A summary of the key LG&E conclusions for the November 2005 sampling event is as follows (LG&E, 2006):

- Production wells PW-1, PW-2, and PW-3 would no longer be sampled, even though they had exceedances above groundwater standards in the past.
 - LG&E would continue voluntarily monitoring for calcium, sodium, and sulfate because they believed these parameters are more indicative of CCW than those required by the KDWM.
 - The average concentrations of three wells (MW-1, MW-3, and MW-5) would now be used as “background” instead of just MW-1 – even though LG&E concluded in 1997 that MW-3 and MW-5 had already been affected by CCW contamination from the landfills, as indicated by statistically significant increases in sodium and TDS.
 - A statistically significant determination should not be based on sampling results because the results might be “indicative of a flaw within either the sample collection or analytical processes.”
 - The results of assessment monitoring “indicated minimal effects on human health and the environment” and that only “effects on human health and the environment” should be the basis for requiring an assessment of contamination, not the results of statistical analyses.
- LG&E would no longer notify the KDWM within 48 hours of determining that a statistical increase (or MCL exceedance) occurred, as required in the permit. Instead, notices would be made in semi-annual sampling reports that are submitted to the KDWM.

The current CCW landfill permit requires that groundwater be monitored semi-annually (KDEP, 2009). The permit requires that “groundwater assessment activities” be performed when an MCL is exceeded or if statistical analyses indicate a statistically significant increase over background occurs. However, none of the monitored parameters has an MCL; therefore, the first condition would never apply.

By 2009, groundwater monitoring data indicated that the horizontal extent of contamination had increased and that concentrations of parameters previously reported had also increased in certain wells. Sampling

included a new well (MW-11 also called IW-11) that was installed downgradient from the newest landfill horizontal expansion area (Site C) where disposal began in 2009. Data from a May 2009 sampling event indicated the following:

- **Chloride** – the concentration of 211 mg/L in MW-6 downgradient from the Site A landfill was substantially higher than concentrations in all other wells which ranged from 9.4 to 55.1 mg/L.
- **TDS** – concentrations exceeded the EPA SMCL (500 mg/L) in wells monitoring all three of the landfill Sites. The concentration for the Site A landfill well adjacent to the Ohio River, MW-6, was 1,280 mg/L (compared to 959 mg/L in June 1996 at MW-6). The concentrations for the three Site B landfill wells were 508 mg/L at MW-1, 596 mg/L at MW-2, and 1,234 mg/L at MW-4. The concentration in newly installed MW-11 monitoring Site C was 585 mg/L.
- **Sulfate** – concentrations exceeded the EPA SMCL (250 mg/L) at Site A landfill well MW-6, at 499.5 mg/L (compared to 383 mg/L in MW-6 in June 1996) and at Site B landfill well, MW-4 at 716.6 mg/L.
- **Calcium and sodium** – the highest concentrations were generally associated with the wells with the highest sulfate and TDS.

When the results of 2009 data are compared to the 1996 results, the data and associated file material indicate that:

- The horizontal extent of groundwater contamination above regulatory standards has progressed according to the approval of horizontal landfill expansions – from Site B, to Site A, and now Site C. The high levels of coal-ash-related constituents in MW-6, downgradient from the Site C landfill indicate that the liner is leaking and not preventing contaminant escape to underlying groundwater. The liner was designed as a leachate “seepage treatment system” (LG&E, 2005) and assumes that toxic metals will be removed by attaching to soil particles. However, monitoring for metals is not required, so the KDWM does not know if the liner is preventing metals migration from the disposal unit.
- The absence of heavy metal testing in the current permit fails to recognize the occurrence of arsenic MCL exceedances in the past. As a result, that documented threat is not defined from any of the disposal units despite the clearly documented spread of contamination across the site.
- Wells downgradient of the CCW landfill areas continue to indicate a release of CCW contaminants to the groundwater, as indicated by elevated levels of chloride, sulfate, pH, calcium, sodium, and TDS and exceedances of SMCLs for sulfate, chloride, and TDS.
- The parameters selected by LG&E as being good indicators of a release of CCW (calcium, sulfate, and sodium) are in fact, good indicators of a release; yet, KDWM has not required an assessment of on-site contamination since 1996 or any off-site assessment to determine the nature and extent of those contamination by those parameters or any heavy metals associated with the CCW.
- Long-term contamination at MW-6 within 175 feet of the Ohio River suggests that contaminants are reaching the river.
- Without sampling for trace elements and metals typically found in CCW such as arsenic, antimony, cadmium, selenium, thallium, or mercury that are harmful to humans and/or fish and aquatic life at extremely low levels, the potential impact of this contamination to the Ohio River and its water quality and ecosystem is unknown.
- Plant production wells (PW-1 through PW-3) are no longer sampled even though they repeatedly provided an indication of CCW contaminant release to groundwater.
- Groundwater monitoring results of four wells (IW-7 through IW-10) that are located between the Ohio River and the Gypsum Processing Plant and the Site A landfill are apparently not reported to the KDWM.

Constituents Involved

Arsenic, chloride, sodium, sulfate, and total dissolved solids

At Risk Population

Private and public drinking well data was obtained for Mill Creek Plant from Kentucky's Well Log GIS layer. In addition, well data was obtained from Indiana's Department of Natural Resources Private and Public Well GIS layer to provide comprehensive well location results for both states. There are 15 private wells within a two mile radius and 4 public wells within a five mile radius of the Mill Creek Plant. Given the evidence that the production wells at Mill Creek Plant are capturing contaminants from the ash pond and CCW landfill, the two public supply wells about 2,000 to 3,000 feet east of these disposal areas may be close enough that they are also capturing contaminants, depending on how much water is being pumped from them. Two other public and four private drinking water wells are clearly downstream of the site. It is possible that data may be inconclusive or missing in both GIS layers presented.



Mounding of groundwater in the disposal area may cause localized flow in other directions.

Incident and Date Damage Occurred / Identified

Parameter concentrations greater than MCLs and SMCLs have occurred since 1994.

Regulatory Actions

KDWM required Mill Creek Plant to conduct groundwater assessment monitoring in October 1996 due to elevated indicator parameters (LG&E, 2005). A groundwater assessment report was submitted on

September 10, 1997. By November 12, 1997, the Mill Creek Plant had returned to normal detection monitoring (LG&E, 2005). There was no indication in the file that the KDWM has ever required any off-site sampling, any off-site drinking water well investigations, or on-site corrective actions.

Wastes Present

Fly ash and bottom ash are disposed in the landfill. FGD scrubber sludge was disposed of in the landfill from 1982 to 1999 (FMSM, Nov. 2003). Fly ash, bottom ash, boiler slag, coal pile runoff, FGD gypsum, and pyrites have been disposed of in the ash pond (EPA, 2009; O'Brien & Geri, 2009).

Type(s) of Waste Management Units

The Mill Creek Plant includes a 185-acre CCW landfill, a 79-acre ash pond, and four flue gas desulfurization (FGD) processing ponds. According to the KDWM, CCW in landfill Sites A, B, and C will eventually cover the entire property except where the plant structures and ash pond exist (Brandenburg, Apr. 2010). Site B was the original landfill that was constructed in 1980 and was operated until 1990 (Puckett, 2010). Disposal in Site A, situated along the Ohio River, began in 1990 and is still active.

The KDWM permitted Sites A and B as an "inert" landfill and did not require liners under them (Brandenburg, July 2010). File photographs indicate that no daily or interim cover is placed on ash in Site A. LG&E applied for a permit modification in March 2003 to vertically expand the Site A landfill (FMSM, Dec. 2003), and KDWM approved that application on January 14, 2004 (KDEP, 2009). LG&E later applied for a horizontal expansion (Site C) of the landfill, and KDWM approved that expansion on September 13, 2006 (KDEP, 2006). Site C will connect disposal Sites A and B. The Site C landfill was not constructed until 2009 (Puckett, 2010). Gypsum was placed over the Site C clay liner and drainage blanket during the construction to prevent erosion; however, as of July 2010, Site A remained the main disposal area.

The 79-acre ash pond was built in 1972. The KDWM does not regulate the ash pond, and the KDWM file review did not determine if the ash pond is lined. No groundwater monitoring system exists at the pond. The pond's west embankment (closest to the Ohio River) is approximately 77 feet higher than the normal pool of the river, and that embankment failed in 1978 during a spring flood; however, there was no release of CCW (O'Brien & Gere, 2009). The pond was rated a high hazard pond because of its proximity (less than 150 feet) to a residential development and a school, and failure of the pond embankment can potentially result in loss of human life, damage to wildlife and habitat, and threaten downstream drinking water supplies (O'Brien & Gere, 2009).

Four wastewater treatment and solids settling ponds have also existed on-site since the late 1970s and early 1980s, and they receive wastes associated with the FGD system, a gypsum processing unit, cooling tower blowdown, and storm water runoff (O'Brien & Gere, 2009). Solids are periodically removed from at least one of the ponds that takes gypsum waste water and disposed in the on-site landfills. The KDWM does not regulate these ponds and as a result, no monitoring data or information on whether they are lined was available from the file review.

Active or Inactive Waste Management Unit

Active

Hydrogeologic Conditions

The average depth to the static water level in wells on-site is approximately 43 feet below the top of each well (FMSM, 2005). The groundwater generally flows from east to west towards the Ohio River.

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EXHIBIT 5
EQSC
SEPTEMBER 21, 2010

Background

In the spring of 2009 a small group of committed organizations met to begin discussing Indiana's investments in conservation. Organizations include: Indiana Association of Soil and Water Conservation Districts, Indiana Conservation Alliance, Indiana Farm Bureau, Indiana Wildlife Federation and The Nature Conservancy. These groups have consistently advocated for Clean Water Indiana funding, Lake and River Enhancement funding, and Conservation Reserve Enhancement Program funding. Our work together on these issues brought us to sit down and think about the bigger picture of conservation funding in Indiana.

The group developed a vision to grow our state's investment in water, wildlife and working farms and forests throughout the state. We know that effective conservation is strategic and planned; and stable funding is an important part of that. The conservation community understands that the time is not right to increase funding, but we do believe that the time is right to explore, to analyze and to look for ways Indiana can position itself to be ready when the economy does turn around. Our hope is that Indiana would have its plan for dedicated conservation funding in place when state revenues are on a positive growth trend. We recognize the process will take time and effort, but the result will be protection of our natural resources for generations of Hoosiers to come.

We have spent considerable time gathering information from other successful states such as Minnesota, Iowa, and Missouri with conservation funding streams. This information and these contacts have been and will continue to be vital as we move forward. We have spoken to folks in Minnesota and Iowa regarding their investments in conservation and have learned about different processes, challenges, and opportunities available. We conducted a legislator survey last fall to gauge interest in conservation funding in Indiana. This survey demonstrated that there is interest in conserving our natural resources, but the current economic situation has taken precedence. We spent time speaking to various conservation leaders in the state about their vision for conservation in Indiana, potential areas for growth, opportunities for partnership, and any long-term conservation problems that may be of concern. We have also taken time to present to the Indiana Rural Caucus, and are now presenting at the summer study committees.

I would now like to introduce Lynn Dennis with the Nature Conservancy who will explain our natural resources funding advisory committee proposal.

