Sierra Club Wins (Again): Court Rulings Delay MVP

The Mountain Valley Pipeline (MVP) has lost two recent court cases challenging permits. One case involved approval by the US Forest Service (USFS) to cross the Jefferson National Forest. In fact, this is the second time a court rejected an approval by the USFS. The Court found in January that in granting approval, the USFS had ignored “real world” evidence of soil erosion and sedimentation in streams. By accepting MVP’s plans for erosion control, the Court ruled that the USFS had ignored over 400 violations of those plans previously documented by environmental regulators.

The Court also found that USFS violated its own 2012 Planning Rule by passing amendments to their forest plan specific only to the MVP project “on an ad hoc basis.” The court concluded that this approach made the substantive requirements of their planning rules “meaningless” and ordered the USFS to “properly apply the 2012 Planning Rule’s soil and riparian resources requirements to the Pipeline amendments.”

In February, the Court ruled in a second case, rejecting a decision by the US Fish and Wildlife Service regarding Endangered Species protections. That means the agency must redo its analysis of impacts to two endangered fish species.

Meanwhile, MVP is still waiting (as of this writing) for permits from the Army Corps of Engineers authorizing dozens of stream crossings along its route. The MVP pipeline is already three years behind schedule and billions of dollars over budget. Originally planned to be operational by 2018, the company had hoped to complete the pipeline and place it in operation by late summer 2022, but these court decisions will almost certainly mean at least another year of delays. MVP has indicated that they believe the project can be completed safely, but they continue to ignore the hundreds of documented violations, which calls into question their credibility.
Looking out my window, I see patches of dirty snow fading into dead grass. In my garden, gray flower stalks, battered and disheveled, lean against each other at crazy angles. Somehow, it seems fitting that the West Virginia Legislature meets at this time of year. Like the landscape outside my house, the Capitol looks drab and somewhat forbidding. But inside, it’s bustling with as much activity as a beehive in June.

The 2022 legislative session runs from January 12 to March 12. It began with the introduction of three bills that would repeal the laws currently preventing nuclear power from being produced in West Virginia. One of the three bills would also provide for a new generation of small nuclear reactors to be built on former mine sites.

At this time, the Sierra Club, like many other environmental organizations, remains opposed to nuclear energy. The Club’s position can be found here: sierraclub.org/nuclear-free. A Sierra Club fact sheet on small modular reactors can be found here: https://tinyurl.com/nuclear-free.

Some other environmental groups, like the Climate Coalition and Environmental Working Group, are beginning to support small nuclear reactors like the ones proposed for West Virginia. Their websites provide their statements on nuclear energy.

It is difficult to imagine how we can attain Net Zero without nuclear power. It is also difficult to imagine what our lives will be like if we don’t attain Net Zero. And it’s equally difficult to imagine the devastation that even a small nuclear accident might cause.

Some of us remember attending schools that had fallout shelters in the basement. We may even have participated in drills in which we cowered under our desks, as if the dreaded isotopes wouldn’t find us there.

Others of us wonder how our children will feed themselves. Will they be living in a world that has become so hot that bees and bugs are no longer synchronized with the flowering plants we eat? So hot that the “breadbasket of America” becomes a desert? It’s already happening in parts of Africa.

Is nuclear power part of the solution?

Each of us owes it to our descendants to learn as much as we can about this new generation of nuclear power, and to enter into dialogue with our peers. We need to arrive at an understanding of what we can and cannot do, should and should not do, with nuclear technology. If no consensus is reached, all too often we take no action. We must not allow the potential divisiveness of this issue to threaten our survival. It is essential that our decisions be rational and based in fact.

When you have considered the best information available to you, please reach out to your legislators. They are already receiving visits from lobbyists who represent companies that would like to build modular nuclear reactors in West Virginia. They need to hear from the people whose lives would be most affected—those who live in the area and would work in the facilities.
Better Bonds Needed for Coal and Gas

West Virginia requires bonds for reclamation of coal mines and closure of gas wells after their productive life ends. But these bonds are often grossly inadequate, especially when the company defaults.

Too often, bonds required to assure that coal mines are reclaimed often do not cover the full cost of reclamation. The Special Reclamation Fund is supposed to cover the costs to reclaim coal mines when the operator goes bankrupt or abandons their responsibilities. The Fund is paid for by bonds and by a tax on mined coal. However, a 2021 legislative audit found that the Fund has nowhere nearly enough money to meet all the liabilities of our declining coal industry. The deficiencies leave West Virginia taxpayers on the hook for hundreds of millions of dollars, an indirect subsidy that benefits the least responsible operators.

Likewise, bonds are required for gas wells to assure that they will be properly plugged and closed. State law caps the bond requirement at $5,000 per well; however, the actual cost may be two or three times this amount. Even worse, the State allows larger companies to use a “blanket bond” of $50,000 to cover all wells of a company, and some companies have hundreds or thousands of wells. The system may work if we assume that these companies are “too big to fail,” but that assumption obviously does not hold up well in the risky gas business.

The legislative audit offers numerous recommendations for legislation (available at: https://tinyurl.com/PA-2021-722) to address the funding shortfall. So far, the WV Legislature has produced few bills that address the issue and none that incorporate the recommendations from the Audit.

In fact, SB 1 exacerbates the problem by creating a quasi-private company to provide bonds for coal mines that can’t get them in commercial markets. To make matters worse, the company would be funded by $50 million in taxpayer funds!

