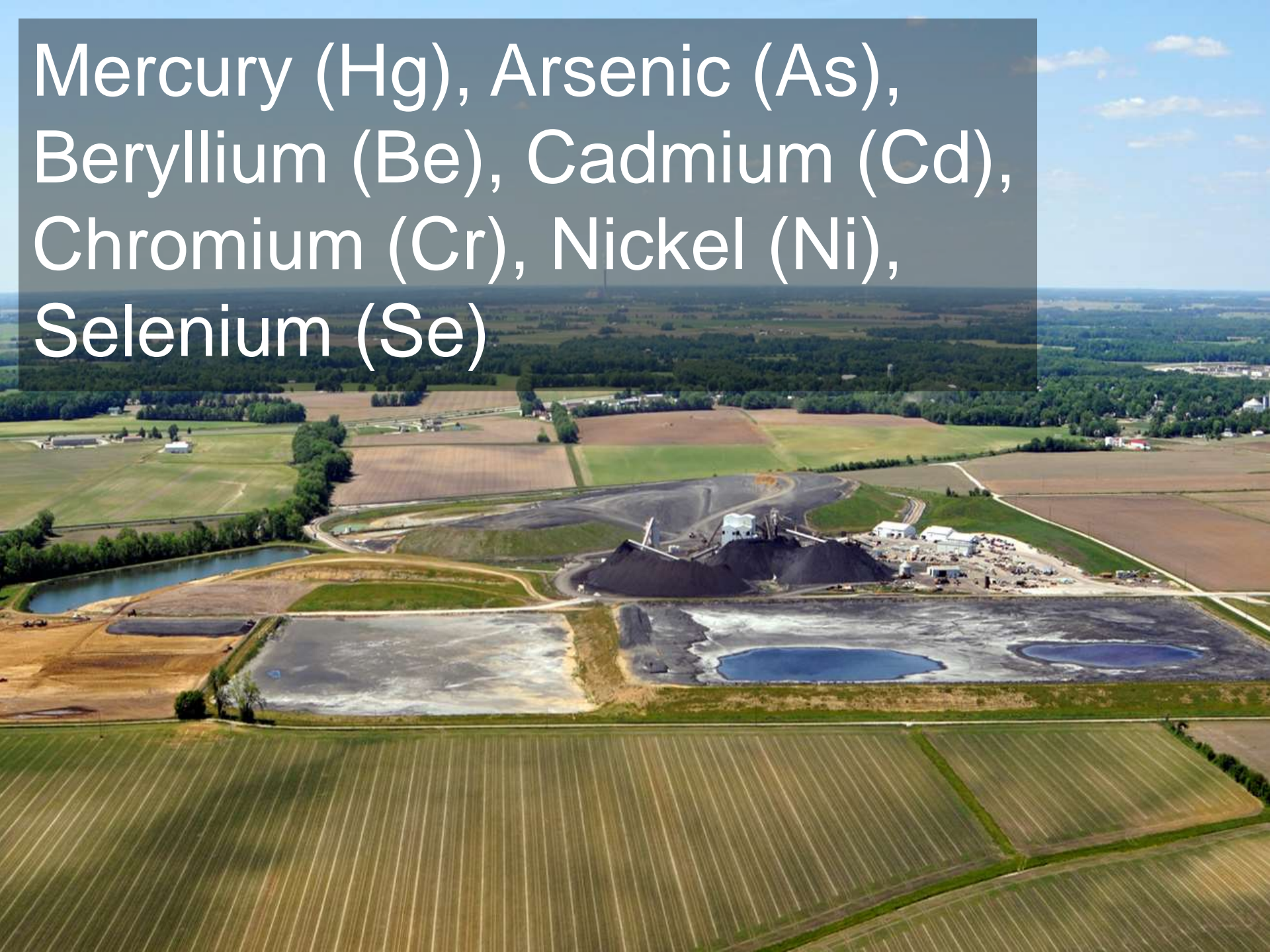




Coal Ash in Illinois

Disposal & Water Quality Impacts

Mercury (Hg), Arsenic (As),
Beryllium (Be), Cadmium (Cd),
Chromium (Cr), Nickel (Ni),
Selenium (Se)