Comparison of surrounding states natural resources conservation funding mechanisms

Provided to the Environmental Quality Service Council

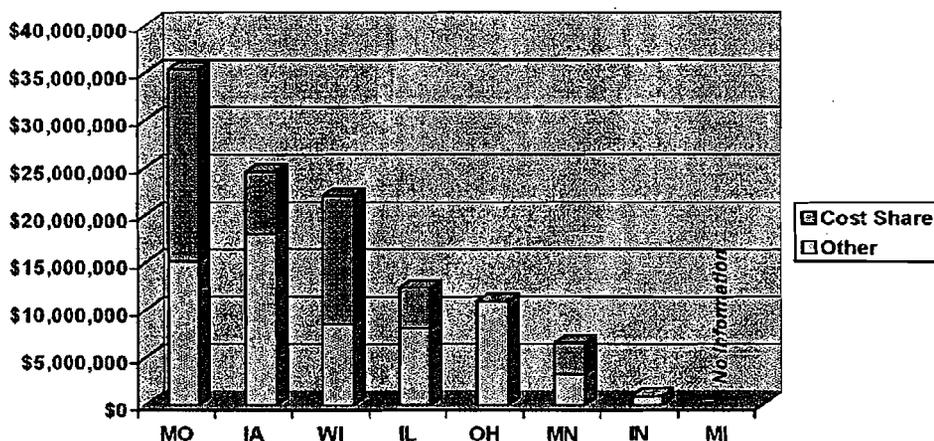
September 21, 2010

Notables

- In 2010 the Central Indiana Land Trust, in partnership with The Conservation Fund, published the first green infrastructure plan for central Indiana, and possibly the first regional plan in the state. What is green infrastructure: "The infrastructure that sustains a community is both built (e.g. roads, utilities) and natural (e.g. drinking water, clean air, forests," and healthy soils.) A green infrastructure plan is the big picture, including networks of natural and park lands, green roofs, and ecologically friendly storm water management systems.
- In Indiana our drinking water comes from both groundwater (72%) and surface waters (28%). Implementing best management practices and protecting natural lands are proven components in providing clean drinking water, through filtration of pollutants from runoff and recharge of groundwater sources.
- A one-acre wetland can typically store about three-acre feet of water, or one million gallons – Indiana has lost 85% of its wetlands, or about 4.7 million acres. Today there are approximately 813,000 acres of wetlands.
- 2,882 stream segments in Indiana are listed on the 2010 303(d) list of impaired waters. Impairments include E.coli, impaired biotic communities, PCB's in fish tissue, and mercury in fish tissue.
- This fall, Iowa voters will decide whether or not to amend their constitution to dedicate 3/8 of 1% of sales tax the next time the legislature increases the sales tax.

Graph below depicts the amount of state funding specifically to Soil and Water Conservation Districts in the Midwest.

Total 2005 State Funding Appropriations to Conservation Districts per State



Missouri

State Characteristics

- Population of 5.6 million
 - 70% urban; 30% rural
- 69,704 square miles in size
- 81 State parks

Mechanisms to fund natural resources conservation

1. Missouri Conservation Sales Tax

- a. Passed in 1976; constitutionally protected
- b. 1/8th percent sales tax
- c. Revenue in FY 2004: \$93 million
- d. Money goes to the Department of Conservation, which manages fish, forest, and wildlife resources
- e. Money is administered by the Conservation Commission with its members appointed by the Governor

2. Parks & Soil Sales Tax

- a. Passed in 1984 to support soil and water conservation along with state parks
- b. 1/10th percent sales tax
- c. Revenue in 2008: \$82 million
 - i. Revenue is split 50/50 between soil/water & the parks
- d. Contains a sunset provision
 - i. Voted on and passed by citizens four times so far
 - ii. Latest vote in 2006 passed by a 2 to 1 margin; renewed for another 10 years

Ohio

State Characteristics

- Population size is 11,485,910
- Land size 40,948 square miles
- # of parks

Mechanisms to fund natural resources conservation

1. Bonds

- a. \$200 million bond for parks and recreation passed via a constitutional amendment in 1993 – all funds have since been allocated

2. Clean Ohio Fund

- a. \$200 million statewide, 4-year bond passed in November 2000 by voters
- b. Fund is divided into four sub-programs: Brownfield Revitalization, Clean Ohio Conservation Program, Farmland Preservation, and Recreational Trails

- c. In 2008, voters overwhelmingly approved a ballot initiative that provides another \$200 million towards the Clean Ohio Fund

3. Other

- a. Tax check-off
 - i. Provides revenue to fund land acquisition
- b. License plate programs
 - i. Sportsman's plates, conservation plates, Ohio scenic river plate, and Ohio state park plate
 - ii. Each program supports projects that help acquire land for conservation, wildlife or water quality
- c. Water Pollution Control Loan Fund
 - i. Effort to target non-point source pollution that threatens water resources
 - ii. 90% of funding has been used for land acquisition

Illinois

State Characteristics

- o Population of 12.8 million
 - o 88% urban; 12% rural
- o 55,584 square miles in size
- o 42 State parks

Mechanisms to fund natural resources conservation

1. Open Space Lands Acquisition & Development

- a. Dedicated funding source statutorily enacted in 1989
- a. Goal is to provide grants to local governments for acquisition and development of parks and open spaces. Matches funds provided by park districts, municipalities, forest preserve districts and other local governmental entities, providing up to 50% of funding.
- b. 35% of Real Estate Transfer Tax
- c. FY 2005 revenue: \$38 million; FY 2009 revenue: \$14 million

2. Natural Areas Acquisition Fund (NAAF)

- a. Dedicated funding source statutorily enacted in 1989
- b. Goal is the protection of natural areas, wetlands, and other high quality natural communities
- c. 15% of Real Estate Transfer Tax
- d. FY 2005 revenue: \$16.3 million; FY 2009 revenue: \$6 million

3. Conservation 2000

- a. Statewide conservation program designed to promote ecosystem-based management of privately held land in a public-private partnership. Regional based program funds 9 programs across 3 state agencies.
- b. Most of its funding is dedicated to planning and management activities, but a portion of its funds go towards land acquisition.
- c. Originally set to expire in 2006, but was extended through 2009.

- d. General fund appropriations. Appropriations dropped from \$13.4 million in FY 2002 to \$2.78 million in 2007.
 - e. Even when legislature appropriates funds, not assured of receiving funds. It is largely defunct now due to economy.
- 4. Tax Check-Off**
- a. Nongame tax check-off that funds the Illinois Natural Heritage Program.
 - b. Averages \$206,000 per year, but is being challenged by more check-off options.
- 5. Local Financing**
- a. Municipalities, counties, conservation districts and park districts have a number of local financing options for open space including, bonds, sales taxes and property taxes.
 - b. OSLAD matches funds provided by park districts and other local government entities, providing up to 50% of the funding. Grant awards up to \$750,000 are available for acquisition projects, while development/renovation projects are limited to \$400,000 grant maximum.
 - c. SWCDs are not taxing units of government but do receive funding from local sources like Indiana. Also receive appropriations from legislature, but have been woefully underfunded and subjected to sweeps or non-appropriation.

Indiana

State Characteristics

- o Population of 6.3 million
 - o 71 % Urban: 29 % rural
- o 35,866 square miles in size
- o 25 State parks & recreation areas

Mechanisms to fund natural resources conservation

1) Non-game Wildlife Tax Check-off

- a) The only source of funding for the DNR non-game program, which researches and protects threatened and rare species.
- b) Averages about \$250,000 per year.

2) Indiana Heritage Trust

- a) The IHT and the environmental license were enacted in 1992. This was the first specialty license plate.
- b) It is the state's only program dedicated for natural lands acquisition, **including such places as state and local parks, forest lands, fish and wildlife habitat, nature preserves, recreation areas and historic sites.**
- c) Receives funding through three sources: general fund appropriations, environmental license plate revenues and partner matching dollars. Receives funding through two sources:
- d) Appropriations (which have been a mix of general fund and BIF), environmental license plate revenues (which are declining with the proliferation of special plates). Additionally, half of the honey in the fund is placed in the Discretionary Account which requires for every \$3 of state funding, there is \$1 of nonstate money brought to the project – in reality it has been leveraged at a higher ratio).
- e) Since 1995 IHT appropriations have averaged approximately \$1.5 million/year; total appropriations add up to \$28.5 million (including Received \$3 m in start up funds from existing

accounts); **The environmental plate is the #1 specialty license plate with total funds of \$26 million.**

3) Clean Water Indiana

- a) Enacted in 1999, the CWI Program was created to protect and enhance the water quality of Indiana's lakes, rivers and streams, by reducing the amount of polluted storm water runoff from urban and rural areas entering surface and ground water.
- b) Appropriations History:
- c) Receives approximately \$3.7 million/year in cigarette tax funds (since 2005)
- d) Since inception, CWI has only received three additional biennial appropriations:
 - 2001 \$2 million from Build Indiana Fund (only half was allocated)
 - 2007 \$1 million
 - 2009 \$500,000 (not allocated as of yet)

4) Boat Fee (LARE)

- 5) Boat owners are charged an annual fee of \$15 to the state's Lake and River Enhancement Program (LARE). Provides approximately \$1 million/year for cost-share projects and grants.
- a) Appropriations last three biennium:

	1. LARE Fees	2/3 LARE Fund	1/3 Enforcement Fund
FY 2005-06	\$5,050,729	\$4,685,811	\$ 364,918
FY 2007-08	\$6,325,856	\$4,685,856	\$1,640,000
FY 2009-10	\$6,194,682	\$4,603,882	\$1,590,800

6) Trust Fund/Direct Appropriation

- a) The Indiana Heritage Protection Act, passed in 1983, created the first public-private partnership for natural lands protection. The fund was established by a \$5 million one-time general appropriation, which was matched by a contribution to the fund by The Nature Conservancy.

Minnesota

State Characteristics

- o Population of 5.2 million
 - o 71 % Urban: 29 % rural
- o 76,610 square miles in size
- o 66 State parks

Mechanisms to fund natural resources conservation

1) Non-game Wildlife Tax Check-off

- a) Established in 1980; a tax check-off on personal income tax form.
- b) Raises approximately **\$1 million/year** for non-game research and habitat acquisition.

2) Environment and Natural Resources Trust Fund

- a) Constitutionally protected funding enacted by the voters in 1988 and renewed in 1998 through 2024. The program dedicates **\$28-35 million/year** (\$28 M is FY 2005 data). Hoped to reach \$1 B by 2025.
- b) Mechanism: 40% of the net state lottery proceeds

- c) Funds projects with long-term benefits: land acquisitions, biodiversity surveys, and innovative community –based conservation projects.

3) Stamp Program-

- a) Trout & Salmon
- b) Pheasant
- c) Duck
- d) Wild Turkey
- e) Deer License surcharge

4) Payment in-lieu-of-sales Tax on Lottery Tickets

- a) MN lottery is exempt from general sales taxes so the state imposes a 6.5% in-lieu-of-sales tax on lottery tickets.
- 5) In 2000, lottery funds were redirected to fund both fish & game and parks & trails receive 72% of the funding the other 28% goes to the general fund. \$25-40M/biennium

6) Constitutional Amendment – Portion of Sales tax

- a) Constitutional amendment was renewed by voters in November 2009. Amendment dedicated 3/8ths of one percent of state sales tax over 25 years to conservation.
- b) \$86 M – habitat, \$86 M - water
- c) Funds arts, trails, water and habitat.

7) License Plate

- a) Established in 1995 to protect critical habitat; proceeds are nearly \$2M/year.
- b) In 1986, the Reinvest in Minnesota program RIM was est. by a recommendation from the Citizen’s commission to Promote Hunting and Fishing.
 - i) \$2M from Legislature/ every other year (Bonding)
 - ii) \$2M from license plates/ annual
 - iii) private donations of land and cash

8) Bonds for Land Acquisition

- a) The legislature approves capitol budget projects every other year, including selling bonds for land acquisition. In the period from 1971 to 2001, nearly \$1 billion has been appropriated for land and restoration. From \$40 M approximately year.

9) County Property Tax Exemption

- a) Native Prairie Tax Exemption Program was created in 1980. MN has approximately 500 landowners and 12,000 acres enrolled in this program statewide.
- b) Wetlands Tax Exemption Program was created in 1979.