Haze is associated primarily with aerosols of sulfur and nitrogen oxides, and these overwhelmingly are associated with coal-fired power plants in West Virginia. Not only do these pollutants obstruct scenic views, they are a major source of health impacts in people, causing or contributing to respiratory and heart disease, and leading to premature death.

As stated in our comments, a Haze Plan that requires stronger pollution reductions by power plants will not only protect our iconic scenic views, but will also save lives of West Virginians.

BY JIM KOTCON
The permit was granted on January 5, despite requests for a new comment period following proposed revisions to the permit after a hearing last October. (The Public Service Commission granted the plant’s siting certificate in April 2020, and the Monongalia County Commission approved a Payment-in-Lieu-of-Taxes agreement in December 2020.) This new facility, which will consist of two natural gas-fired turbines that will add 1270 megawatts of capacity to electric grid operator PJM’s wholesale market, is expected to cost $1.1 billion and to begin operation by January 2025.

Despite its name, MSCE would emit over 5 million tons of greenhouse gases per year, and this does not include upstream emissions from wells, pipelines, and other infrastructure to produce the gas. (The draft air pollution permit would allow emissions of 210 tons per year (TPY) of the particulate matter PM2.5, 39.9 TPY Sulfur Dioxide, 321 TPY Nitrogen Oxide, 276 TPY Carbon Monoxide, 141 TPY Volatile Organic Compounds, and 23.3 TPY Hazardous Air Pollutants.) Further, the plant will be adjacent to two coal-fired powerplants, where there is already a lot of air pollution.

The newly approved air permit is technically a “permit for construction” of a stationary source of air pollutants (WV Rule #45-CSR-13), so the air pollution permit and construction permit are the same thing. This is the last major hurdle to realization, apart from some minor construction or storm water permits.

Is Longview II a done deal? Getting Congress to pass the Build Back Better Act, especially if it has the Clean Electricity Performance

CONTINUED ON PAGE 5
Recreation Issues Subteam Seeks New Members

Do one, two, three, or even more, of the issues below bother you? Interest you? Concern you? Upset you? Make you feel some action is needed toward better management?

- Off-road vehicles (motorcycles, electric bicycles, ATVs, snowmobiles, jet-skis, etc. — whether creating noise, conflict with hikers, or impacts to ecosystems);
- park overflight noise impacts;
- bicycles;
- trail conflicts and inappropriate uses;
- accessible recreation;
- recreation fees charged on public lands;
- commercialization and privatization of recreation on public lands.

Let the Sierra Club’s Recreation Issues Subteam hear from you!

Sierra Club’s national Wildlands and Wilderness Team recently created a Recreation Issues Subteam, and now seeks interested individuals to join the Subteam, which currently has 12 members. Previously, starting back in 1999, Recreation Issues was a standalone team, but now we work within the Wildlands Team.

The Recreation Issues Subteam’s mission is to assist volunteers, build networks, and help coordinate the Club’s conservation efforts on recreation issues, primarily on public lands. While all recreation activities certainly have some impact on the land and ecosystems, a major concern of the Subteam is the way that land managers, under the relentless advocacy of mechanized recreation, are steadily converting non-motorized trails into mechanized-motorized trails. This mechanized use conflicts with potential future wilderness designations, among other problems.

If you would like to help our campaign to get better public lands management, better control of some of these issues — please contact Subteam chair Karl Forsgaard at karlforsgaard@comcast.net.

We are mindful that wild public lands exist not ONLY for human recreation but are essential for wildlife habitat, so that we must balance needs of Nature, including wildlife, against our own recreational impacts.

—VICKY HOOVER, MEMBER, RECREATION ISSUES SUBTEAM

LONGVIEW | CONTINUED FROM PAGE 4

Program, would go a long way to killing the plant. Unfortunately, that program was dropped from the bill thanks to our Senator Manchin, who later rejected the bill anyway. All that is left in the proposed legislation is a lot of incentives for renewables. Furthermore, WV State Senate President Craig Blair wants to provide additional incentives to get gas plants built in the state, so this year’s legislative session will be critical.

What does the investment future for gas-fired power plants look like? According to the Institute for Energy Economics and Financial Analysis (IEEFA) from November 2021, five factors pose a challenge for investment in PJM gas projects. (PJM is the wholesale electricity market that purchases power from Longview I and where Longview II hopes to sell its power.)

1. PJM holds an auction every year where it purchases its energy supply, plus a reserve margin, for the next three years. Companies are thus paid for three years into the future, a big enticement to project developers. This is the Capacity Market. But there has been a sharp drop in the region’s latest power auction, causing uncertainty about future capacity prices.

2. Renewable Energy, especially offshore wind projects and battery storage, is growing rapidly as prices for renewables go down and demand rises.

3. The previous decade saw low and stable gas prices, resulting in the rise of Combined Cycle Gas Turbine (CCGT) power plants like Longview II. But constrained production from fracking in the U.S. and a rise in gas exports has led to more volatile and unpredictable gas prices, making it difficult to analyze a plant’s long-term profitability.

4. The PJM Market has seen low growth recently due in part to rising energy efficiency.

5. Financial markets are concerned about climate change and the likelihood of required fossil fuel plant closures by 2050.

IEEFA has identified 17 gas plant projects that remain undeveloped in the PJM market. More are likely to follow. Five plants have been terminated, while three others have been indefinitely postponed, including Brooke County Power 1 and Moundsville Power Project in WV. Six additional projects are listed as unlikely to go forward, including the Harrison County Project in WV. Three plants are listed as possible, and Longview II is included here.

