

CAPITAL PLANNING ADVISORY BOARD

**2022-2028
Agency Capital Plan**

Staff Analysis and Comments

CABINET: Energy and Environment Cabinet

OVERVIEW

The mission of the Energy and Environment Cabinet (EEC) is to protect and enhance Kentucky’s environment. The capital plan submission includes projects for the Office of the Secretary, the Department for Environmental Protection, and the Department for Natural Resources that address anticipated needs for the 2022-2028 planning period.

The projects in this plan are prioritized based upon safety, public health, protection from environmental hazards, statutory requirements, maintaining existing programs, financial savings, and federal requirements.

The Office of the Secretary is responsible for final administration and programmatic decision-making. The Department for Environmental Protection (DEP) is responsible for protecting the quality of the state's air, land, and water, and the Department for Natural Resources (DNR) is responsible for the conservation, preservation, protection, and perpetuation of natural resources, administering Kentucky's Surface Mining Program, Abandoned Mine Program, and is responsible for the inspection of all coal mines to guarantee that miner safety laws are being followed to ensure the safety of Kentucky miners.

PROPOSED PROJECTS – Financial Summary

Funding by Source	<u>2022-2024</u>	<u>2024-2026</u>	<u>2026-2028</u>	<u>Total</u>
General Funds	\$21,224,000	\$32,128,000	\$12,881,000	\$66,233,000
Total				
Funding by Agency				
Secretary’s Office	\$2,753,000	\$2,690,000	\$800,000	\$6,243,000
DEP	16,428,000	27,395,000	10,038,000	53,861,000
DNR	<u>2,043,000</u>	<u>2,043,000</u>	<u>2,043,000</u>	<u>6,129,000</u>
Total	\$21,224,000	\$32,128,000	\$12,881,000	\$66,233,000

ENERGY AND ENVIRONMENT CABINET
Proposed Projects Involving the General Fund (cash or bonds)
(amounts in **bold** are the total budget)

2020-2022

(Projects listed by cabinet priority; descriptions are from the agency submission)

1 Maintenance Pool for Cabinet-Owned Facilities \$968,000

Maintenance pool project is necessary to preserve existing cabinet real property in a usable, safe, and functional condition. (C-PI) **Secretary's Office Priority #1**

CPAB Staff Notes

- *The cabinet currently has 10 sites with numerous cabinet-owned buildings and structures valued at approximately \$763,000 assessed on the facilities, and \$11 million assessed on the properties. Due to a lack of funding, there is a backlog of maintenance and repairs needed on these facilities.*
- *Proposed maintenance pool projects include six projects at the Maxey Flats Site, \$216,000; 11 projects for the Office of Kentucky Nature Preserves, \$150,500; and 14 projects for the Dept. of Forestry, \$601,500.*
- *Maintenance pools are requested in 2024-26 and 2024-28 (GF – \$800,000)*

2 State-Owned Dam Repair Pool \$8,000,000

Additional funding in the amount of \$6,000,000 is requested for rehabilitation efforts on Willisburg Lake Dam in Washington County. This includes engineering assessment, design, construction, and project management. New funding in the amount of \$2,000,000 is requested to conduct engineering assessments and repairs on Boltz Lake Dam in Grant County (\$1,000,000), Marion County Sportsman Lake Dam (\$500,000), and Cannon Creek Dam in Bell County (\$500,000). (C-O) **DEP Priority #1**

CPAB Staff Notes

- *State-Owned Dam Repair pools are requested in 2024-26 and 2026-28 (GF – \$8,000,000).*
- *The Willisburg Lake Dam project received a \$1.5 million allocation from the 2018-2020 State-Owned Dam Repair pool. The project was in Design Phase B, but is on hold for funding and easement issues.*