Slurry Disposal





24 coal-fired power plants

adjacent to rivers & lakes, over aquifers

91 Coal Ash Disposal Pits

An aerial photograph showing a large industrial facility, likely a power plant, with several large, rectangular pits filled with a greenish-brown slurry. The pits are separated by earthen embankments. In the background, there are more industrial structures, including tall chimneys and a large building. The surrounding area is a mix of open land and some vegetation.

Unsuitable & Risky Location

- 56 over groundwater recharge areas
- 62 over shallow aquifers
- 9 over wetlands

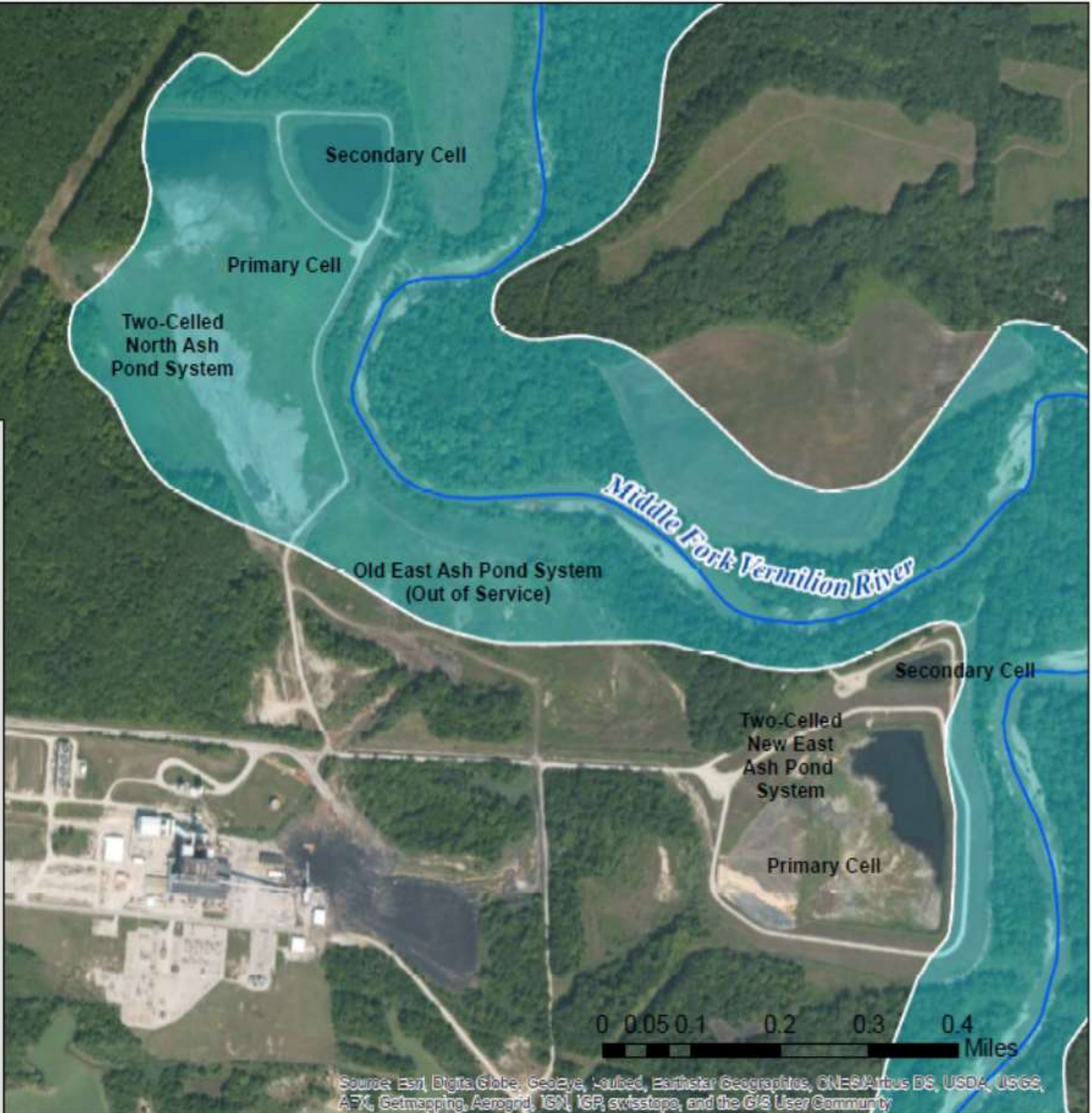
16 of 38 dams
assessed in “poor”
condition