Iowa

State Characteristics

- Population of 3 million
- 55,869 square miles in size
- 69 State parks

Mechanisms to fund natural resources conservation

1. Iowa Environmental Protection Charge (EPC)

- a. Royalties from all deposits of petroleum products into a non-exempt underground and non-exempt above ground storage tanks in Iowa.
- b. The rate is 1 cent/gallon of petroleum products deposited in qualifying tanks.
- c. The funds are deposited into the Iowa Comprehensive Petroleum Underground Storage Tank Fund. This fund is administered by a six member board that uses the fund to clean up the release of any petroleum products and investigate and clean up past contamination.
- d. Collected \$20,995,594.55 in FY 2005

2. Wildlife and Duck Stamp Revenue

- a. In 1996, the Wildlife Habitat Stamp Program generated \$600,000 per year and the state Duck Stamp Program generated \$150,000 per year

3. Resources Enhancement and Preservation (REAP)

- a. Passed in July 1989 by the legislature for open space, county conservation, city parks, state land management and conservation.
- b. It is authorized at \$30 million/year for 10 years (\$20 million/year of standing appropriation, \$10 million/year from lottery proceeds).
- c. It has only been funded at between \$3-18 million in recent years.

4. Lottery

- a. In 1996, the state established a 1:1 match for distribution of the portion of lottery proceeds slated for natural areas protection. Approximately \$500,000/year in the first year.

5. Constitutional Amendment for Conservation

- a. In 2006, legislation passed that created the Iowa Sustainable Natural Resources Funding Task Force and their findings were issued in April of 2007. Legislation was passed to establish "Sustainable Nat. Res. Funding Interim Study Committee" to look at these issues and the advisory committee's findings. Set the stage for leg. To be introduced in House and Senate Nat. Res.
- b. Legislature approved it as a constitutional amendment on the 2010 ballot for 3/8th of 1 percent of the next increase of the sales tax to be constitutionally protected for conservation. The sales tax has been at 6.25% over the last 15 years; the next increase will likely be 7%.
- c. Estimated at approximately \$150 million/year (more than double the current funding), these funds would be used for fish and wildlife habitat, natural areas, parks and trails, as well as soil and water conservation.

Michigan

State Characteristics

- Population of 10 million
- 56,803 square miles in size
- 87 State parks

Mechanisms to fund natural resources conservation

1. Michigan Natural Resource Trust Fund

- a. Passed in 1976; constitutionally protected
- b. Acquisition of land for public recreation and environmentally significant lands
- c. Oil and gas lease revenues; average \$29.4 million per year
- d. 75% goes towards land acquisition and 25% towards capital improvements

Wisconsin

State Characteristics

- Population of 5.6 million
 - 68 % Urban: 32% rural
- 54,310 square miles in size
- 46 State parks

Mechanisms to fund natural resources conservation

1. Knowles-Nelson Stewardship Program

- a. Passed in 1989; reauthorized in 2007 through 2020
- b. General obligation bonds
- c. In 2010, funding will increase to **\$86 million per year - a 40% increase over the current funding level.**
- d. Goal is to preserve valuable natural areas and wildlife habitat, protect water quality and fisheries, and expand opportunities for outdoor recreation.

2. Non-game Wildlife Tax Check-off

- a. Established in 1996, this program receives funds from the personal income tax check-off and corporate tax returns (added in 2000).
- b. Approximately **\$600,000/year** is dedicated for non-game research and habitat acquisition. It is matched 1:1 with state general tax funds.

3. Environmental License Plate Program

- a. Established in 1995 to fund the Bureau of Endangered Resources.
- b. Approximately \$500,000/year (in FY 1997).

1. Department Funding

- The Department of Natural Resources spends approximately \$120 million/year on fish and wildlife activities (based on FY 2004-05 budgets).
 - \$68 million is from the sale of hunting and fishing licenses
 - \$20 million in Federal dollars
 - \$18 million in bonds to acquire hunting and fishing land (Knowles-Nelson)

- \$8 million from state general fund
- Wisconsin has become increasingly reliant on user fees and has begun to search for other sources of funding for the DNR. The reliance on user fees has led to a pattern of raising fees to maintain funding levels. This has had the effect of causing resentment in the gaming/fishing community who feel they bear too much of the burden.

Kentucky

State Characteristics

- Population of 4.3 million
- 40,598 square miles in size
- 52 State parks and public use areas

Mechanisms to fund natural resources conservation

1. Mineral Tax/License Plate Sales/Environmental Fines

- a. In 1994, legislators passed enabling legislation for the Kentucky Heritage Land Conservation Fund.
- b. Monies are derived from a portion of the unmined mineral tax, monies received from environmental fines, and the sale of environmental license plates.
- c. The money generated is used to purchase land from willing sellers for nature preserves, state parks and forests, wildlife management areas, recreation and environmental education areas, wild river corridors, and wetlands.
- d. Distributed in as follows:
 - i. 10% to the Department of Fish and Wildlife Resources
 - ii. 10% to the Department of Parks
 - iii. 10% to the Division of Forestry
 - iv. 10% to the Nature Preserves Commission
 - v. 10% to the Wild Rivers Program
 - vi. 50% to Local Governments, State Colleges, Universities, and other state agencies. In
 - vii. From 1995-2007, \$35.3 million with 29,000 acres purchased.

2. Purchase of Agricultural Conservation Easement Program (PACE)

- a. PACE was established in 1994.
- b. Initial funding was provided through a \$10 million state bond issuance paid by tobacco settlement funds.
- c. PACE gives the state the authority to purchase agricultural conservation easements in order to ensure that lands currently in agricultural use will continue to remain available for agriculture. Donors of conservation easements are eligible to receive federal and state income tax and estate tax benefits.
- d. Received \$400,000 annual appropriation from the state, but has recently been left unfunded.
- e. Last tally showed over 600 applications for easements with no money available.

3. Tax Check Off

- a. Raises approximately \$70,000 each year.

- b. Proceeds go to the Nature and Wildlife Fund with funding split between the Kentucky Department of Fish and Wildlife Resources and the Kentucky State Nature Preserves Commission.
- c. The Nature and Wildlife Fund protects and manages state nature preserves and protects nongame wildlife.
- d. The two agencies cooperate on programs that protect rare plants and animals; acquire and protect forests, wetlands, and prairies; and manage wildlife.

4. Local Financing

- a. Financing options for parks and open space include general obligation bonds, property taxes and the occupational license tax (income tax).
- b. There are no local sales taxes in Kentucky.
- c. Local governments generally do not seek voter approval for bond issuances.
- d. A property tax for PDRs or park expansion/improvements was instituted by the legislature and these do not require a referendum, which can be initiated by voters or by the County/Urban County Council.

EXHIBIT 6
EQSC
SEPTEMBER 21, 2010

As Jennifer noted, our small group has looked at many of the natural resource protection programs in the central U.S. We have been particularly drawn to the process that Iowa has gone through in creating a sustainable funding mechanism. It is not finalized, but the General Assembly has proposed a constitutional amendment which will be on the ballot in November. If it is approved, the next increase in state sales tax will dedicate 3/8 of 1% to sustainable funding for natural resources.

How did they get there?

In 2006, the Iowa General Assembly established a committee called the Sustainable Natural Resource Funding Advisory Committee. They recognized that their rich soils were responsible for their agricultural strengths and thus the growth of the state's economy and their population. That success, however, comes at a price—the conversion of most of their natural areas to agricultural and urban landscapes: which in turn has resulted in the loss of soil, diminished water quality, loss of habitat for wildlife and native vegetation and less land available for outdoor recreation.

This Committee was charged with providing a report that would contain:

FIRST: Information on what surrounding states had done to provide sustainable funding for conservation.

SECONDLY: an outline of a conservation funding program agreed upon by the members of the advisory committee.

THIRD: an estimate of the amount of revenue needed and what would be accomplished if the conservation funding initiative were implemented.

FINALLY: an analysis of Iowa's citizens' willingness to pay for the identified conservation funding initiative.

In 2007 after the Iowa Legislative Council received the advisory committee's report, they created an interim legislative committee that would ultimately be responsible for determining the best way to proceed in establishing a source or sources of funding that would be sustainable and allow Iowa to protect natural lands, farmland, trails and parks, as well as working with private landowners in management practices. All of this would help them conserve their soils and protect and improve water quality and ensure a healthy environment and outdoor recreational opportunities for their citizens today and generations to come. To accomplish their charge, they were also directed to cooperate with members of the Sustainable Natural Resource Funding Advisory Committee and others interested in persons.

The result was the recommendation that the Iowa General Assembly pass a constitutional amendment that would require that 3/8 of 1% of sales tax be dedicated to natural resource protection the next time the state sales tax is increased. And as I stated earlier, that will be on the ballot this fall.

So what are we proposing for Indiana?

There are many similarities between Indiana and Iowa. We both have a strong agricultural heritage, and we both have significant water resources and still have intact natural lands despite our development. We also both face some of the same challenges.

We believe the way Iowa systematically created a diverse committee of conservation and farm organizations, as well as executive and legislative branch members to do the initial thorough study and then taking their report, data and recommendations and examining it with the lens of the legislature before making a recommendation back to the full General Assembly is a good road map for Indiana.

As Jennifer said good conservation is strategic and planned, and an important part of that equation is consistent and stable funding which we've been lacking in Indiana. We understand that another "study

committee” is not popular. But a focused short-lived committee will be worth the money and the effort. It will allow Indiana to look holistically at natural resources and conservation practices and design a program that works for Indiana.

We have provided you with a copy of a draft resolution we shared with Rep. Michael in the last session, as well as a little more detailed information about the Iowa report, along with a link to their website and a comparison of other state programs. Rep. Michael arranged for us to present to the Rural Caucus during the last session, and we are continuing to work with her. This summer we have already presented this concept to the Water Resources Study Committee and will be doing the same at the Natural Resources Study Committee next week.

So today we would like to ask that you, the members of the Environmental Quality Service Council, consider supporting the creation of the Sustainable Natural Resource Funding Advisory Committee for Indiana and let me reiterate, that we are not asking for an increase in any funding at this point, we know it isn't the time for that, we strongly believe it is an excellent time for Indiana to lay the groundwork so that when the economy turns around, we are poised to act.

EXHIBIT 7, ERSC, SEPTEMBER 21, 2010
A CONCURRENT RESOLUTION creating the Sustainable Natural Resource Funding Advisory Committee.

Whereas, natural resources provide benefits across Indiana such as working farms, clean water and habitat for our native fish and wildlife, as well as outdoor recreation and healthy activities for Hoosier families;

Whereas, our prime soils and sustainable agriculture and hardwood industry provide positive economic impacts for the state and continues our cultural heritage of the family farm and the pastoral landscapes beloved by many;

Whereas, Indiana citizens have been well-served by our Departments of Agriculture, Environmental Management and Natural Resources, along with their many partners in federal and local government and the private and nonprofit sectors;

Whereas, there is more that can be done and partnership opportunities that have been lost. Current funding for programs, such as Clean Water Indiana, the Indiana Heritage Trust, and the Division of Forestry have been substantially diminished while others, such as a payment in lieu of tax and a farmland preservation program, have yet to be realized;

Whereas, the inability of Indiana to regularly generate the requisite funding needed to secure matching funds available through federally administered conservation programs contributes to Indiana's status as a "donor" state with Indiana taxpayers paying more in federal taxes than we realize in federal expenditures in our state: Therefore,

Be it resolved by the House of Representatives
of the General Assembly of the State of Indiana,
the Senate concurring:

SECTION 1. That the Sustainable Natural Resource Funding Advisory Committee shall be created to study how to provide stable, suitable and sufficient funding for natural resource needs in Indiana.

SECTION 2. That the Sustainable Natural Resource Funding Advisory Committee shall collect data regarding natural resource programming, funding and funding mechanisms in other states, particularly our neighboring states and other Midwest states.