Longview II has the permit needed to begin construction. But could investors put the kibosh on this project? Moody’s says that “the PJM region is plagued by persistent excess capacity and tepid electric demand.” IEEFA concludes that “the Longview gas plant will be challenged by market realities. The recent run-up in gas prices and expectations of continued volatility will pose additional challenges for the proposed plant.” If climate science doesn’t convince its developers that Longview II is a bad idea, let’s hope the market will.
Environmental advocacy is hard; it’s not for the faint of heart or for those who can’t tolerate rejection. We’re often up against underfunded state agencies who defer to corporate entities with deep legal pockets and state officials who are more interested in looking good now than protecting future generations.

Advocacy for our environment is worth it, though, because when a win for water happens, we all win.

Charles Town Utility Board Wanted to Relax Permit, Jefferson County Foundation Intervened

Last fall the Charles Town Utility Board (CTUB) appealed its new and more protective National Pollutant Discharge Elimination System (NPDES) permit issued by the WV Department of Environmental Protection (WVDEP). CTUB told the WV Environmental Quality Board (EQB) that it wanted to delay compliance with the permit’s chloride limits for two years and did not want to have to discontinue service to industrial users (like Rockwool), even if there are three consecutive exceedances of effluent limits. Jefferson County Foundation filed as an intervenor in the case and took the position that the more protective measures in the NPDES permit should stand. Notably, WVDEP did not oppose our intervention.

CTUB’s lawyers, Steptoe and Johnson, argued against our involvement because, among other things, it would “cause undue complication and delay, and impair the efficient resolution of this legal action.” In its brief, CTUB’s lawyers stated, “Intervenors are legal ‘frequent flyers’ engaging in lawfare to complicate and bog down the legal process to push forward their own agenda.”

We took strong exception to Steptoe’s attempt to belittle our objectives and to mischaracterize the public’s serious concerns over lax permit conditions as a mere nuisance to CTUB. The Foundation’s core strategy is to use the legal system—only when necessary—to seek compliance with law and the protection of our area’s natural resources, environment, and human health.

What Happened?

A hearing was held on December 10 to address the Foundation’s request to join the legal proceeding as an intervenor on behalf of our collective interest in clean and healthful waters. At that hearing, CTUB announced it was withdrawing its appeal of that action.

CTUB further advised the EQB that it had agreed with WVDEP that 1) CTUB would abide by the original chloride limits (exactly what we wanted), and 2) that CTUB will be required to contact WVDEP within 24 hours if there are any industrial users that fail to comply with the terms of the permit.

This is good news! The Foundation’s move to intervene achieved our goal to protect the waters of the region. First, the settlement keeps intact key portions of the original CTUB permit. In addition, since WVDEP has the power to stop industrial users from discharging effluent immediately if they don’t comply with permit conditions, action can potentially be taken even faster than was provided for in the original permit conditions. Had the Foundation not intervened, CTUB would have likely not agreed to such a compromise. Going forward, the Foundation will continue to monitor CTUB and its compliance with its permit.

This positive outcome is proof that watchful eyes on the permitting process can achieve meaningful protections for the waters of the state and the region. If we all do our part, the impact we have will be profound for future generations.

Lynn Delles is the Director of Strategic Communications for the Jefferson County Foundation, Inc.
Sweetheart Deal for Nucor at Taxpayers’ Expense?

The West Virginia Legislature went above and beyond in a special session prior to the 2022 regular session to secure a deal with steelmaker Nucor for a recycling facility in the state.

Using $1.7 billion in taxpayer money (a combination of $1.35 billion in tax credits over several years and $315 million in cash to match the company’s investments), the state and Nucor promise about 800 well-paying jobs. As the Charleston Gazette-Mail’s Phil Kabler pointed out, that’s $393,000 a job. This investment will be in the Ohio River Valley in Mason County. Is it worth it? I’m not so sure.

The $315 million in cash comes from federal American Rescue Plan funds provided to offer pandemic relief for the working people of West Virginia, families, and small businesses. Why is this matching of Nucor’s funds really necessary, especially using these relief dollars? According to MarketWatch, Nucor issued a press release last December “calling 2021 ‘the most profitable year in Nucor history’ for the fourth quarter.” This is a Fortune 150 company. This kind of corporate handout doesn’t exactly strike me as reasonable. And don’t just take it from me.

Phil Kabler also pointed out that Michael Farren, research fellow at the George Mason University Mercatus Center (funded by the Koch family), “was to give a report on how state and local corporate development incentive packages are ineffective in attracting business development.” This legislative meeting with Farren was cancelled. Kabler continues, “Farren would have told legislators that research shows the estimated $95 billion a year of state and local government economic development subsidies actually only influence corporate location or expansion decisions about 10% of the time—although companies are more than happy to play localities against one another to see who will give them the most corporate welfare.”

Kelly Allen, executive director at the West Virginia Center on Budget and Policy, stated in a release that, “In this case, West Virginia taxpayers are on the hook, while Kentucky and Ohio will see a big chunk of any economic and tax-revenue benefits—though research shows that these deals rarely produce their promised value for local communities.” The West Virginia Legislature went above and beyond in a special session prior to the 2022 regular session to secure a deal with steelmaker Nucor for a recycling facility in the state.

The nonprofit news organization Mountain State Spotlight has pointed out that “lawmakers made a decision about the project based on a report [from the WVU Bureau of Business and Economic Research] that didn’t receive enough scrutiny and gave them a possibly inflated picture of the benefits of the plant [in Mason County].”