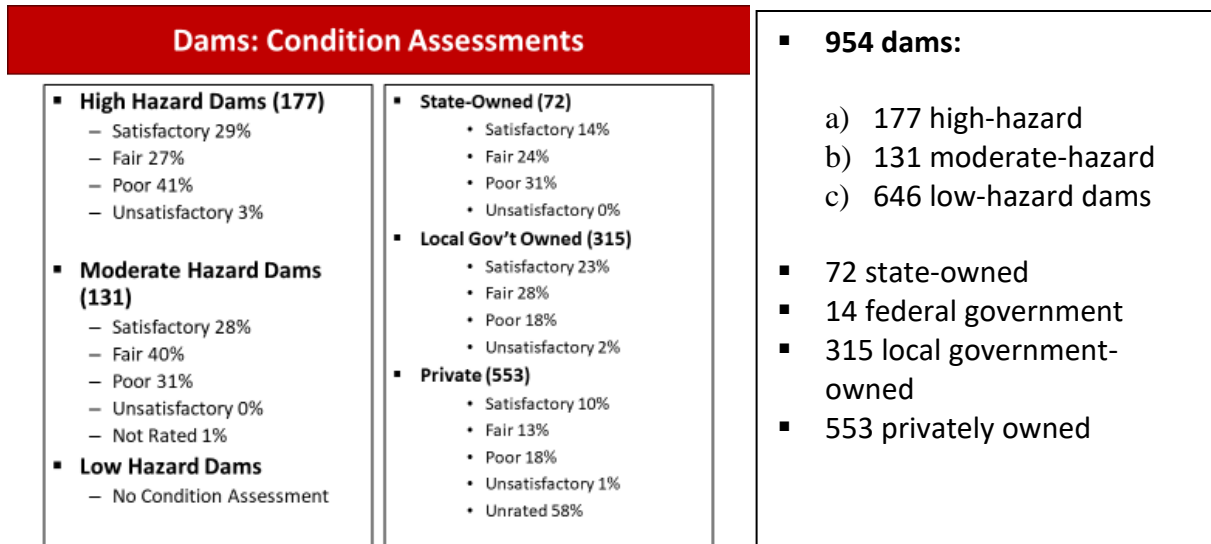
Kentucky received a grade D+ on the ASCE Infrastructure Report Card in 2019

Dam failure estimated losses from 72 Kentucky publicly-owned dams:

*Greater than \$500 million - Homes, Businesses, Infrastructure (Hanus)

*Greater than \$28 million – Agriculture (Hanus)

(Info above is based on the Hazus risk assessment tool developed by FEMA of which the Division of Water utilizes to determine potential losses from dam failures as well as the most effective mitigation actions for minimizing those losses.)



3 Southern Wood Treatment Site \$5,604,000

This project would provide for continued remediation of the Southern Wood Treatment/Long Lane Superfund Site in Mt. Sterling. The site has a high concentration of arsenic and was originally declared an emergency by the Commonwealth. Many residents living in the area were exposed to arsenic left in the soil derived from the wood treatment facility that operated there years ago. The state has spent approximately \$5 million on the emergency phase. However, the site is not in a final remedial state whereby the state can leave it "as is" for any length of time. This is one of the many hazardous waste sites where there is no responsible party to clean up the contamination. (C-O) **DEP Priority #2**

CPAB Staff Notes

- This project differs from the original request in the previous capital plan as it is requested in phases instead of the total request in one biennium. The current request will more accurately represent the work that can be performed over the time covered by the request.
- Phase two of this project is proposed for 2024-2026, \$9,254,000 BF.

4 State Superfund Sites 2020-2022 \$2,824,000

The Department for Environmental Protection, the Division of Waste Management, is requesting funding to address State Superfund Site remediation efforts. It is the statutory responsibility of the Superfund Branch to conduct clean up actions of sites where no responsible party is available. The goal of the cabinet is to prevent contaminant exposures that affect human health and the environment. (C-O) **DEP Priority #3**