- Erosional forces of nearby rivers
- Over mine voids, subsidence


















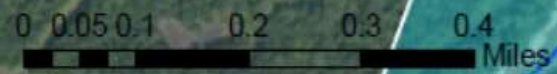
Vermilion Power Station





Legend

-  Water Lines
- Flood Hazard Boundaries**
 -  Other Boundaries
- Line Type**
 -  Limit Lines
 -  SFHA / Flood Zone Boundary
- Flood Hazard Zones**
 - Zone Type**
 -  1% Annual Chance Flood Hazard
 -  Regulatory Floodway
 -  Special Floodway
 -  Area of Undetermined Flood Hazard
 -  0.2% Annual Chance Flood Hazard
 -  Future Conditions 1% Annual Chance Flood Hazard
 -  Area with Reduced Risk Due to Levee
 -  World Imagery
 -  Low Resolution 15m Imagery
 -  High Resolution 60cm Imagery
 -  High Resolution 30cm Imagery



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community





Newton Power Station

303(d) Impaired Waters:

- Aesthetic Quality
- Fish Consumption





**Newton
Power
Station**

**Newton
Lake**

**Newton
Lake**

Primary Ash Pond

Secondary Ash Pond

NPDES Outfall

Coffeen Power Station

- Impaired for secondary contact uses
- Not supporting aesthetic quality or fish consumption