SECTION 3. That the Advisory Committee shall issue a preliminary report to the General Assembly and the Governor by November 1, 2011, with a final report by November 1, 2012. The report shall contain, but is not limited to the following:

- a. Information on what surrounding states have done programmatically to ensure conservation of natural resources and what they have done to provide sustainable funding for natural resource conservation.
- b. Options for conservation funding mechanisms.
- c. Outline of the amount of revenue needed and what would be accomplished if the conservation funding initiative is implemented.
- d. Analysis of Indiana's citizens' willingness

SECTION 4. The Advisory Committee will be staffed through coordinated efforts of:

- a. the Legislative Services Agency,
- b. the Department of Agriculture, and
- c. the Department of Natural Resources.

SECTION 5. That it is recommended that the Advisory Committee shall be composed of one member from each caucus in both the Indiana Senate and Indiana House of Representatives, with the majority member in each house serving as co-chairs, as well as:

- a. State Director of Department of Agriculture or designee.
- b. State Director of the Indiana Department of Natural Resources or designee.
- c. Commissioner of the Department of Environmental Management or designee.
- d. One representative from each of the following organizations:
 - 1) Indiana Wildlife Federation – Sportsman's Roundtable.
 - 2) Pheasants Forever.
 - 3) Indiana Association of Soil and Water Conservation Districts.
 - 4) Indiana Farm Bureau.
 - 5) The Nature Conservancy.
 - 6) One (1) representative of an environmental organization.
 - 7) Indiana Forestry and Woodland Owners Association.
 - 8) Indiana Park and Recreation Association
 - 9) Indiana Land Protection Alliance
 - 10) One (1) representative from a lake or watershed organization.
 - 11) Three (3) representatives from public universities providing research, science and policy analysis.

EXHIBIT 8
EQSC
SEPTEMBER 21, 2010

Sustainable Natural Resources Funding Advisory Committee

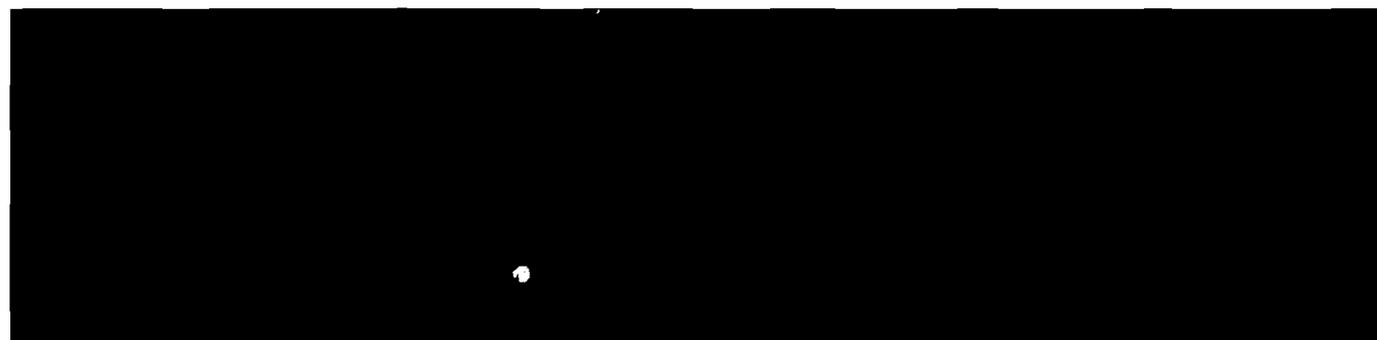
<http://www.iowadnr.gov/sustainablefunding/index.html>

Sustainable Funding for Natural Resources Study Committee

http://www.legis.state.ia.us/scripts/docmgr/docmgr_comdocs.dll/showtypeinterim?idt=true&type=ih&com=212

SUSTAINABLE NATURAL RESOURCE FUNDING

REPORT TO THE GOVERNOR AND GENERAL ASSEMBLY
JANUARY 8, 2010



SUBMITTED BY
THE SUSTAINABLE NATURAL RESOURCE FUNDING
ADVISORY COMMITTEE

SUSTAINABLE NATURAL RESOURCE FUNDING ADVISORY REPORT

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EXECUTIVE SUMMARY

In 2006, the forward thinking of our legislators to propose and support the concept of sustainable funding for Iowa's natural resources, and their request for diverse organizations to represent their Advisory Committee, was an indicator that this is an important issue for all of Iowa. The result of securing funding for natural resources will provide benefits across Iowa such as cleaner water, positive economic impacts, sustainable agriculture and soils, and



outdoor recreation opportunities where Iowans can enjoy and appreciate healthy activities, nature, and Iowa's beauty. In August 2006, the Sustainable Funding Advisory Committee (SFC) began their work to meet the legislative mandate under House File 2797 and provide information and recommendations to the Governor and General Assembly.

To help provide focus, the SFC defined Iowa's natural resources into three categories 1) Soil and Water, 2) Fish, Wildlife and Natural Areas, and 3) Parks and Trails. To address the needs in these categories, it was recognized the funding source, aka funding mechanism, would need to be dedicated, sustainable, and protected. The amount identified would need to be approximately \$150 million annually in addition to any base funding currently allocated. To protect this new funding, it was recommended that a constitutional amendment be proposed to create a trust fund for this additional funding. After thoughtful and thorough evaluation, inquiries, presentations, and discussion, legislators proposed language to create a trust fund and recommended a funding mechanism.

In Iowa, the same language requesting an amendment to its constitution needs to pass two different General Assemblies before it can go before the people for a vote. The resolution that proposed the amendment to establish the Natural Resources and Outdoor Recreation Trust Fund in an effort to secure funding for the benefit of Iowa's natural resources passed two General Assemblies, under SJR-2002 (2008) and HJR-1 (2009), with overwhelming support. The resolution does not raise taxes – it gives the citizens of Iowa the opportunity to vote to create a trust fund protecting sustainable funding for natural resources. Iowans can have this opportunity as soon as November 2010.

To support the three broad categories, seven funding vehicles were identified as logical avenues to distribute the funding: REAP (Resource Enhancement And Protection program), LCPP (Local Conservation Partnership Program), WP (Watershed Protection), LR (Lake

Restoration), Trails, Natural Resources (Iowa Department of Natural Resources), Agriculture and Land Stewardship (Iowa Department of Agriculture and Land Stewardship). These funding vehicles are structured in a way to work independently and complement each other.

In April 2008, under HF2580, legislators requested the continuation of the Advisory Committee with reports being due January 9, 2009, and January 8, 2010, to the Governor and General Assembly. The legislative charge notes the advisory committee shall: 1) study how to provide one or more sustainable sources of funding for natural resources and outdoor recreation needs in Iowa, and 2) advise members of the general assembly in efforts to establish or administer sustainable funding sources.

The first report under this latest charge was submitted in January 2009. This report will expand and clarify points in the January 9, 2009, report in administering the funds and creating a transparent and public engaging process.



ADVISORY COMMITTEE REPORT

HF 2580 LEGISLATIVE CHARGE #1: Provide one or more sustainable sources of funding for natural resources and outdoor recreation needs in Iowa.

ADDRESSING THE NEED

To help provide focus, the Sustainable Funding Advisory Committee (SFC) defined Iowa's natural resources into three categories:

- 1) Soil and Water
- 2) Fish, Wildlife and Natural Areas
- 3) Parks and Trails.

To address needs in these categories, the SFC recognized that the funding source, aka **funding mechanism**, would need to be a dedicated, protected, and sustainable promise to Iowans. After in-depth research, the SFC evaluated a broad range of sustainable funding mechanisms. The brainstormed list of over 45 mechanisms was narrowed down using viability filters that determined what criteria the funding mechanism should meet:

- All Iowans will benefit from sustainable funding for natural resources and the burden of funding should be a responsibility of all Iowans. (This criterion is supported by the public's responses in the "Willingness to Pay" survey.)
- The funding mechanism should have statewide appeal and be politically viable.
- The source of funds should be easy to administer without the need to establish significant additional administrative staff.
- New funds, when possible, should have the ability to be leveraged to increase their effectiveness.
- Each new funding mechanism must raise over \$5 million annually to be considered by the committee.
- The new funding mechanism must conform to all state and federal commerce regulations.
- The funding mechanism should be "new money" and not a replacement of existing resources.
- The funding mechanism should be stable, protected, and identified as dedicated.
- The new funding must unite, rather than divide, conservation agencies and organizations.

It is noteworthy to point out that, as well as proposing long term funding mechanisms, the SFC also offered suggestions to the legislature that could be quickly implemented, such as creating a conservation tax credit to individuals supporting Iowa's natural resources through land donations. Legislators appreciated and valued the efforts of these donors and introduced legislation that was passed allowing a charitable conservation contribution tax credit for those who make a donation to a qualified conservation organization, effective January 1, 2008.



FINAL REPORT

Sustainable Funding for Natural Resources Study Committee

March 2008

MEMBERS:

Senator Dick L. Dearden, Co-chairperson
Senator Dennis H. Black
Senator David Johnson
Senator Mary Lundby
Senator Dr. Joe M. Seng

Representative Paul Bell, Co-chairperson
Representative McKinley Bailey
Representative Dan Rasmussen
Representative Henry Rayhons
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Meeting
- IV. January 28, 2008, Meeting
- V. Committee Discussion and
Recommendations
- VI. Materials Filed With the
Legislative Services Agency

AUTHORIZATION AND APPOINTMENT

The Sustainable Funding for Natural Resources Study Committee was established by the Legislative Council and charged to “study how best to provide for sustainable funding for natural resource needs. Cooperate with the members of the Sustainable Natural Resource Funding Advisory Committee established in 2006 Iowa Acts, ch. 1185, § 43, and other interested persons in performing the study.”



Sustainable Funding for Natural Resources Study Committee

I. Committee Proceedings

The Committee conducted three meetings at the Statehouse during the 2007 Legislative Interim and the 2008 Legislative Session. The Committee met on Monday, August 13, 2007, Wednesday and Thursday, November 1 and 2, 2007, and Monday, January 28, 2008.

II. August 13, 2007, Meeting

A. Overview

The Committee adopted rules and elected Senator Dearden and Representative Bell as permanent co-chairpersons. The Committee considered information provided by members of the Sustainable Natural Resource Funding Advisory Committee.

B. Summary of Activities of the Sustainable Natural Resource Funding Advisory Committee

Mr. Richard Leopold, Director of the Department of Natural Resources and member of the Sustainable Natural Resource Funding Advisory Committee, discussed the origins of the advisory committee created in 2006 (2006 Iowa Acts, ch. 1185, § 43) with the requirement to report to the General Assembly by January 10, 2007. Mr. Leopold described the membership and work of the advisory committee, including information regarding efforts by surrounding states, an outline of a conservation funding initiative, an outline of the amount needed to accomplish the conservation funding initiative, and an analysis of the willingness of Iowans to support a conservation funding initiative. According to Mr. Leopold, the resource initiative requires an annual commitment of \$150 million from a dedicated revenue source. He discussed a number of funding mechanisms including: (1) utilizing gambling and gaming revenues, (2) deducting a fractional percentage in the state retail sales tax, (3) dedicating a portion of lottery revenues, (4) creating tax incentives or tax credits for conservation practices, and (5) utilizing bonding.

C. Public Hearing and Survey

Mr. Leopold discussed a public hearing conducted via the Iowa Communications Network, in which 210 participants provided comments, and the results of a survey of 800 Iowans. Mr. Leopold noted that the survey indicated that most persons surveyed believed water quality is a priority and environmental conservation is a shared responsibility. He stated that most people supported dedicating additional public funds for conservation, are willing to pay \$10-\$25 annually in additional taxes, preferred using gambling and gaming revenues to support a conservation initiative, and supported conservation tax credits.

Mr. Leopold noted that public support for a natural resource initiative is critical, and that the process of establishing a constitutionally protected funding mechanism would take four years.

D. Recommendations

The Committee adopted two recommendations to be forwarded to the Legislative Council for action. Both recommendations were approved by legislative leaders.