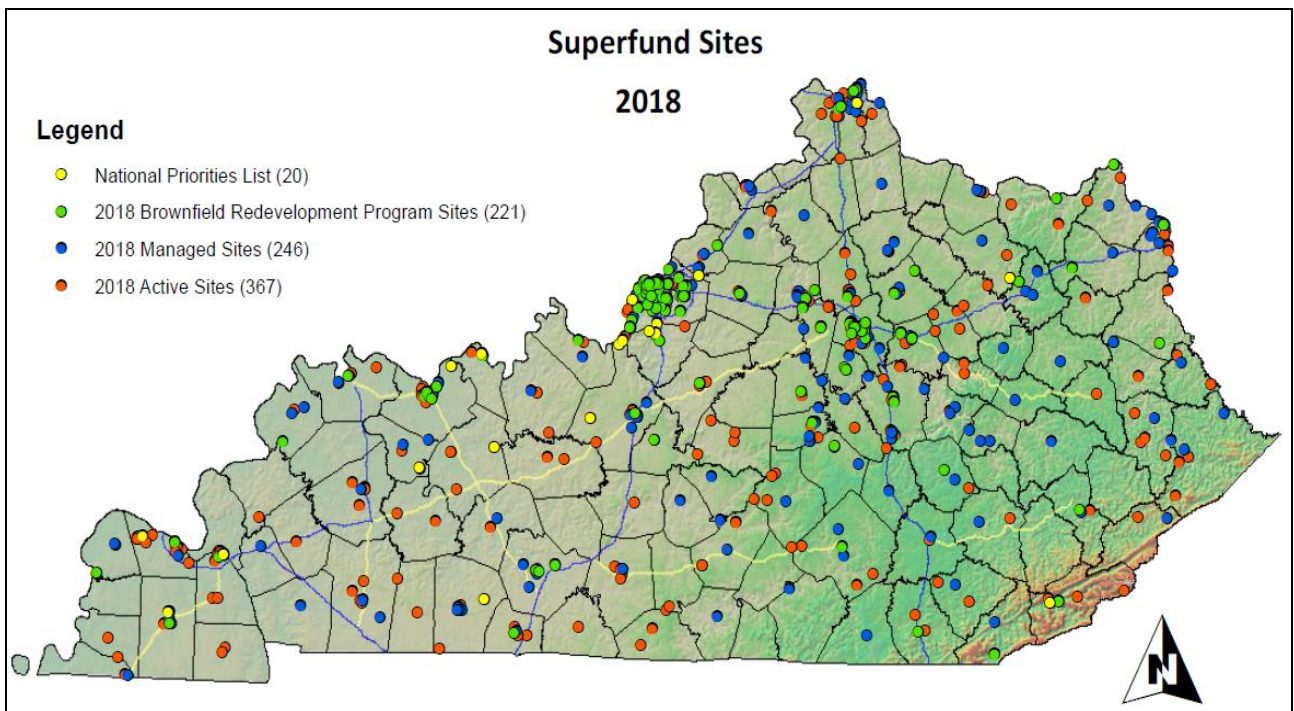
CPAB Staff Notes

- Additional GF of \$2,038,000 are requested for Phases 2 and 3 in 2022-24 and 2024-26.
- This project was proposed in the agency's last plan at a scope of \$4,000,000. The project cost has decreased due to revised construction costs estimates.

- The Superfund Branch presently has over 1,000 identifiable sites throughout the state and averages approximately 90-100 new sites per year. There are approximately 620 state-lead superfund sites in Kentucky.

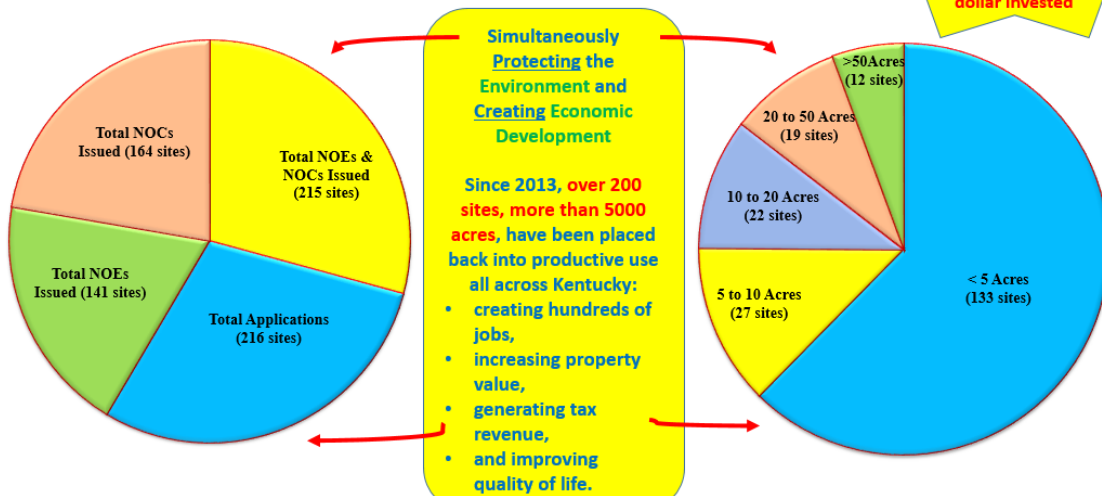
There is over \$1.4 Billion liability of superfund sites throughout the Commonwealth

- There are approximately 620 state-lead Superfund sites and 280 Brownfield Redevelopment program sites in Kentucky. Most of the state-lead Superfund sites do not have a viable responsible party.
- An additional RCIS 425 sites are being evaluated and prioritized for the need to address contamination.
- The estimated liability cost to remediate these sites is between \$1.4B and \$2.4B.
- EEC currently receives approximately \$1.8M/year to provide (a) emergency response services, (b) Superfund oversight, and c) cleanup costs.