West Virginia always gets promised huge jobs and tax revenue numbers by companies like these but almost always gets left with environmental and public health damage far surpassing such benefits, which never seem to accrue to their promised levels to begin with. Steelmaking involves the use of metallurgical coal and iron ore and has a long history of air and water pollution. While steel is needed, just like cement, for rebuilding our infrastructure and for renewable energy options, green hydrogen offers future promise for reducing greenhouse gas emissions and other pollution from such energy intensive processes. But green hydrogen is not involved here.

As always, it seems the Ohio River Valley is being promised growth and prosperity and receiving nineteenth-century-era industry, subsidized by public funds all-too-happily denied to those most in need but shelled out gleefully to corporations with enormous profit margins.
Bitcoin Mining and Its Threat to West Virginia

As if we didn’t already have enough to worry about, now there’s Bitcoin mining. What is it, and why do people in West Virginia need to worry about it?

Bitcoin is one of many virtual currencies that exist only online or within a computer network. It is independent of regulation, centralized authority, or government backup. Participating computers (nodes) create and trade Bitcoins, and every node must validate every transaction. This consumes tons of energy and attracts use by people seeking anonymity, because the identities of users are unknown.

Bitcoins can be traded or purchased, but the real wealth comes in creating them. The Bitcoin is created, or “mined,” by the first miner to produce a 64-digit hexadecimal number (a “hash”) that is less than or equal to the target hash. It is basically guesswork. This process is known as proof of work (PoW). A series of these numerical sequences becomes a block, and each block created becomes inextricably linked to the next block, forming the blockchain. On the Bitcoin network, this blockchain, or ledger, certifies the authenticity of all the coins that have been mined—close to nineteen million to date—but doesn’t reveal who has them.

Bitcoin, first introduced in 2008 using a purpose-made app, was designed to not exceed 21 million total coins. Like gold and real estate, Bitcoin is a successful store of value because it is difficult to increase its supply. Right now, 18.89 million Bitcoins have already been mined, which took nearly 12 years to happen, leaving 2 million Bitcoins left to be mined. But because the complexity increases, it is expected to take until 2140 to mine the last Bitcoin. With the total number of possible guesses for each of the 64-digit target numbers being on the order of trillions, the process consumes vast energy. And the number of possible solutions only increases as more miners join the mining network.

Twelve years ago, home computers could handle the computations needed to generate Bitcoin. Today, according to a Times of London report, it would take an American home with average electricity consumption at least thirteen years to mine a single Bitcoin. The growing blockchain demands purpose-built powerful processors that run day and night. The Bitcoin mining industry uses four times the energy per year as the entire electricity needs of New York City. Clearly, very cheap energy is needed to make Bitcoin mining profitable. This is where four natural gas wells in the Morgantown Industrial Park enter the picture.

In 2011, Northeast Natural Energy fracked four gas wells in the Morgantown Industrial Park, just outside city limits on the Monongahela River. Jump to November 2021, when an air-quality permit application to West Virginia Department of Environmental Protection (WVDEP) quietly appeared in the Dominion Post. Marion Energy Partners (MEP) applied for a permit to build a “science center” or data facility adjacent to the four gas wells. A little digging revealed that MEP is a shell company for Northeast Natural Energy.

WV Sierra Club Conservation Chair Jim Kotcon and others convinced the WVDEP to hold a public meeting, held January 11, for the air permit. Over forty people participated, including four local elected officials, all questioning the purpose of the facility. Despite two hours of comments against such a facility, CONTINUED ON PAGE 9
UNCERTAIN ENVIRONMENTAL IMPACT OF New Mine Research Facility Raises Concerns

Randolph and Pocahontas County residents are about to get a new neighbor. Plans are moving forward for a new mine safety research facility in Mace, WV.

From 1988 until 2013, the National Institute for Occupational Safety and Health (NIOSH) operated a research facility in an old limestone quarry in Fayette County, Pennsylvania. Shortly after a roof fall damaged that facility, the owner of the property decided not to renew the lease with NIOSH. Selection of the new 461-acre site was announced at a public meeting in Slatyfork, WV in June 2018.

Above-ground facilities would occupy about twelve acres. Five hundred feet below the surface, a 164,000-square-foot facility would be carved out of limestone rock.

The site is near the headwaters for several of the best trout streams in the East. The property borders the Monongahela National Forest (MNF), a 919,000-acre tract of the best trout streams in the East.

The site is near the headwaters for several of the best trout streams in the East. The property borders the Monongahela National Forest (MNF), a 919,000-acre tract affectionately called “the Mon” by the hunters, anglers, campers, and nature photographers who visit throughout the year. According to the MNF’s website, the Mon “is considered by The Nature Conservancy to be in an area of global ecological importance. Much of this diversity can be attributed to the wide variations in elevation and the resulting patterns of precipitation.”

Area residents have raised concerns about environmental damage during construction and continuing harm during the lifetime of the NIOSH facility. They have been joined by groups including Snowshoe Resort and the West Virginia Highlands Conservancy. The Pocahontas County Commission voted to ask Governor Justice for alternative locations.

Nevertheless, the Final Environmental Impact Statement was approved in October 2021, and NIOSH’s parent agency, the CDC, announced that it will acquire the property.

Residents are worried about the effects of construction on their well water and about increased truck traffic. Anglers have pointed to the potential harm the facility could inflict on streams in the headwaters area.

Once the facility is operating, residents are concerned that research on firefighting chemicals could result in contamination of drinking water. Firefighting materials often contain the PFAS “forever chemicals” like those that have contaminated drinking water supplies in Parkersburg and Martinsburg.

Residents are skeptical, saying that the environmental impact analysis relies on assumptions about how the construction is to be done and what the completed facility will be like, but to date, plans are either incomplete or are not being made available to the public.