The first proposal directed the Committee to contract with the Center for Agricultural and Rural Development (CARD) at Iowa State University (ISU) to review literature and analyze and compile existing state and regional data concerning the economic impact, conservation benefits, and social benefits of natural resources in Iowa. The proposal required CARD to prepare a 60-70 page report by the end of November 2007 for an estimated cost of \$30,000.

The second proposal requested a panel of legislative colleagues from other states with successful natural resource programs to share models for legislative action in Iowa. The panel could also include staff from the Council of State Governments, the National Conference of State Legislatures, and the National Caucus of Environmental Legislators. The Committee limited the expenditures for the panel to \$3,000.

III. November 1 and 2, 2007, Meeting

A. Overview

During the first meeting day, the Committee considered presentations by Mr. Daniel Cohen, Director of the Buchanan County Conservation Board; Mr. Duane Sand, Special Projects Consultant for the Iowa Natural Heritage Foundation; Mr. Bill Northey, Secretary of Agriculture; Ms. Barbara Finch, a member of the Iowa Farm Bureau Federation; Mr. Dave Van Waus, a member of Pheasants Forever; Mr. Jon Kruse, a member of Ducks Unlimited; and Mr. Mark Ackelson, President of the Iowa Natural Heritage Foundation. All presenters, with the exception of Mr. Sand, serve as members of the Sustainable Natural Resource Funding Advisory Committee. During the second meeting day, the Committee considered presentations by a number of persons and made preliminary decisions about its next meeting. The presenters included Dr. Daniel Otto, Professor of Economics, ISU; staff from the Fiscal Services Division of the Legislative Services Agency including Mr. Jeff Robinson, Senior Legislative Analyst, Mr. Dave Reynolds, Senior Legislative Analyst, and Ms. Marcia Tannian, Legislative Analyst; and officials from other states including State Representative Lucy Allen, Chairperson of the North Carolina House Environment and Natural Resources Committee; State Representative Jason Brown from Missouri; State Senator Dennis Frederickson from Minnesota; and Mr. Bob Garner, Chairperson, Michigan Natural Resources Trust Fund Board.

B. Buchanan County Conservation Board — Mr. Cohen

Mr. Cohen discussed potential funding sources to preserve or enhance natural resources defined to include: (1) fish, wildlife, and natural areas, (2) soil and water, and (3) parks and trails. He presented polling data indicating that 77 percent of Iowans support dedicating additional public funding to programs that protect Iowa's land, water, and wildlife. He emphasized that any funding mechanism should be simple to administer, used to leverage additional moneys, and used to supplement existing sources of revenue. Mr. Cohen addressed a number of potential funding mechanisms required to annually raise all or part of \$150 million, noting that some could raise the entire amount while others would have to be combined with moneys from other sources. Mr. Cohen and Committee members discussed a number of funding mechanisms in detail, including the use of gaming revenues (such as capturing revenue based on admissions), increasing the



Sustainable Funding for Natural Resources Study Committee

state's sales tax by 3/8th of 1 cent (accomplished by a constitutional amendment), and the dedication of moneys generated from the state lottery. Mr. Cohen and Committee members also discussed the use of targeted tax credits, bonding, the real estate transfer tax, the water utility tax, a tax on outdoor recreational equipment, a sales tax on bottled water, and a biofuel severance tax. Committee members noted the need for public education and support.

C. Iowa National Heritage Foundation — Mr. Sand

Mr. Sand discussed sustainable funding sources in other states, including the use of bonds, real estate transfer taxes, gaming or lottery revenues, severance taxes, sales tax revenues, voluntary revenues (e.g., conservation tax credits), and user fees. He explained that it is difficult to compare funding sources between states due to the unique nature of each state's situation (e.g., the amount of land owned or controlled by the federal government). He discussed the advantages associated with bonding which serves as a hedge against inflation and the growing popularity of tax credits targeted to protect privately held land. Mr. Sand emphasized the need to preserve and enhance natural resources in order to keep and attract young people in the state, and to structure tax law toward employees rather than employers. He cautioned that moneys from any new funding source could be diverted by competing needs unless it is constitutionally protected. He suggested that the General Assembly reexamine Iowa's existing tax laws including tax increment financing, the agricultural land tax credit, and tax credits benefiting the biofuels industry.

D. Needs Panel

Secretary Northey, Ms. Finch, Mr. Van Waus, and Mr. Kruse discussed the proposed allocation of an additional \$150 million annually to preserve or enhance natural resources.

- **Secretary of Agriculture Northey.** Secretary Northey discussed the \$30 million proposed to support programs administered by the Department of Agriculture and Land Stewardship. According to Secretary Northey, the first \$15 million would be used to fund existing needs identified by soil and water conservation districts which are not being met by appropriations from the Environment First Fund (see Code section 8.57A), and the second \$15 million would be used to provide additional technical assistance to soil and water conservation districts, develop a stream bank and buffer stabilization project, initiate a program modeled after the federal Conservation Reserve Program, and establish a tillage management incentives program to assure adequate crop residue levels remain in areas impacted by demand for cellulosic ethanol production.
- **Iowa Farm Bureau — Ms. Finch.** Ms. Finch discussed the impact of natural resources on all other areas of government interest, the current underfunding of projects supported by the Resource Enhancement and Protection Fund (see Code section 455A.18), the need to constitutionally protect any funding source, and Iowa's lack of matching moneys required to obtain a greater share of federal moneys to support important natural resource initiatives.
- **Pheasants Forever — Mr. Van Waus.** Mr. Van Waus discussed the importance of county conservation boards, the need for increased natural resource funding to acquire additional public lands devoted to sporting and recreational activities and to create a



better quality of life for lowans including its young people, and how private organizations like Pheasants Forever are partnering with state and local governments to carry out important conservation projects.

- **Ducks Unlimited — Mr. Kruse.** Mr. Kruse discussed the importance of lake restoration efforts, noted that the Department of Natural Resources has prioritized 35 lakes for restoration, and cited Storm Lake as an example of how a natural resources project can stimulate economic development through the successful collaboration of state government, local governments, community groups, and conservation organizations, including Ducks Unlimited.

E. Iowa Natural Heritage Foundation — Mr. Ackelson

Mr. Ackelson discussed the recent increase in land values and the private acquisition of unique land to the detriment of preservation and public uses. He urged the Committee to recommend passage of H.F. 902 (currently referred to the House Ways and Means Committee) which provides that individuals and businesses could claim a tax credit for the charitable conveyance of real property for conservation, including the conveyance of title directly or by bargain sale or the transfer of permanent conservation easements to conservation organizations. Mr. Ackelson stressed the need to consider how biomass is used in ethanol production, and suggested incentives for improving crop management practices, developing dedicated biomass energy crops, improving manure management practices, increasing sustainable grass-based livestock production, and reducing greenhouse gas emissions.

F. Iowa State University — Dr. Otto

Dr. Otto discussed the preliminary results of a study conducted by ISU on behalf of the Committee. The study includes a literature review and analysis and compilation of existing state and regional data concerning the economic impact, conservation benefits, and social benefits of natural resources in Iowa. Dr. Otto discussed the state's recreational amenities and current usage levels, estimated the economic value of these resources, and estimated the benefits of new investments in those amenities. Dr. Otto stated that lowans are increasingly living in cities, although 88.7 percent of the state's land area is privately owned farmland. He discussed Iowa's natural resource inventory, including lakes, state parks, county parks, multiuse trails, state forests and preserves, wildlife management areas, and rivers. Dr. Otto stated that in 2006, of the total estimated annual economic impacts associated with recreational expenditures, approximately \$4.2 billion was attributed to consumers. He discussed expenses and benefits associated with lake restoration efforts, noting the success of the Storm Lake restoration project.

G. Legislative Services Agency, Fiscal Services Division

Tax Revenues. Mr. Robinson discussed net tax revenues collected by the state from October 2006 to September 2007 (\$6.3 billion) and the local option sales tax remitted to the state and distributed to local governments for the 12 months ending September 2007 (\$681 million). According to Mr. Robinson, for FY 2006-2007, the state's real estate transfer tax raised approximately \$21.7 million in state and county revenue and lottery transfers to the General Fund accounted for \$57 million. He estimated that a 3/8th cent increase in the sales tax rate would raise



Sustainable Funding for Natural Resources Study Committee

approximately \$146 million in annual revenue. Committee members discussed the possibility of imposing an excise tax on certain recreational equipment and products.

Infrastructure Funding. Ms. Tannian stated that the Rebuild Iowa Infrastructure Fund (RIIF) (see Code section 8.57) was established in 1995 with a \$50 million General Fund appropriation. The RIIF's revenue sources include interest from Iowa's "rainy day funds" (see Code section 8.55 establishing the Iowa Economic Emergency Fund and Code section 8.56 establishing the Cash Reserve Fund), a portion of state wagering taxes (see Code section 99F.4A providing for taxes imposed upon gambling at pari-mutuel racetracks, and Code section 99F.10 imposing taxes upon persons licensed to conduct gambling activities), and interest from moneys in RIIF and the Environment First Fund (see Code section 8.57A).

Ms. Tannian and Mr. Reynolds discussed allocations from the state wagering tax to the General Fund, the Vision Iowa Fund (see Code section 12.72), the School Infrastructure Fund (see Code section 12.82), with the remainder deposited in RIIF. They also discussed direct expenditures from RIIF for a number of projects. Ms. Tannian estimates that in FY 2009-2010, RIIF will have total revenues of \$251 million. The RIIF's revenues consist of 80 percent from the state's wagering tax, 12 percent from interest generated by the fund, and 8 percent from the beginning balance of RIIF.

Ms. Tannian discussed other funds with moneys available for FY 2009-2010, including the Vertical Infrastructure Fund (VIF) (see Code section 8.57B), and the Restricted Capital Account of the Tobacco Settlement Fund (see Code section 12E.12). The VIF receives appropriations from RIIF until FY 2009-2010. In FY 2009-2010, VIF is scheduled to receive \$50 million, \$40 million of which is already appropriated. The Restricted Capital Account of the Tobacco Settlement Trust Fund already has most of the money appropriated. However, \$7.6 million is available for FY 2009-2010. Between RIIF, VIF, and Restricted Capital Account funds, \$105.5 million is available for infrastructure funding (in FY 2009-2010, \$79.5 million in RIIF, \$18.4 million in VIF, and \$7.6 million in Restricted Capital Account funds). Ms. Tannian noted that RIIF revenues may be affected when annual tax credits begin for racetracks (\$4.6 million) and riverboats (\$6 million). Departmental requests for FY 2009-2010 total \$595.3 million from RIIF.

H. Officials From Other States

- **North Carolina.** Representative Allen explained that North Carolina has established four trust funds managed by four separate boards or advisory committees and supported by a number of funding mechanisms including general appropriations, a stamp tax on state deeds, and fees paid for issuance of personal license plates. The funds include the Clean Water Management Trust Fund for the remediation and preservation of surface water grants, the Agricultural Development and Farmland Preservation Trust Fund for the promotion of sustainable family farm agriculture, the Natural Heritage Trust Fund for the protection and promotion of the state's cultural and historic assets, and the Parks and Recreation Trust Fund for the expansion and improvement of state and local parks and public beach access. She also described a pending public referendum initiative calling for a \$1 billion bond to support land and water conservation.
- **Missouri.** Representative Brown discussed Missouri's constitutional amendment which dedicates 1/8 of 1 cent in sales tax revenue for conservation purposes. According to



Representative Brown, the Missouri system provides a comprehensive structure for the collection, use, and administration of constitutionally protected revenue (\$100 million collected in 2006), and for conservation efforts administered by the Missouri Department of Conservation including the acquisition of public land.

