

2019 Drawdown Report



The Claytor Lake Technical Advisory Committee and
The Friends of Claytor Lake.

Claytor Project No. 739
January 20, 2020

**Claytor Project No. 739
Water Management Plan
2019 CLAYTOR LAKE DRAWDOWN REPORT**

The Federal Energy Regulatory Commission (Commission) issued Order Issuing New License on December 27, 2011 (License) to Appalachian Power Company (Appalachian) allowing the continued operation of the Claytor Hydroelectric Project. As part of the approved Water Management Plan (Article 405 of the License), Appalachian may conduct non-emergency reservoir drawdowns for the purpose of minimizing the impact of any project maintenance activity requiring a reservoir drawdown on aquatic resources in the project reservoir and downstream of the project and to allow shoreline property owners sufficient time to plan shoreline maintenance activities.

In accordance with the Water Management Plan, Appalachian consulted with the U.S. Fish and Wildlife Service, Virginia Department of Game and Inland Fisheries, Virginia Department of Conservation and Recreation, Virginia Department of Environmental Quality, Pulaski County, New River Planning District Commission and the Friends of Claytor Lake (FOCL) on the 2019 Claytor Lake drawdown plan. Initially, Appalachian proposed a three-foot drawdown. In response, FOCL and the Pulaski County Board of Supervisors requested a five-foot drawdown for 2019 to enable more people to effectively use drawdown. There being no objection from other agencies or organizations, Appalachian filed a plan for a five-foot drawdown with the Commission on May 31, 2019. On October 10, the Commission issued *Order Approving Reservoir Drawdown Plan Under Article 405* (Order). The purpose of the scheduled drawdown was to allow shoreline property owners to conduct shoreline maintenance activities while minimizing the impact of the drawdown on aquatic resources within the Project boundary.

A non-emergency drawdown of Claytor Lake for shoreline maintenance purposes was last conducted in November 2017. Included were mussel salvage activities to mitigate for impacts to mussels. The drawdown plan for 2019 was patterned after the 2017 drawdown plan that had also been approved for a five-foot drawdown. The following is a report on the implementation of the 2019 drawdown.

Publicity/Education

On October 14, 2019 Appalachian sent a letter to Claytor Lake property owners informing them of the details regarding the drawdown scheduled for November 2019. The letter also contained information about mussel salvage during drawdown, including instructions on returning dewatered mussels to deeper water and photos of mussels commonly found in Claytor Lake. Special instructions were given in the event Pistolgrip mussels (*Tritogonia verrucosa*), a state threatened species, were found.

Pulaski County included information about drawdown and mussel salvage through various emails and Weekly Update Reports to the county's Board of Supervisors, constitutional officers, and county leadership and supervisory personnel and support staff.

FOCL provided information about drawdown and mussel salvage through its website, on its Facebook page, and in emails. On October 28, 2019, FOCL sent a letter about drawdown and mussel salvage to lake area residents that included a post card to be returned to FOCL with information on how shoreline property owners used drawdown, how many mussels were returned to the water, and the length of shoreline involved.

Drawdown Schedule

The 2019 drawdown began Monday, November 4, 2019 at 8 a.m. The reservoir was lowered one foot per day until it reached the 1841 foot contour elevation (for a total of five feet below full pond) on Saturday morning, November 9. The reservoir remained five feet down until 10 p.m. Sunday, November 17, when it was scheduled to begin refilling. The lake returned to the minimum required level for November of 1845 by November 25, 2019.

Mussel Salvage Event

As with the 2017 drawdown plan, a key component of the 2019 plan was mitigating for impacts to mussels. Mussel mitigation involved recruiting lakeshore property owners and volunteers to return mussels stranded by drawdown to deeper water. In addition to publicity about mussel salvage sent out by Appalachian, Pulaski County and FOCL, a volunteer mussel salvage event was held on Saturday, November 9, 2019. The event was organized by FOCL with generous support and participation by Appalachian, Virginia Department of Game and Inland Fisheries (VDGIF), Claytor Lake State Park, Pulaski County, FOCL, local schools, organizations, businesses and others.

One hundred and thirty-six individuals participated in the volunteer mussel salvage event on November 9. Volunteers included 2 from Appalachian, 9 from VDGIF, 5 FOCL members, 21 from Pulaski High School, 8 from the New River Chapter of Master Naturalists, 25 from Radford University, 15 from the Virginia Tech, 6 from Boy Scout Troops 19 and 141, 2 from Claytor Lake State Park, 3 Pulaski County staff members with an emergency response boat, 2 from the Isaac Walton League of Christiansburg, 17 from The River Church in Blacksburg, 20 local citizens and property owners, and 1 reporter.

Participants met at one of two meeting sites: Water's Edge marina meeting facility at Claytor Lake State Park and Pulaski County's Harry DeHaven Park. Breakfast and lunch foods were provided by FOCL and drinks by Virginia Eagle Distributing Company.

Following training and orientation by VDGIF and FOCL, volunteers were deployed in teams to mussel salvage sites on foot, by car, and by boats provided by VDGIF, FOCL and private citizens. Multiple teams were sent to sites with long stretches of shoreline. In order to compare data from year-to-year, most of the same sites salvaged in 2017 were selected for salvage in 2019.