As always, the devil is in the details. Concerned citizens must be diligent in watching for permits as they are submitted for public comment. If enough citizens submit written comments, the WV Department of Environmental Protection will hold a public meeting to receive spoken comments. To sign up for notification of permits, visit tinyurl.com/dep-permits.

Read more at: Mining Connection: tinyurl.com/miner-health and The Highlands Voice: tinyurl.com/highlands-voice

BITCOIN | CONTINUED FROM PAGE 8

little was learned. More online digging for information convinced everyone, even the gas industry website Marcellus Shale News, that the permit is for a Bitcoin mining facility. It appears that MEP’s plan is to use gas from their own wells for this data center and be completely off the grid, one of several ways that Bitcoin mining can be profitable. But the purpose of the facility has still not been confirmed. What are they hiding?

The air permit is for four large gas-fired engines that will run the 24/7/365 that is needed to power S9 processors. According to the permit, the levels of NOx authorized will exceed those allowed under the operating permit for the Longview coal-fired power plant by a factor of approximately 2.6. Jim Kotcon says the volatile organic compound levels proposed for the Marion Energy facility exceed those of Longview by 21 times!

The take-away: pollution, noise, electronic waste and no public benefit.

- Bitcoin currently creates 97 million metric tons of carbon dioxide annually and increases global energy consumption equivalent to 58 large, coal-fired power plants. It will seriously undermine the fight to stop global warming.
- Huge fans must run non-stop to cool the computers, generating noise that will disturb local residents and dissipate huge amounts of heat. Further, huge demand will be placed on internet capacity.
- Bitcoin mining uses S9 machines manufactured in China, with no other alternative use. They will generate more than 26,000 metric tons of electronic waste annually as these special purpose machines routinely become obsolete.
- Bitcoin mining has no upside for Morgantown or for the planet.
Power Companies Request Rate Increases So They Can Keep Polluting!

FirstEnergy subsidiaries MonPower and Potomac Edison have requested Public Service Commission (PSC) approval for a rate increase to cover costs for upgrades to the Harrison and Fort Martin power plants.

Both plants are currently owned by MonPower, and they must meet new EPA standards for coal ash disposal and water pollution discharges, or they will need to close by 2028. If approved, the plants could continue operating through 2040.

These modifications will entail $142 million in new construction plus an additional $3 million per year in operating costs.

Customers are still paying an “Environmental Control Charge” to cover the costs of scrubbers installed at Fort Martin in 2009. But additional upgrades to the wastewater treatment for these scrubbers will be needed to meet the new EPA standards.

ELG RULES

EPA adopted rules called “Effluent Limitation Guidelines” (ELG) in 2015 to reduce discharges of arsenic, mercury, selenium, and other pollutants from coal-fired power plants. The ELG rules were delayed and later modified during the Trump Administration. EPA has announced plans to upgrade the Trump-Era ELG rules later this year and is expected to make them more stringent. But in the meantime, the power plants must come into compliance soon, or close.

WHAT ARE THE ALTERNATIVES?

MonPower has analyzed several options in case the plants have to close. They claim that the cheapest replacement alternative would be gas-fired power plants. First Energy has proposed that all of their power plants would be carbon-neutral by 2050, so it is not clear how a gas-fired power plant would be consistent with that goal, or if it would be cost-effective. MonPower also estimated costs for wind and solar generation. Unfortunately, MonPower underestimates the costs for gas-fired power plants and overestimates the costs for wind and solar. Worse, they fail to account for falling prices for wind and solar and increasing costs for gas-fired power plants.

MonPower also estimated the costs of closing both plants in 2028 versus keeping them running through 2040. A third alternative, running Harrison until 2040 but closing Fort Martin by 2035 (the “Intermediate” case) was identified as the lowest-cost option, but costs for all three options differed by less than 0.7%.

None of the alternatives analyzed costs associated with climate change or greenhouse gas emissions, effectively assuming those costs are zero. The estimates also failed to consider any of the current proposals for a carbon tax or emissions costs for greenhouse gases. These would greatly alter the cost-benefit calculations.

RELATED CASES

The PSC last year approved a request by Appalachian Power (ApCo) for rate increases for similar upgrades to the Amos, Mountaineer, and Mitchell power plants. In that case, the plants are co-owned by Virginia and Kentucky, but those states rejected the ApCo request as not cost-effective and not in the best interest of their customers. WV-PSC approved it anyway, so West Virginia ratepayers may need to cover the entire costs.

In another case last year, Longview Power asked the PSC to require MonPower to buy electricity from Longview. The PSC declined to require a “Power Purchase Agreement” at the time, but did direct MonPower to consider that in a future case, probably by June. Stand by to find out if MonPower customers will be required to pay for Longview Power. Longview has been bankrupt twice since 2013, has intervened in the current ELG case, and is likely to push their proposal for ratepayer funding.

WHAT YOU CAN DO

Send comments to the WV Public Service Commission. Be sure to cite Case # 21-0857-E-CN and indicate “Letter of Protest.” Address letters to Karen Buckley, Acting Executive Secretary, WV Public Service Commission, PO Box 812, Charleston, WV 25323. Comments can also be submitted on line at: tinyurl.com/wvpsc-comments.

Ask the PSC to reject MonPower’s request for a rate increase. Tell them to consider the impact of climate change to West Virginians, and to instead invest in energy efficiency and renewables. The size of your electric bill may depend on it.
Lights Out at Watoga State Park

When you step outside at night and look up at the sky, what do you hope to see?