- **Minnesota.** Senator Frederickson described various revenue sources for natural resources funding in Minnesota, including a wildlife “checkoff” printed on income tax forms, the sale of specialty license plates, stamp fees imposed upon various hunting and fishing licenses, and a 6.5 percent tax on lottery tickets (“in-lieu-of-sales tax”). According to Senator Frederickson, the Minnesota Constitution establishes a permanent trust fund (supported by 40 percent of the net proceeds from the state lottery until 2025) for the protection, conservation, preservation, and enhancement of the state's air, water, land, fish, wildlife, and other natural resources. He described the state’s Legislative-Citizen Commission on Minnesota Resources which makes recommendations regarding natural resource projects. He also described a legislative proposal estimated to raise \$291 million by increasing the state sales tax by $\frac{3}{8}$ of 1 cent which would support habitat conservation, clean water initiatives, and cultural legacy projects.
- **Michigan.** Mr. Garner stated that Michigan’s Constitution and Natural Resources and Environmental Protection Act authorizes the creation of the Michigan Natural Resources Trust Fund, administered by a board of trustees, for the acquisition of land or rights in lands for recreational uses or the protection of the land because of its environmental importance or scenic beauty, and for the development of public recreation facilities. According to Mr. Garner, the fund is supported by revenues from leases on state-owned land for the extraction of nonrenewable resources, with \$20-\$25 million available for allocation each year.

I. Committee Discussion

Members discussed acquiring additional information regarding how \$150 million in proposed additional revenue would be allocated. Members discussed possible funding options including a proposed constitutional amendment dedicating $\frac{1}{8}$ th of 1 cent in sales tax revenue for natural resources, and the importance of interested organizations educating the public regarding the need for dedicated funding for natural resources.

IV. January 28, 2008, Meeting

A. Overview

The Committee considered testimony by Dr. Otto who presented the Committee with the results and final report of the study performed for the Committee. The Committee then discussed and approved recommendations.

B. Dr. Otto

Dr. Otto discussed Iowa’s outdoor recreational amenities and current usage levels, estimated the economic value of these resources, and estimated the benefits of new investments in those amenities, including the importance of outdoor recreation opportunities to Iowans and its economy,



Sustainable Funding for Natural Resources Study Committee

the return of investment in natural resources, and its impact upon economic development. Dr. Otto discussed how young, educated workers use natural resources amenities. He also discussed the Iowa Lakes Valuation Project, which is a collaborative project involving economists and ecologists studying Iowa's lakes, noting that while investments in water quality are expensive, under most circumstances the benefits outweigh the costs, and cited the investments made at Storm Lake as an example of the potential benefits.

Dr. Otto provided cost and benefit analyses for lake restoration and preservation projects at 14 lakes in Iowa, and made recommendations to increase the economic benefits of investments made in outdoor recreation, including linking outdoor recreation amenities to create a critical mass and synergies; leveraging investments with multiple benefits; collecting additional data on usage patterns, preferences, resources available, and resource quality; and targeting quality-of-life investments to benefit new and current residents.

C. Committee Discussion and Recommendations

The Committee discussed presentations provided during the Committee meetings and issues presented during those meetings. The Committee considered a number of issues related to a proposed constitutional amendment that would provide a dedicated funding source to support natural resources and outdoor recreation. As part of that discussion, the Committee considered issues related to deferred maintenance needs of Iowa's parks and outdoor recreation facilities; the need for public education as part of the process of increasing funding; additional information required to be furnished to the Committee by the Department of Agriculture and Land Stewardship for its soil and water conservation initiative; the possibility of future reductions in statutorily appropriated funding; and whether there should be a provision which requires a 10-year review of any approved funding source.

After discussion, the Committee made the following recommendations:

- The General Assembly adopt H.F. 902 or S.F. 587 which creates a charitable conservation contribution tax income tax credit.
- A dedicated funding source be used to support the \$150 million needs assessment identified by the Sustainable Natural Resource Funding Advisory Committee.
- The Sustainable Natural Resource Funding Advisory Committee be reauthorized.
- The General Assembly consult with the Sustainable Natural Resource Funding Advisory Committee regarding the amount of funding that is required to satisfy deferred maintenance needs.
- A Water Quality and Outdoor Recreation Trust Fund be created within the state treasury.
- A constitutional amendment be placed on the ballot that would constitutionally protect a 3/8th of 1 cent increase in the state's sales tax to raise approximately \$146 million per year to support needs identified by the Sustainable Natural Resource Funding Advisory Committee, and that the dedicated moneys should be in addition to and not replace existing moneys dedicated for natural resources and outdoor recreation.



V. Materials Filed With the Legislative Services Agency

The following materials listed were distributed at or in connection with the Committee's three meetings and are on file with the Legislative Services Agency. The materials may be accessed from the <Additional Information> link on the Committee's internet page:

<http://www.legis.state.ia.us/asp/Committees/Committee.aspx?id=212>.

1. Final Meeting Notice - January 28, 2008.
2. Sustainable Funding for Natural Resources Study Committee - Draft Memorandum.
3. Final Report "The Economic Value of Iowa's Natural Resources" prepared by Dr. Daniel Otto, Dr. Dan Monchuk, Dr. Kanlaya Jintanakul, and Dr. Catherine Kling.
4. Presentation by Dr. Dan Otto, Economics Department, Iowa State University.
5. Presentation by Mr. Jeff Robinson, Fiscal Services Division, Legislative Services Agency.
6. Presentation by Ms. Marcia Tannian, Fiscal Services Division, Legislative Services Agency.
7. Presentation by Representative Lucy T. Allen, North Carolina House of Representatives.
8. Handout Submitted by Representative Allen, "Saving the Goodliest Land."
9. Handout Submitted by Representative Allen, "Group Urges N.C. General Assembly to Prepare Now for Impact of 'Population Tsunami'..."
10. Handout Submitted by Representative Allen, "NC's Conservation Trust Fund Awarded by County 1987-2006."
11. Handout Submitted by Representative Allen, "North Carolina's Conservation Trust Funds: 2005 Trust Fund Statistics."
12. Handout Submitted by Representative Allen, "North Carolina's Conservation Trust Funds - Protecting Clean Water, Forests, Farms, and Historic Site."
13. Handout Submitted by Representative Allen, Joint Legislative Commission on Land and Water Conservation, January 24, 2007.
14. Handout Submitted by Representative Jason Brown, Missouri House of Representatives, Design for Conservation Sales Tax Summary.
15. Biography of Senator Dennis Frederickson, Minnesota State Senate.
16. Handout Submitted by Senator Frederickson, Information for the Iowa Sustainable Funding for Natural Resources Study Committee, November 2, 2007.



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17. Handout Submitted by Senator Frederickson, Legislative-Citizen Commission on Minnesota Resources (LCCMR).
18. Handout Submitted by Senator Frederickson, Conference Committee Report on H.F. No. 2285.
19. Handout Submitted by Senator Frederickson, Funding From Proposed Constitutional Amendment.
20. Handout Submitted by Mr. Bob Garner, Michigan Natural Resources Trust Fund Board.
21. Presentation by Mr. Dan Cohen, Director, Buchanan County Conservation Board.
22. Presentation by Mr. Duane Sand, Iowa Natural Heritage Foundation.
23. Sustainable Natural Resource Advisory Committee Funding Vehicle Summary.
24. Sustainable Natural Resource Advisory Committee Funding Mechanism Summary.
25. Presentation by Secretary of Agriculture Northey.
26. Presentation by Mr. Mark C. Ackelson, Iowa Natural Heritage Foundation.
27. Handout of Sustainable Natural Resource Funding Advisory Committee.
28. Proposed Rules.
29. Membership.
30. Charge.
31. Background Information.
32. Sustainable Natural Resource Funding Advisory Committee Presentation.

EXHIBIT 9
EQSC
SEPTEMBER 21, 2010

1
W. Environmental Law Judges (ELJs) are ALJs

A question has been raised as to whether Environmental Law Judges (ELJs) in the Office of Environmental Adjudication (OEA) are considered Administrative Law Judges (ALJs) for purposes of the Administrative Orders and Procedures Act (AOPA). Although the term ELJ was included in IC 4-21.5-7, the enabling law for OEA, we believe the intent was to have the ELJs function in all respects as ALJs under AOPA. To clarify this concept, a one sentence change is needed to IC 4-21.5-7-5 as follows:

IC 4-21.5-7-5

Decisions reviewed by law judge

Sec. 5. Except as provided in IC 14-10-2-2.5, an environmental law judge is the ultimate authority under this article for reviews of agency actions of the department of environmental management, actions of a board described in IC 13-14-9-1, and challenges to rulemaking actions by a board described in IC 13-14-9-1 made pursuant to IC 4-22-2-44 or IC 4-22-2-45. **An environmental law judge under this chapter has the same authority and responsibilities as an administrative law judge defined in IC 4-21.5-1-2.**

(As amended by P.L.84-2008, § 1).

EXHIBIT 10
EQSC
SEPTEMBER 21, 2010

II. Reasonably Prompt Adjudication

The Administrative Orders and Procedures Act (AOPA) currently provides that an Administrative Law Judge (ALJ) is subject to disqualification for a number of reasons, including "failure to dispose of the subject of a proceeding in an orderly and reasonably prompt manner after a written request by a party...." IC 4-21.5-3-10. ALJs take very seriously their responsibility to dispose of cases in a fair and timely manner. From time to time, however, there have been problems in obtaining "reasonably prompt" decisions. In one case, for example, a fully briefed Motion for Summary Judgment was not ruled upon for nearly three years. In another case, it took so long for the ALJ to dismiss a permit challenge that the permit holder had to file bankruptcy because he could not get financing while the permit appeal was pending. Indiana's ALJs generally possess knowledge of the substantive and administrative law, which is very important to ensure consistency and accuracy in complex administrative cases. Also, a party or its lawyer will often face the same ALJ more than once in different cases. For these reasons, parties take very seriously the option to seek disqualification of an ALJ. Yet cases need to be resolved so that the parties can move on. While there are several ways to address the issue, NEW suggested below in bold could provide fair time lines and adequate incentive for ALJs to rule in a timely manner:

IC 4-21.5-3-10

Disqualification of administrative law judge

(A) Any individual serving or designated to serve alone or with others as an administrative law judge is subject to disqualification for:

(1) bias, prejudice, or interest in the outcome of a proceeding;
(2) failure to dispose of the subject of a proceeding in an orderly and reasonably prompt manner after a written request by a party; or **issue an order within the following time frames unless otherwise agreed by all parties:**

- a) **within thirty (30) days after submission of all briefs regarding a motion to dismiss on jurisdictional grounds;**
- b) **within sixty (60) days after submission of all briefs regarding a motion for summary judgment under section 23;**
- c) **within ninety (90) days after conclusion of a hearing or after submission of proposed findings in accordance with section 27;**

(3) any cause for which a judge of a court may be disqualified.

(B)An individual who is disqualified under subdivision (2), shall provide a list of at least three (3) special administrative law judges, who meet the requirements of IC 4-21.5-7-6, from which the parties may choose:

- (1) **by agreement or**
- (2) **by an alternate striking procedure.**

Nothing in this subsection prohibits an individual who is an employee of an agency from serving as an administrative law judge.

As added by P.L.18-1986, SEC.1.

EXHIBIT 11
EQSC
SEPTEMBER 21, 2010

III. De Novo Review

When the Office of Environmental Adjudication (OEA) was created by the General Assembly in 1995, it was often stated that the purpose was to provide an independent review of IDEM decisions. Because of the experience and knowledge level required by law, the Environmental Law Judges (ELJs) were given the role of “ultimate authority...for reviews of agency actions of the department of environmental management, actions of a board....”¹ Thus, IDEM is a party to the proceedings just like all other parties.

Indiana courts have held that the important role of “fact finder” rests with the ALJ.² The ALJ must conduct prehearing proceedings, rule on preliminary motions, decide evidentiary disputes, hear evidence, and prepare findings based on the evidence and the law. ALJ’s decisions are then subject to limited judicial review by a trial court and then by the Court of Appeals and Supreme Court.