**Coffeen
Lake**

**Power
Station**

**Gypsum
Reclaim Pond**

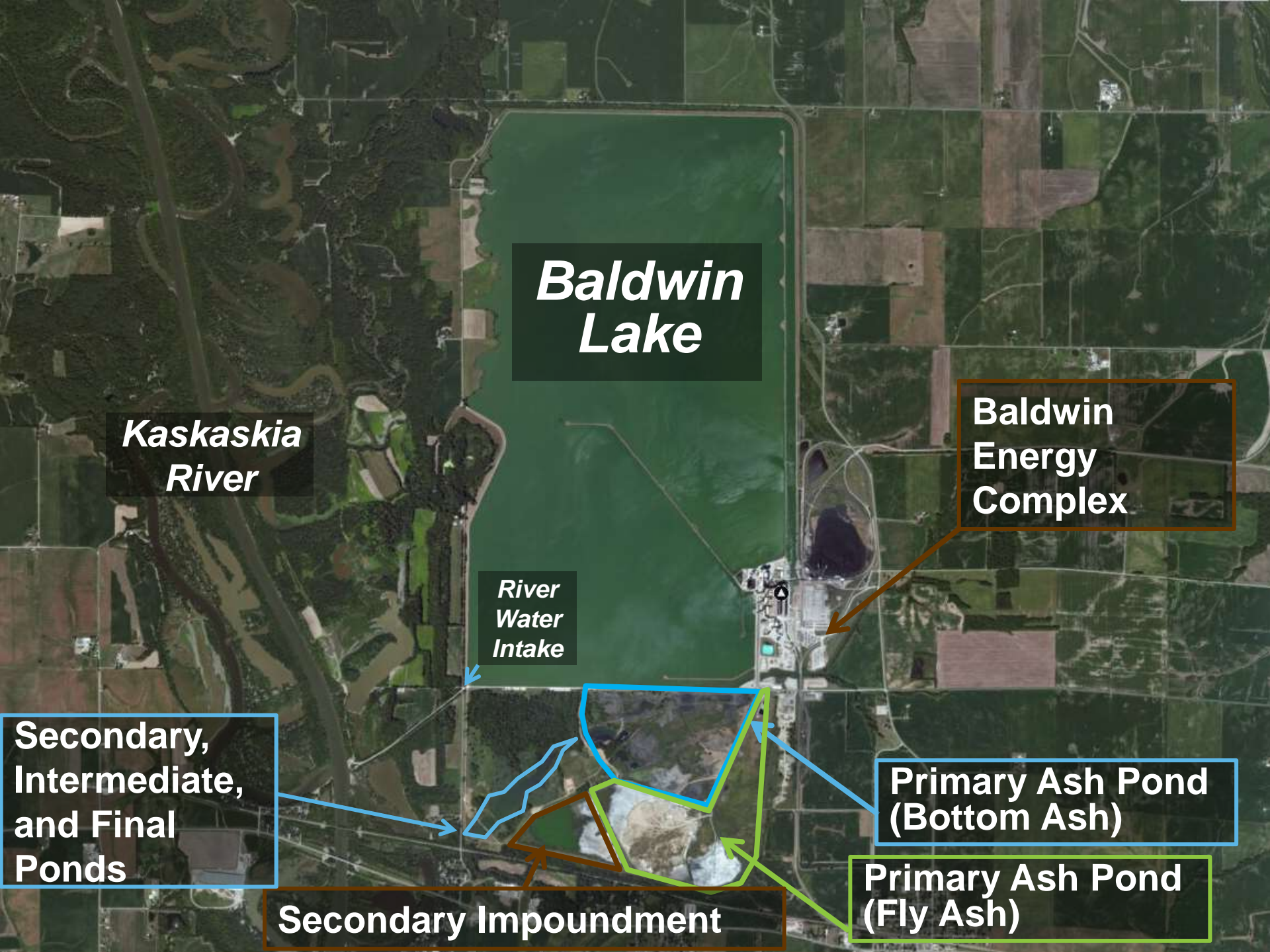
**Decommissioned
Ash Pond**

Recycle Ash Pond

Baldwin Energy Station

Portion of
Kaskaskia not
supporting fish
consumption and
aquatic life





**Baldwin
Lake**

**Kaskaskia
River**

**Baldwin
Energy
Complex**

**River
Water
Intake**

**Secondary,
Intermediate,
and Final
Ponds**

**Primary Ash Pond
(Bottom Ash)**

Secondary Impoundment

**Primary Ash Pond
(Fly Ash)**

USEPA Coal Ash Rules



Unfortunately...

- Fails to phase out unlined pits
- Poor Closure Standards
- Enforcement burden on communities

More Protective Standards

- Groundwater monitoring
- Location restrictions
- Closure of ponds when they don't meet stability standards
- Closure of legacy ponds
- Trigger clean-up
- Notification Requirements

Illinois Coal Ash Rules

An aerial photograph of a coal ash processing facility. In the foreground, there are large piles of dark coal ash and several industrial buildings. A large river flows through the middle ground, with a bridge visible in the distance. To the right of the river, there is a large, irregularly shaped pond. The background shows more industrial structures and a parking lot with many cars. The overall scene is industrial and somewhat desolate.

- Groundwater monitoring
- Require liners
- Post-closure monitoring
- Protection of surface waters

Moving Forward

An aerial photograph of a power plant facility. The plant consists of several large, rectangular buildings with flat roofs, and a prominent, tall, cylindrical smokestack. The facility is situated on a grassy area adjacent to a large, dark blue body of water. In the background, there are rolling hills covered in dense, leafless trees, suggesting a late autumn or winter setting. The overall scene is a mix of industrial infrastructure and natural landscape.

- Adopt best elements of federal rule
- Financial assurances
- Structural integrity inspections