A black velvet canopy accented by constellations and possibly other galaxies? Or a bluish or orange glow void of stars? Artificial lighting, connected to human development, can block our view of the stars at night. According to the website Space.com and the National Geographic, only one in five North Americans can see the Milky Way at night, and 99% of Americans experience light pollution. This is a stark difference from the way humans lived for millennia. Now most folks living in urban areas may never experience the Milky Way or a starlight canopy over their heads.

What is light pollution, and why is it a problem? The International Dark Sky Association and National Geographic describe it as inappropriate or excessive use of artificial outdoor lighting. Light pollution can have serious environmental consequences for human health, wildlife, plants, insects, and even our climate. Nocturnal light interrupts sleep and confuses Circadian rhythm—the internal, twenty-four-hour clock that guides day and night activities—and affects physiological processes in nearly all living organisms.

International Dark Sky Places (IDSP) was founded in 2001 to encourage communities, parks, and protected areas around the world to preserve and protect dark skies through responsible lighting policies and public education. They maintain a list of sites around the world designated as “International Dark Sky” sites. As of January 2022, 195 such sites have been certified.

So what does this have to do with public lands in West Virginia? In October 2021, the IDSP jointly awarded Watoga State Park, adjacent Calvin Price State Forest, and nearby Droop Mountain Battlefield State Park with Dark Sky Park status, the first such designation in the Mountain State. This international honor was a result of an application submitted by the Watoga State Park Foundation Board.

Since being designated as a Dark Sky Park, Watoga State Park has started offering nocturnal educational programming. In doing so they are raising public awareness of the potential hazards of light pollution. Additionally, WV Department of Natural Resources has confirmed the existence of a population of synchronous fireflies within Watoga State Park. They are the only species in America whose individuals can synchronize their flashing light patterns. The designation by IDSP will help provide additional protection and awareness for this species.

So, if you are looking for a new way to enjoy West Virginia’s public lands, take a trip to Watoga State Park to enjoy the night life. The light bulb may have been one of man’s greatest inventions, but sitting in the dark under a canopy of stars is...well, nothing short of heavenly.
Outings

The pandemic has brought many changes to our lives in the past two years—mainly bad. But one positive change is that so many have discovered the importance of being outdoors in nature. Americans are hiking, bicycling, birding, paddling, angling, and more in greater numbers than ever before. Whether these outdoor experiences translate into increased awareness and support for our environment remains to be seen.

Sierra Club’s heritage has always been about combining outdoor adventure with conservation, and the Club’s outings are well-suited to lead diverse people in outdoor experiences while advocating for the land and water resources we enjoy. Nationwide, Sierra Club outings leaders report that since our long COVID closure our hikes and other outings are filling up and have long waiting lists. Those of us on West Virginia’s very short list of outings leaders are no exception.

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Saturday, March 19, 2022
Day Hike: Appalachian Trail, Keys Gap to Loudoun Heights, VA/WV

Our series of AT hikes in Northern Virginia continues with this ridgetop hike along the VA/WV border to the edge of Harpers Ferry NHP. Late winter will allow for some views, but it is mainly a reasonably level walk in the woods—a good introduction to America’s premier trail. The hike is open to adults and children (accompanied by adults) capable of a winter hike on uneven terrain. Attendance will be limited by NPS regulations. Well-behaved dogs on leashes are welcome. There is no charge for this hike, though contributions are welcome.

Distance/ Difficulty: 6.5 mile MODERATE
Duration: 3.5 hours
Bring: water, lunch, and a snack if desired. Wear footwear and clothing appropriate for a winter hike on varied terrain.
Meet: 10 am. Keys Gap AT parking lot at the VA/WV state line on Route 9. Note that this lot is limited in space, so park closely to others. Additional parking may be available along the highway nearby. Recommended approach to the lot is from the east (VA) to avoid a left turn on the highway.
Leader: Chris Craig ccraig@laurellodge.com or 304-433-1260
Nearest towns: Harpers Ferry, WV and Hillsboro, VA
Cancellation policy: We will carry on in light rain or snow but cancel in ice or heavy precipitation.
Additional information: We aim to keep everyone healthy. Please do not attend if you are ill or have recently tested positive for COVID-19. Masks are welcome but not required, and we will practice reasonable distancing.

Above and right: Sierrans enjoyed an Urban Ecotherapy Walk at White Park in Morgantown just after Thanksgiving. PHOTO BY ADRIENNE EPLEY BROWN.

If you enjoy West Virginia’s hills, rivers, and parks, consider whether you’d enjoy sharing them with others in a group setting. We especially need leaders in the central, western and southern parts of the state. The opportunities are limitless at various levels, from easy nature walks in town parks to long, wilderness treks. And we haven’t even mentioned bike rides, river trips, or other types of experiences. Sierra Club’s requirements for day trip leadership are few: Complete a short online or in-person course, have skills and experience in the type of outings you lead, become certified in at least basic first-aid skills, and complete an outing under the mentorship of another certified Club leader.

For more information on the Sierra Club outings program and becoming a leader, contact Chris Craig at ccraig@laurellodge.com or 304-433-1260.

And speaking of those long outings waiting lists, we want to help Sierra members and volunteers have a better chance to participate in our outings. Starting with these spring offerings, events will now be publicized through club emails, on Club webpages, and—as possible—in this newsletter for a few days before they are publicized in the general media. If you are a member or volunteer wanting to join our outings, watch your inbox or, better yet, go frequently to Sierraclub.org/west-virginia/events and register early. This will ensure that you find a spot before it fills up.
Sunday: March 27, 2022
Day Hike: Snake Hill Trail, Snake Hill Wildlife Management Area (WMA)

Snake Hill Trail is a 3.5-mile, lightly trafficked loop that features seasonal wild flowers and outlooks. The hike can be muddy and has uneven terrain. The trails are not well marked. It is primarily used for hiking, walking, x-country skiing and nature trips. The trail is dog- and mountain-bike friendly.