The role of the trial court on judicial review, which is known as a “limited standard of review”, is not to re-weigh all the evidence and consider the case de novo³, but rather to review the administrative record as a whole to determine if the ALJ’s decision should be overturned. The language of Indiana’s administrative law has for years provided that:

- (d) The court shall grant relief under section 15 of this chapter only if it determines that a person seeking judicial relief has been prejudiced by an agency action that is:
1. arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;
 2. contrary to constitutional right, power, privilege, or immunity;
 3. in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;
 4. without observance of procedure required by law; or
 5. unsupported by substantial evidence.

Ind. Code § 4-21.5-5-14

In 2006, the Indiana Court of Appeals stated that “[t]he judicial review proceeding is not intended to be a trial de novo, as the role of fact finder rests with the ALJ.⁴ Thus, according to

¹ Ind. Code § 4-21.5-7-5.

² See, e.g., *Indiana Dep’t of Natural Res. v. United Refuse Co., Inc.*, 615 N.E.2d 100 (Ind. 1993); *Bucko Construction Co. v. INDOT*, 850 N.E.2d 1008 (Ind.App. 2006).

³ *Black’s Law Dictionary* defines *de novo* as Latin meaning “Anew”, “afresh”, or “from the beginning.”.

⁴ *Bucko Construction Co. v. INDOT*, 850 N.E.2d 1008, 1017.

statute and case law, the ALJ's job is that of fact finding. This role is extremely important, and all parties to a fact finding are allowed to present evidence on an equal basis. A question has arisen as to whether OEA's standard of review is that of a "de novo" review or whether the ELJ is limited to only being able to overturn an IDEM decision if it falls into one of the categories above. A limitation on OEA's ability to reverse or modify an IDEM decision would mean there is no meaningful review or fact finding. If an ELJ reviews the IDEM decision on a limited basis, there is no administrative record for the court to review. Also, despite an unambiguous precedent from the Indiana Supreme Court that is now almost 20 years old, the absence of a specific reference to de novo ALJ review in AOPA contributes to confusion between the differing standards for judicial review and administrative review.

To resolve this issue legislatively, the following NEW subsection (d) could be added to the current administrative agency law:

IC 4-21.5-3-14

Record; hearing on motion; burden of proof

Sec. 14. (a) An administrative law judge conducting a proceeding shall keep a record of the administrative law judge's proceedings under this article.

(b) If a motion is based on facts not otherwise appearing in the record for the proceeding, the administrative law judge may hear the matter on affidavits presented by the respective parties or the administrative law judge may direct that the matter be heard wholly or partly on oral testimony or depositions.

(c) At each stage of the proceeding, the agency or other person requesting that an agency take action or asserting an affirmative defense specified by law has the burden of persuasion and the burden of going forward with the proof of the request or affirmative defense. Before the hearing on which the party intends to assert it, a party shall, to the extent possible, disclose any affirmative defense specified by law on which the party intends to rely. If a prehearing conference is held in the proceeding, a party notified of the conference shall disclose the party's affirmative defense in the conference.

(d) The proceedings before an administrative law judge are *de novo*.

As added by P.L.18-1986, SEC.1. Amended by P.L.35-1987, SEC.9.

EXHIBIT 12
EQSC
SEPTEMBER 21, 2010

IV Agreed Order Procedures

A large number of cases pending before Administrative Law Judges that involve permit appeals are settled prior to hearing as a result of negotiation and/or mediation. Often such changes are minor because the permit was issued in haste to meet department deadlines. Other times, parties spend months negotiating and ensuring accuracy in the language of the resulting permit. Under the Administrative Orders and Procedures Act (AOPA), such permits were required to have been public noticed through a number of means, and aggrieved or affected persons were given specific instructions on how to participate in any appeal proceedings at the time the permit was issued. The reason for public notice is to allow all objectors a chance to challenge the permit under AOPA at the same time, thus providing finality to all parties. The process was worked out through two years of study in the mid-1980s by a legislative study committee. It provides a fair balance between the rights of neighbors to object to permits while allowing a reasonable time for issuance of a permit.

Once all issues regarding the permit have been resolved, most ALJs issue the resulting Agreed Order in the form of a revised permit as a final order that disposes of all issues in a proceeding. The Office of Environmental Adjudication (OEA), however, takes the position that if a permit is challenged before OEA and later resolved through a settlement, the permit must go all the way back to the beginning of the permit process for rewriting, renoticing, and reissuance by IDEM. Beginning the permit process all over again leads to additional delays and unnecessary expenditure of resources for the state and the parties. (One environmental attorney from another state remarked that Indiana's process creates a potential "endless loop" of appeals because by starting over, another agency mistake could be made or a different person could appeal who did not take the opportunity afforded in the first permit issuance.) In order to be clear that the agreement resulting from OEA adjudications is a final order, the following NEW language in bold could be added to the section on settlement of AOPA cases:

IC 4-21.5-3-34

Informal procedures; rules

Sec. 34. An agency is encouraged to develop informal procedures that are consistent with this article and make unnecessary more elaborate proceedings under this article. An agency may adopt rules, under IC 4-22-2, setting specific procedures to facilitate informal settlement of matters **so long as such procedures are not inconsistent with this article**. This section does not require any person to settle a matter under the agency's informal procedures. **When a matter is settled without the need for more elaborate proceedings under this section, the administrative law judge shall issue the order agreed to by the parties as a final order under this article.**

(As amended by P.L.35-1987, § 16.)

EXHIBIT 13

EQSC

SEPTEMBER 21, 2010

V

IC 4-21.5-3-1

Service of process; notice by publication

Sec. 1. (a) This section applies to:

- (1) the giving of any notice;
 - (2) the service of any motion, ruling, order, or other filed item; or
 - (3) the filing of any document with the ultimate authority;
- in an administrative proceeding under this article.

(b) Except as provided in subsection (c) or otherwise provided by law, a person shall serve papers by:

- (1) United States mail, or
- (2) personal service,
- (3) electronic facsimile transmission,
- (4) electronic filing, or
- (5) any other method approved by the Indiana Rules of Court.

~~If an agency mails or personally serves a paper, the~~ The agency shall keep a record of the time, date, and circumstances of the service.

(c) The following shall be served by United States Mail or personal service:

- (1) the initial notice of a determination under section 4, section 5, section 6 or section 8 of this chapter;
- (2) any petition for review of an agency action under IC 4-21.5-3-7.

The agency shall keep a record of the time, date, and circumstances of the service.

(d) Service shall be made on a person or on the person's counsel or other authorized representative of record in the proceeding. Service on an artificial person or a person incompetent to receive service shall be made on a person allowed to receive service under the rules governing civil actions in the courts. If an ultimate authority consists of more than one (1) individual, service on that ultimate authority must be made on the chairperson or secretary of the ultimate authority. A document to be filed with that ultimate authority must be filed with the chairperson or secretary of the ultimate authority.

~~(d)~~(e) If the current address of a person is not ascertainable, service shall be mailed to the last known address where the person resides or has a principal place of business. If the identity, address, or existence of a person is not ascertainable, or a law other than a rule allows, service shall be made by a single publication in a newspaper of general circulation in:

- (1) the county in which the person resides, has a principal place of business, or has property that is the subject of the proceeding; or
- (2) Marion County, if the place described in subdivision (1) is not ascertainable or the place described in subdivision (1) is outside Indiana and the person does not have a resident agent or other representative of record in Indiana.

(e)(f) A notice given by publication must include a statement advising a person how the person

may receive written notice of the proceedings.

(g) The filing of a document with an ultimate authority is complete on the earliest of the following dates that apply to the filing:

(1) The date on which the document is delivered to the ultimate authority under subsection (b) or (c).

(2) The date of the postmark on the envelope containing the document, if the document is mailed to the ultimate authority by United States mail.

(3) The date on which the document is deposited with a private carrier, as shown by a receipt issued by the carrier, if the document is sent to the ultimate authority by private carrier.

As added by P.L.18-1986, SEC.1. Amended by P.L.35-1987, SEC.2; P.L.33-1989, SEC.2; P.L.35-1989, SEC.2.

1742536 (September 21, 2010)

EXHIBIT 14
EQSC
SEPTEMBER 21, 2010

**2011 LEGISLATIVE "TO DO" LIST
(AS REQUESTED FOR 2010 EQSC)**

VI Summary Judgment

The Administrative Orders and Procedures Act (AOPA) includes a section regarding Summary Judgment that can be very useful in resolving litigation without the need for a full hearing. However, the section has become outdated. The AOPA provision, IC 4-21.5-3-23, was drafted in the 1980s and has not been amended to track changes made by the Indiana Supreme Court to the Indiana Trial Rules. The suggested amendment below simply conforms Indiana's administrative practice to its Trial Rules, which should eliminate the need for parties and Administrative Law Judges (ALJs) to struggle with the variations between the statute and the rule.

IC 4-21.5-3-23

Summary judgment

Sec. 23. (a) A party may, at any time after a matter is assigned to an administrative law judge, move for a summary judgment in the party's favor as to all or any part of the issues in a proceeding. ~~The motion must be supported with affidavits or other evidence permitted under this section and set forth specific facts showing that there is not a genuine issue in dispute.~~
—(b) ~~The motion must be served at least five (5) days before the time fixed for the hearing on the motion. The adverse party may serve opposing affidavits before the day of hearing. The administrative law judge may direct the parties to give oral argument on the motion. The judgment sought shall be rendered immediately if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits and testimony, if any, show that a genuine issue as to any material fact does not exist and that the moving party is entitled to a judgment as a matter of law. A summary judgment may be rendered upon fewer than all the issues or claims (such as the issue of penalties alone) although there is a genuine issue as to damages or liability, as the case may be. A summary judgment upon fewer than all the issues involved in a proceeding or with respect to fewer than all the claims or parties is not a final order. The administrative law judge shall designate the issues or claims upon which the judge finds no genuine issue as to any material facts. Summary judgment may not be granted as a matter of course because the opposing party fails to offer opposing affidavits or evidence, but the administrative law judge shall make a determination from the affidavits and testimony offered upon the matters placed in issue by the pleadings or the evidence. If it appears from the affidavits of a party opposing the motion that the party cannot for reasons stated present by affidavit facts essential to justify the party's opposition, the administrative law judge may make any order that is just.~~
—(c) ~~If on motion under this section no order is rendered upon the whole case or for all the relief asked and a hearing is necessary, the administrative~~

law judge at the hearing of the motion, by examining the pleadings and the evidence before it and by interrogating any person, shall if practicable ascertain:

~~— (1) what material facts exist without substantial controversy;~~

and

~~— (2) what material facts are actually and in good faith controverted.~~

The administrative law judge shall then make an order specifying the facts that appear without substantial controversy, including the extent to which the amount of damages or other relief is not in controversy, and directing further proceedings in the action as are just. Upon the hearing of the action, the facts specified are established in the judge's order under this subsection.

~~— (d) Supporting and opposing affidavits must:~~

~~— (1) be made on personal knowledge;~~

~~— (2) set forth facts that are admissible in evidence; and~~

~~— (3) show affirmatively that the affiant is competent to testify to the matters stated in the affidavit.~~

~~— (e) The administrative law judge may permit affidavits to be supplemented or opposed by depositions, answers to interrogatories, further affidavits, or testimony of witnesses.~~

~~— (f) If a motion for summary judgment is made and supported under this section, an adverse party may not rely upon the mere allegations or denials made in the adverse party's pleadings as a response to the motion. The adverse party shall respond to the motion with affidavits or other evidence permitted under this section and set forth specific facts showing that there is a genuine issue in dispute. If the adverse party does not respond as required by this subsection, the administrative law judge may enter summary judgment against the adverse party.~~

(b) Except as otherwise provided in this section, an administrative law judge shall consider a motion filed under subsection (a) as would a court that is considering a motion for summary judgment filed under Trial Rule 56 of the Indiana Rules of Trial Procedure.

(c) Service of the motion and any response to the motion, including supporting affidavits, shall be performed as provided in this article.