KRS 224.1-415 – Program Success since 2013

Return on Investment into the Brownfield program ranges from \$17 to \$34 for every \$1 dollar invested



Success Stories:

- **Nucor Brandonburg Steel Mill** – 1,500 construction contractors, 400 full time jobs
- **Louisville Soccer Complex** - \$30M investment by City of Louisville; \$17M pay by Lou. Soccer Club
- **Castlen Steel Owensboro** – Upgraded rail access & utilizes river for barge reclamation; produces steel tanks at this site.
- **Anna Lee Village Harlan** – Created multi-family affordable housing complex in the city of Harlan
- **Lextran Lexington** – constructed \$26M facility; increased employees from 109 to 200

5 AR Inspection Forms **\$1,785,000**

The Energy and Environment Cabinet performs over 50,000 inspections and investigations each year. The goal of this project is to allow these inspections to be documented via a mobile application that will speed the inspection process, increase accuracy, and lessen the dependency on visits to the office. Customized mobile inspection templates will allow inspectors to spend more time protecting human health and the environment while reducing the time spent on documentation and travel. EEC will work with vendors and contractors to customize commercial off the shelf software to create mobile inspection templates that will be interfaced with existing Cabinet databases. (IT) **Secretary's Office Priority #2**

CPAB Staff Notes

- *NEW project – has not been listed in a previous capital plan.*
- *Additional GF of \$1,890,000 are proposed for 2024-26.*
- *A key component of the system includes remote inspection capability. Designed as a response to the Covid-19 Pandemic, a remote inspection feature helps compliance programs expediently*

clear backlogs and further protect the health of their field workforce. The remote inspection feature takes advantage of all the existing tools while offering the ability to conduct the inspection remotely or even allow a site-manager to self-inspect with the inspector auditing the results.

6 Wildland Fire Equipment Replacement Schedule \$1,043,000

The proposed project will replace dozer and transport units that will be utilized in fire suppression efforts. The Division of Forestry transport fleet has 34 dozers and 33 transports manufactured before the year 2006. Many are well past the recommended 15-year useful life of this equipment. This aging dozer/transport fleet also results in high maintenance costs and poses safety threats to the firefighting staff that operate them. This request will replace 3 dozer/transport units over the biennium at \$347,600 per unit. (EQ) **DNR Priority #1**

- Forestry heavily relies on dozers to cut fire lines for protection of life, property and resources.
- There are 12 Million acres of forestland Forestry is mandated to protect.
- Forestry has 34 dozers that are past the 15 year useful life; ten of which are 30 years old.

Dozer/Transport Inventory 5/7/21			
Date Range	Dozers	Date Range	Transports
1981-1985	4	1981-1985	0
1986-1990	6	1986-1990	1
1991-1995	11	1991-1995	8
1996-2000	11	1996-2000	15
2001-2005	2	2001-2005	9
2006-2010	6	2006-2010	7
2011-2015	4	2011-2015	4
2016-2020	6	2016-2019	2
Sum	50	Sum	46
*Yellow indicates equipment in need of replacement			

7 Kentucky Abandoned Storage Tank and Orphan Well \$1,000,000

The Energy and Environment Cabinet (EEC), Department for Natural Resources (DNR), the Division of Oil and Gas (DOG), is requesting funding to enable clean-up action under the Kentucky Abandoned Storage Tank and Orphan Well (KASTOW) reclamation program. The program was established by legislation in 2019 to address legacy oil and gas environmental liabilities across the

Commonwealth that impact citizens, property, and water resources daily. Key components include reclamation of abandoned oil storage tank sites, removal of gathering lines, and plugging of orphan oil and gas wells in order to return the property to safe and productive use. HB-199, enacted in the 2019 Regular Session, established the KASTOW program but did not allocate sustainable funding. (C-O) **DNR Priority #2**

- Roughly 14,000 orphan wells across the Commonwealth; abandoned by operators long before state oil & gas laws were enacted
- KY orphan well problem typically grows by 800 wells per year
- During 2020, the Division plugged 298 orphan wells through the State Abandoned Well Program at a total contractor cost of \$1.29M. That calculates to \$4330 per plugged well in 2020. However the range of individual well plugging costs was from \$700 to \$40,000 varying with the depth of the well, well head deterioration, and downhole abandonment conditions.
- A conservative estimate of the plugging liability for Kentucky's 14,000 orphan wells, based upon typical plugging costs by region, is approximately \$71M.

Abandoned well in Cumberland Co, leaking sulfur water directly into local stream.