- Distance: 3.5 miles
- Difficulty: EASY
- Duration: 2 hours
- Meet: Snake Hill WMA Parking Lot, located in western Preston County and eastern Monongalia County. From Cheat Lake, WV, follow Cheat Road (CR-857) south two miles to left turn onto Tyrone Road. Continue 1.6 miles to a left turn onto Snake Hill Road. Continue approximately 15 miles into the management area. From highway WV-7 at Masontown, WV, follow Rohr Road (CR-19) north approximately 2.5 miles. The latter route becomes Snake Hill Road, and the management area is located 2.5 miles ahead.
- Leader: Adrienne Epley Brown, adrienne_epley@yahoo.com or 702-465-9119.
- Nearest town: Morgantown, WV
- Cancellation policy: We will carry on in drizzle but postpone in case of ice or heavy precipitation. RSVP for updates. Snake Hill Road is not well-maintained and trails can become muddy and slick.

Saturday, April 9, 2022
Day Hike: Antietam National Battlefield – Southern Section

In September 1862 Robert E. Lee led Confederate forces on their first invasion into Northern territory. That move culminated in the Sept. 17 battle at Antietam Creek—the bloodiest day in American history, with an estimated 26,000 casualties. Our hike will survey the southern part of the battlefield, taking us along a long stretch of the creek and across the famed Burnside Bridge. Paths will be smooth, but there are considerable hills. There is no charge for the hike, but entry to the battlefield requires a fee ($20/car or $10/pedestrian) or National Park pass. The hike is suitable for adults and children (accompanied by an adult) capable of the hills and distance. It is unsuitable for dogs.

- Distance: 6.4 miles
- Difficulty: MODERATE
- Duration: 3.5 hours
- Bring: Water, a snack, protection from sun.
- Meet: 9 am. Newcomer House parking lot (off MD Route 34, east of the National Cemetery), Antietam National Battlefield.
- Leader: Chris Craig c craig@laurellodge.com or 304-433-1260
- Nearest town: Sharpsburg, MD
- Cancellation policy: We will cancel in case of ice or heavy precipitation.
- Additional information: We aim to keep everyone healthy. Please do not attend if you are ill or have recently tested positive for COVID-19. Masks are welcome but not required, and we will practice reasonable distancing.

Peak foliage had turned to late autumn and temperatures dropped as eleven Sierrans gathered at Cacapon State Park for a pre-Thanksgiving hike on the Ziler Loop trail.

PHOTOS BY CHRIS CRAIG

Sunday, April 24, 2022
Day Hike: Mason Dixon Historical Park - Fairy Door Trail

This hike is open to all. The Fairy Door trail is a great way for children to connect to the outdoors and for adults to reconnect with their inner child. We will start on the Green Trail next to Dunkard Creek. The trail will take us to the Third Crossing of Dunkard Creek site. After passing this site we will connect to the Bluebell Trail/Fairy Door Trail. We will follow the Bluebell trail around the hillside to view the Fairy Houses and reconnect to the Green Trail to form a loop. We will cap the hike at 15 people, so RSVP.

- Distance: 1 mile
- Difficulty: EASY
- Duration: 90 min
- Bring: snack, water, sunscreen, and shoes for the varied terrain
- Meet: 10 am at the Lower Parking Lot adjacent to Dunkard Creek and Basketball Court, 79 Buckeye Rd., Core, WV.
- Leader: Adrienne Epley Brown, adrienne_epley@yahoo.com or 702-465-9119.

We will carry on in drizzle but postpone in case of a downpour. This is a unique hike. Situated along the trail are miniature and humble abodes of fairies, gnomes, and other creatures. These miniature creations feature tiny benches, fence posts, and welcome signs, perfect for the inhabitants. Local artists came together and, with the help of an Arts Mon Impact Grant, made the idea a reality in the spring of 2020. masondixonhistoricalpark.com

Please do not attend if you are ill or have recently tested positive for COVID-19. Masks are welcome but not required, and we will practice reasonable distancing.
**Saturday, May 14, 2022**

**Day Hike: Tuscarora Trail, Morgan County, WV**

In our exploration of West Virginia’s section of the Tuscarora Trail, this hike will fill in the gap between the northern woods near the Potomac River and Sleepy Creek Wildlife Management Area. We will start at Spruce Pine Hollow County Park and hike an easy out and back to the south followed by a more moderate out and back to the north. Those wishing an easy, shorter hike may join us for just the first part. Some of the hike will be on quiet country roads surrounded by fields, orchards, woods, and a few houses. At other times we’ll be on forest trail with varied trees and shrubs. The hike is suitable for adults and children (accompanied by an adult) capable of the distance on uneven terrain. Well-behaved dogs on leashes are welcome.

- **Distance/ Difficulty:** 8.7 miles/MODERATE, with option for 4.2/EASY
- **Duration:** 5 hours. Option for 2 hours.
- **Bring:** water and lunch, protection from sun and bugs.
- **Meet:** 10 am. Spruce Pine Hollow County Park, WV Route 9. From I-81 take WV Route 9 west 14 miles to park entrance on the left (south). From Berkeley Springs take Route 9 east 8.2 miles and turn right.
- **Leader:** Chris Craig
  ccraig@laurellodge.com
  304-433-1260
- **Nearest town:** Berkeley Springs, WV
- **Cancellation policy:** We will cancel in heavy rain.
- **Additional information:** We aim to keep everyone healthy. Please do not attend if you are ill or have recently tested positive for COVID-19. Masks are welcome but not required, and we will practice reasonable distancing.