(d) Summary judgment is an order which is governed by section 28 and section 29 of this chapter.

As added by P.L.18-1986, SEC.1. Amended by P.L.35-1987, SEC.13; P.L.5-1988, SEC.27.

Members

*Rep. Ryan Dvorak, Chairperson
Rep. David Wolkins
Sen. Beverly Gard
Sen. Frank Mrvan
Thomas Easterly*



COMPLIANCE ADVISORY PANEL

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LSA Staff:

*Robert Bond, Attorney for the Panel
Bernadette Bartlett, Fiscal Analyst for the Panel*

Authority: IC 13-13-7-2

MEETING MINUTES¹

Meeting Date: September 21, 2010
Meeting Time: 3:15 P.M.
Meeting Place: House Chamber, State House, 200
W. Washington St.
Meeting City: Indianapolis, Indiana
Meeting Number: 1

Members Present: Rep. Ryan Dvorak, Chairperson; Rep. David Wolkins; Sen. Beverly Gard; Sen. Frank Mrvan.

Members Absent: Thomas Easterly.

1. Call to Order Rep. Dvorak called the meeting to order at 3:15 P.M.
2. Program Report Rick Bossingham, Assistant Commissioner, Office of Pollution Prevention & Technical Assistance, Indiana Department of Environmental Management, made a presentation entitled "Compliance Advisory Panel Annual Presentation" (Exhibit #1).

In response to questions from Panel members, Mr. Bossingham:

- ◆ Explained that the Indiana Technical and Compliance Assistance Program applies not only to air issues, but to all environmental issues.
- ◆ Discussed recent staff reductions resulting from required budget reversions.

3. Adjournment Rep. Dvorak adjourned the meeting at 3:30 P.M.

¹ These minutes, exhibits, and other materials referenced in the minutes can be viewed electronically at _____ Hard copies can be obtained in the Legislative Information Center in Room 230 of the State House in Indianapolis, Indiana. Requests for hard copies may be mailed to the Legislative Information Center, Legislative Services Agency, West Washington Street, Indianapolis, IN 46204-2789. A fee of \$0.15 per page and mailing costs will be charged for hard copies.

EXHIBIT 1
COMPLIANCE ADVISORY PANEL
SEPTEMBER 21, 2010

9/21/2010



IDEM We Protect Hoosiers and Our Environment
Pollution Prevention



Compliance Advisory Panel Annual Presentation September 21, 2010

Rick Bossingham, Assistant Commissioner
Office of Pollution Prevention & Technical
Assistance



IDEM We Protect Hoosiers and Our Environment
Pollution Prevention



Agenda:

- I. CAP/OPPTA/CTAP Purpose
- II. Metrics/Performance
- III. Current Actions
- IV. Moving Forward
- VI. Questions



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Compliance Advisory Panel Purpose

- Required per CAA and Indiana Code
- To oversee and ensure the effectiveness of technical assistance efforts
- Several Indiana rules address technical assistance efforts that overlap purpose of CAP



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IDEM:

“We Protect Hoosiers and Our Environment”



IDEM We Protect Hoosiers and Our Environment
Pollution Prevention



How does IDEM protect Hoosiers and our environment?

- Implement Federal and State regulations that restrict chemical discharges to the environment
- Monitor affected facilities to ensure compliance with regulations and permits
- Take appropriate action when non-compliance is found
- *Assist and encourage others to help protect Hoosiers and our Environment*



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Pollution Prevention



Office of Pollution Prevention & Technical Assistance

Focus:

Find better ways to assist and encourage others to protect Hoosiers and our environment



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Pollution Prevention

In order to achieve OPPTA goals:
Transform knowledge through compliance assistance

Key Metrics:
Compliance Assistance Site Visits
Office & Phone Contacts
Program Participants

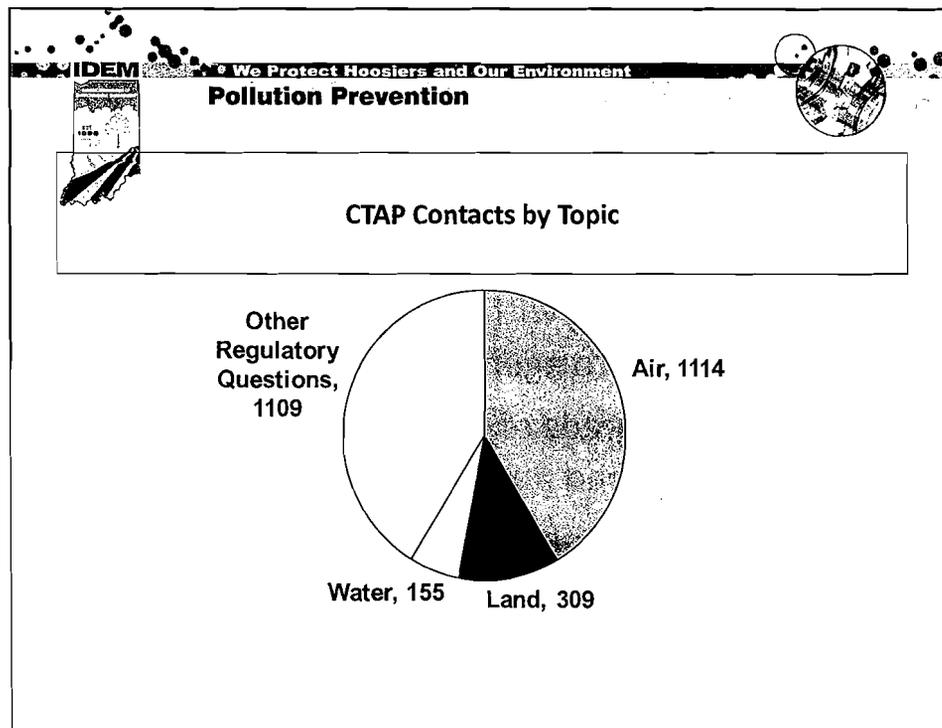
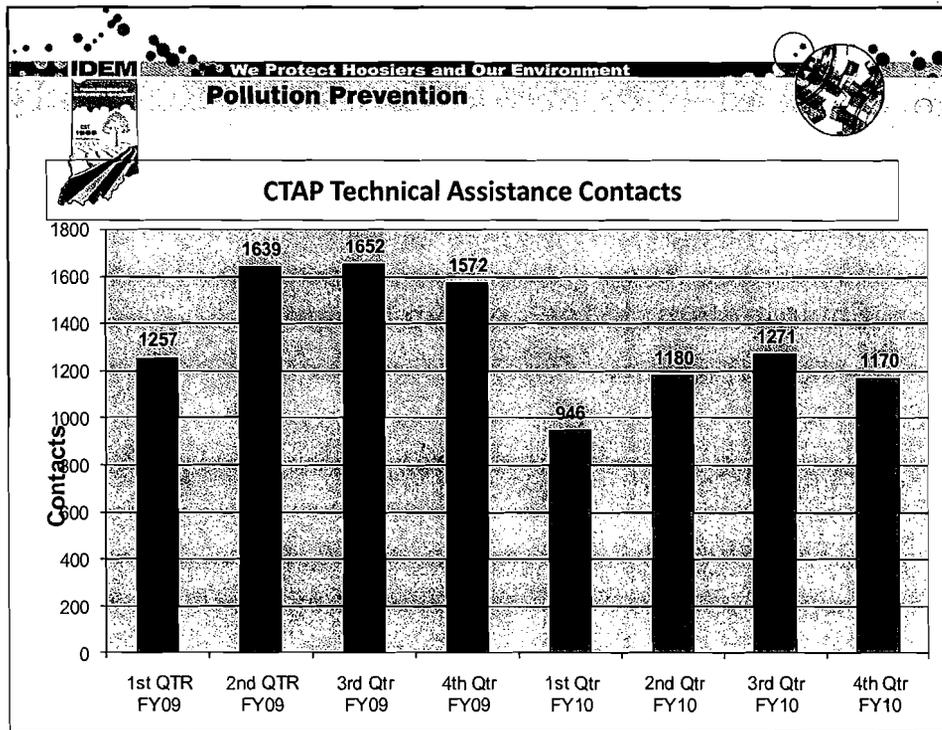


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Compliance Assistance Site Visits

2008 Goal:	337
2008 Actual:	331
2009 Goal:	330
2009 Actual:	327
2010 Goal:	250
2010 Actual:	234*

*As of August 31, 2010, 94% (234/250) of goal.





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Voluntary Partnerships

- Environmental Stewardship Program:
 - 50 Participants.
- CLEAN Communities:
 - 14 members.



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Keys to success...

- Leveraging efforts with OAQ, OLQ, OWQ, and OLC are critical to agency mission.
- Focus on the needs of regulated entities to better understand and comply with rules.
- Working to promote cooperation between IDEM and the regulated communities.



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Moving forward...

Office of Voluntary Compliance
IC 13-28-1-2

- The purpose of the office is the following:
 - (1) To assist regulated entities in achieving regulatory compliance.
 - (2) To promote cooperation between the department and regulated entities.



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Questions?

Rick Bossingham
Assistant Commissioner, OPPTA
317-233-6658
or
Brad Baughn, Legislative Liaison
317-234-3386



September 2010

Compliance Advisory Panel Report

CTAP Activities September 1, 2009- August 31, 2010

IC 13-28-3

The federal Clean Air Act requires states to provide compliance assistance. IC 13-28-3 further defines Indiana's implementation of compliance assistance through the Compliance and Technical Assistance Program (CTAP) which has expanded assistance to all environmental programs: air, land and water.

CTAP activities are tracked and the following metrics help to measure program success and staff performance.

Two program metrics:

	<i>2010 Goal</i>	<i>Completed</i>	<i>Percentage of Goal</i>
<i>Site Visits</i>	250	234	94%
<i>Potential Customers</i>	1200	1409	117%

PROBE metrics:

<i>FY 2009 Goal: 1200/quarter</i>	<i>1st Quarter</i>	<i>2nd Quarter</i>	<i>3rd Quarter</i>	<i>4th Quarter</i>
<i>Technical Assistance Contacts</i>	1257	1639	1652	1572
<i>FY 2010 Goal: 1223/quarter</i>	<i>1st Quarter</i>	<i>2nd Quarter</i>	<i>3rd Quarter</i>	<i>4th Quarter</i>
<i>Technical Assistance Contacts</i>	946	1180	1271	1170

Compliance and Technical Assistance Numbers:

- Necessary reductions in staffing will affect goals and metrics
- 3,037 total phone contacts
 - 1,114 Air
 - 155 Water
 - 309 Land
 - 1,109 Misc. Assistance
- 350 Site Visits

Additional Technical Assistance Provided:

- Provide assistance to the ESP and CLEAN community programs.
- Worked with IDEM internal customers on compliance and permitting initiatives throughout the agency. Partnerships are numerous and include the Clean Yard Program and Carpet Cleaning Fact Sheet with OLQ; 40 CFR 63, Subpart RRR Outreach, Autobody Training, Article 2 Permit Rulemakings, and Surface Coating Initiative with OAQ; and Marina Stormwater and E-DMR Outreach, and Rule 6 training for inspectors with OWQ.
- Partnering with all Region V Small Business Environmental Assistance Programs (SBEAP) on the Autobody Refinishing Environmental Results Program (ERP). The Region V SBEAPs are using ERP to implement the area source rule 40 CFR Part 63, Subpart HHHHHH (subpart 6H) as it affects autobody refinishing shops and measure the changes in environmental performance that result. Thousands of sources previously under limited regulation are now affected by these regulations. While the primary focus of this project will be compliance with subpart 6H, we also will provide education and collect data on compliance and best practices in other regulated environmental impact areas, energy efficiency and pollution prevention.
- CTAP Follow-up Letters: Follow-up letters clarify requirements to the customer and can be used to demonstrate the customer is proactively pursuing compliance to IDEM inspectors.