2024-2026

AR Inspection Forms	\$1,890,000
Kentucky Abandoned Storage Tank and Orphan Well	1,000,000
Maintenance Pool for Cabinet-Owned Facilities	800,000
Southern Wood Treatment Site	9,254,000
State Superfund Sites	2,038,000
State-Owned Dam Repair	8,000,000
Wildland Fire Equipment Replacement Schedule	1,043,000
Wiley Property Site	8,103,000

2026-2028

Kentucky Abandoned Storage Tank and Orphan Well	\$1,000,000
Maintenance Pool for Cabinet-Owned Facilities	800,000
State Superfund Sites	2,038,000
State-Owned Dam Repair	8,000,000
Wildland Fire Equipment Replacement Schedule	1,043,000

ENERGY AND ENVIRONMENT CABINET
Maintenance Pool Allocations (2020-2022)

Secretary's Office
(\$600,000 Investment Income)

<u>Project</u>	<u>Cost</u>	<u>Status</u>
Buffer Zone Road Maintenance	104,000	Underway
Chenoa Dam	24,600	Underway
Ditch and Culvert Maintenance	15,000	Underway
Kentucky Nature Preserves 16 Additional Projects	80,500	Proposed
Kentucky Ridge State Forest Equipment Shed	60,000	Proposed
Morehead Office Gate Access	20,000	Proposed
North Eastern District Office	157,600	Underway
<u>Division of Forestry</u>		
Bert T. Combs Building Light Repairs	17,500	Proposed
Bert T. Combs Building Maintenance	285,000	Underway
Bert T. Combs Exterior Cleanup and Repair	15,000	Proposed
Bert T. Combs Roof Replacement	230,000	Proposed
Bert T. Combs Security Fence	20,500	Proposed
Division of Forestry-3 Additional Projects	13,300	Proposed
John P. Rhody Nursery Maintenance	101,000	Underway
John P. Rhody Nursery Mulch Pad	20,000	Proposed
John P. Rhody Seedling Bed Former	25,000	Underway
Morehead Office Shed Lighting and Electric	10,000	Underway
Morgan County Nursery Top Pruner	9,000	Underway
Nursery Shuttle Bins	20,000	Underway
Pineville Office Window Replacement	52,900	Underway
Road and Parking Area Maintenance	61,500	Underway
Seedling Nursery Trucks	75,000	Proposed
<u>Maxey Flats Site</u>		
Floor Maintenance	21,200	Underway
Ground Maintenance Equipment	62,000	Proposed
Sampler Replacement	24,000	Proposed
Sampling Shelter Replacement	30,000	Underway
Security Gate Replacement	17,000	Proposed
Shed Addition	12,500	Underway
Skid Steer Track Replacement	6,500	Underway
Solid State Detector	50,000	Proposed
<u>Office of Kentucky Nature Preserves</u>		
ATV Replacement	12,000	Underway
Blacktop Removal	7,000	Underway
Blanton Forest Bridge and Trail Maintenance	5,000	Underway
Bridge and Walkway Replacement	6,000	Underway
Parking Lot Construction and Maintenance	25,000	Underway
Vehicle Replacement	103,400	Underway
Wild Rivers Sign Installation	12,000	Underway

**2020-2022 State-Owned Dam Repair
 Dept. for Environmental Protection
 (\$7,000,000 Bond Funds)**

<u>Projects</u>	<u>Cost</u>	<u>Status</u>
Boltz Lake Dam	\$5,668,700	Underway
Bullock Pen Lake Dam	15,392,000	Underway
Cannon Creek	500,000	Proposed
Chenoa Lake Dam	1,300,000	Proposed
Clements Lake Dam	500,000	Proposed
Guist Creek Dam	3,800,000	Proposed
Marion County Sportsman Lake Dam	2,900,000	Proposed
Martin County Lake Dam	3,800,000	Proposed
Scenic Lake Dam	6,385,500	Underway
Smokey Valley Lake Dam	1,000,000	Proposed
Willisburg Lake Dam	8,574,927	Underway

ENERGY AND ENVIRONMENT CABINET
Quarterly Status Report – Current Capital Projects

Project Title	County	Authorization	Status	Percentage Complete
State-Owned Dam Repair – Boltz Lake Dam	Grant	Pool Project	Awaiting Initiation by agency	
State-Owned Dam Repair - Bullock Pen Lake Dam	Multi	Pool Project	In Construction	70
State-Owned Dam Repair - Clements Lake Dam	Rowan	Pool Project	Awaiting Initiation by agency	
State-Owned Dam Repair - Scenic Lake Dam	Henderson	Pool Project	In Construction	3
State-Owned Dam Repair - Willisburg Lake Dam <i>(on hold due to funding and easement issues)</i>	Washington	Pool Project	Design/Phase B- Project on hold	

Project Status is identified as one of the following:

- Awaiting Initiation by Agency - project has not started.
- Design/Phase B - design development.
- Design/Phase C - construction document development.
- In Construction - between construction contract award and substantial completion.