**Satuday, June 18, 2022**

**Day Hike: Appalachian Trail, Blackburn Center to Buzzard Rock and Rocky Knoll, WV/VA**

Continuing our series of AT hikes in Northern Virginia, we will hike out and back between the Blackburn Center and the scenic Buzzard Rock overlook. Those completing the full hike will then go out and back south of the Blackburn Center. Most of our hike will be on the ridge, avoiding the famed “Rollercoaster” section a bit to the south. There will be some rocky sections on the trail. Be prepared for possible high temperatures, as we’ll be close to the summer solstice. The hike is suitable for adults and children (accompanied by an adult) capable of the distance on uneven terrain. Well-behaved dogs on leashes are welcome.

- **Distance/ Difficulty:** 10.4 miles, MODERATE. Option for 5.6 MODERATELY EASY.
- **Duration:** 6 hours. Option for 3 hours.
- **Bring:** plenty of water, lunch and possibly snacks. Protection from bugs.
- **Meet:** 10 am. Blackburn Center, 34899 Appalachian Trail Road, Round Hill, VA. From VA Route 9 between Hillsboro, VA and the WV line, turn south on VA 751 (Cider Mill Road) for 1.5 miles, then right on VA 719 (Woodgrove Road) for 2 miles. Turn right on VA 713 (Appalachian Trail Road). Park at the first parking area within the Blackburn Center, about 2 miles up the hill from Woodgrove.
- **Leader:** Chris Craig
  ccraig@laurellodge.com
  304-433-1260
- **Nearest town:** Round Hill, VA
- **Cancellation policy:** We will cancel in heavy rain.
- **Additional information:** We aim to keep everyone healthy. Please do not attend if you are ill or have recently tested positive for COVID-19. Masks are welcome but not required, and we will practice reasonable distancing.

Sierrans geared up for the holidays in the best way possible: Outdoors! At West Virginia Botanical Garden, Core, WV, December 19. PHOTO BY ADRIENNE EPLEY BROWN

On the weekend prior to Christmas and the solstice, 14 Sierrans crossed the Shenandoah River from Harpers Ferry and climbed to the top of Loudoun Heights. The newly reconfigured Appalachian Trail up the mountain made the climb seem easier than in the past. But the climb was still vigorous enough to keep everyone warm on a chilly December day. PHOTO BY CHRIS CRAIG.
The WV Chapter of the Sierra Club has a volunteer opportunity for Chapter Compliance Officer. The Chapter Compliance Officer serves as Election Law Compliance Officer to the Chapter, advising those involved in a chapter’s political program about how to conduct political activities to ensure compliance with the provisions of its own state and local election laws, as well as Sierra Club policies and restrictions.

**DUTIES OF THE CHAPTER COMPLIANCE OFFICER:**

- Ensure that the political campaign activities of the chapter and its entities adhere to all applicable state and local election regulation and reporting requirements. This includes responsibility for compliance with the laws and regulations pertaining to direct and in-kind contribution limits, public and member communications, fundraising restrictions, and the reporting of campaign contributions and expenditures.

- Explain, justify, and persuade Club members to accept and comply with all appropriate Sierra Club policies and Club-related restrictions as stated in the Sierra Club Political Team Compliance Guidelines and other related resources.

- Maintain good communications with the chapter chair, political chair, political action committee treasurer(s) and staff regarding pertinent political campaign activities.

- Serve as a compliance resource for the Chapter’s political program.

- Keep informed of any changes in regulations and reporting changes in filing dates and requirements for various state and local elections types, the application of 501(c)(4), PAC, and independent expenditures, and other information relating to the Chapter’s state and local campaign-related activities.

- This is a great opportunity for someone who is tired of our current politicians, but may prefer to work behind the scenes. If interested, or if you just want to find out more, contact the WV Chapter Political Committee, at jkotcon@gmail.com or call 304-594-3322.

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**Wanted: Chapter Secretary**

The WV Chapter of the Sierra Club needs a new secretary. Volunteering for this position would make you a voting member of the Executive Committee, and you would take minutes of quarterly meetings, currently held virtually.

The most important requirement for the position is enthusiasm; however, experience with Word software and email is helpful. If you are someone who:

- Is unsure of the issues, procedures, and policies of the Sierra Club;
- Has limited free time but would like to support your local chapter’s work; and/or
- Would like to contribute directly to protecting our environment this is a great opportunity for you!

For more information contact Mel Waggy at sierraclub.wv@gmail.com.

Of her past six years as secretary, Mel has this to say:

“Being Chapter Secretary has been a rewarding experience. Not only has it given me the opportunity to learn more about environmental issues important to West Virginians, it has also allowed me to see firsthand how our Chapter’s ExComm functions. This is a group of wonderfully knowledgeable volunteers who work hard to protect those things we love most about West Virginia—community, wild places, mountains, rivers, clean air and water, and wildlife. As Secretary I was able to support their efforts in a meaningful way with a limited time commitment.”
Chapter ExComm Meeting

The next meeting of the WV Chapter of Sierra Club Executive Committee will be held online at 10 am – 2:30 pm, Saturday, April 2.

Email sierraclub.wv@gmail.com or call 304-314-2709 for more information or to receive the link.