Most volunteers were instructed to count and gently toss mussels into deeper water without identifying mussel species unless they suspected a Pistolgrip. Five teams with

VDGIF personnel and/or leaders knowledgeable about mussels did identify mussel species at their salvage sites. Species identified were Giant Floater (*Pyganodon grandis*)(42.78%), Paper Pondshell (*Utterbackia imbecillis*)(50.22%), Eastern Elliptio (*Elliptio complanata*)(6.76%), Pistolgrip (*Tritogonia verrucosa*)(0.10%), Pocketbook (*Lampsilis ovata*)(0.07%), and Purple Wartyback (*Cyclonaias tuberculata*)(0.07%).

The total number of mussels salvaged during the November 9, 2019 mussel salvage event was 7,604 live mussels. Included were 3 Pistolgrip mussels found at the same site at which Pistolgrips were found during the three previous mussel salvage events. The number of mussels salvaged during this 2019 event compares to a total of 6,204 mussels with 24 Pistolgrips salvaged in 2017, 1,363 total mussels including 20 Pistolgrips salvaged in 2015, and 6,797 total with 4 Pistolgrip mussels salvaged in 2012.

Drawdown Use and Mussel Salvage by Shoreline Property Owners

Shoreline property owners were encouraged to report their use of drawdown and to return stranded mussels to deeper water during drawdown. A form was provided on FOCL's website and a response card was included in FOCL's letter to property owners to report their use of drawdown and the number of mussels they salvaged. Ninety responses were received representing at least 33,491 feet of shoreline.

Of the respondents, the majority reported using drawdown for multiple shoreline maintenance activities. Most (74) reported using it for debris clean up; 40 used drawdown to repair existing shoreline stabilization; 32 did dock maintenance; 4 inspected shoreline structures; 1 removed old steps and rail; and 2 installed new shoreline stabilization.

Several respondents expressed their thanks for drawdown, remarking it made it possible to do shoreline maintenance work they otherwise would not have been able to do. One requested an annual drawdown for maintenance and clean up; another said they needed a seven-foot drawdown to do repair work.

Many respondents made note of mussels. Eighteen responded they found no mussels along their shorelines. Respondents who found mussels salvaged 1,440 mussels. One property owner reported finding 45 Pistolgrip mussels whose identity was confirmed via photos with VDGIF staff.

When the number of mussels salvaged by property owners is added to the number of mussels salvaged during the volunteer mussel salvage event on November 9, a total of 9,044 mussels were salvaged during the 2019 five-foot drawdown. This compares to 8,086 total mussels salvaged during the 2017 five-foot drawdown, 1,792 total mussels salvaged during the 2015 three-foot drawdown (interrupted by rain and inflow), and 8,975 total mussels salvaged during the 2012 three-foot drawdown.

Included with this report:

AEP letter to Commission requesting approval (contains 2019 drawdown plan)
Commission Order Approving Reservoir Drawdown Plan
Appalachian Oct 14, 2019 letter to property owners
photos of Nov 9 mussel salvage event
Nov 9 mussel salvage counts by site
Nov 9 species count by VDGIF led teams
FOCL drawdown response card & website form
spreadsheet of property owner responses

FOCL Drawdown Homeowner Card

Drawdown Work: **Very important to complete!**

Document of drawdown work is important. Please provide the following:

Name: (optional) _____

Lake Address: (optional) _____

Total Lake Frontage: _____ **feet. Feet of Shoreline Accessible:** _____

Work completed during the drawdown:

- Shoreline stabilization (new) _____ ft _____Type
- Dock Maintenance _____ ft _____Type
- Shoreline stabilization repair _____ ft _____Type
- Shoreline cleanup of debris _____ ft _____(amount/type)
- Other: _____

Mussels:

Please pick up mussels encountered during the drawdown and gently toss them into deeper water.

Let us know about your efforts:

_____ # Mussels found _____# Mussels relocated _____ feet of shoreline

Email address: _____



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Ms. Kimberly Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

May 31, 2019

**Re: Appalachian Power Company
Claytor Hydroelectric Project No. 739
License Article 405 – Reservoir Drawdown**

Dear Secretary Bose:

On December 27, 2011, the Federal Energy Regulatory Commission (Commission) issued its *Order Issuing New License* for the Claytor Hydroelectric Project No. 739. Article 405 of the license requires that Appalachian Power Company (Appalachian) file with the Commission, for approval, a reservoir drawdown plan at least three (3) months prior to implementing a non-emergency reservoir drawdown. Friends of Claytor Lake (FOCL) and Pulaski County have requested that Appalachian conduct a non-emergency drawdown of the Claytor reservoir in the fall of 2019 in order to allow for shoreline property owners to perform shoreline maintenance and construction activities. Enclosed for Commission approval is a proposed drawdown plan for a non-emergency five-foot drawdown starting Monday, November 4, 2017.

A plan proposing a three-foot drawdown was provided to the Virginia Department of Game and Inland Fisheries (VDGIF), Virginia Department of Conservation and Recreation (VDCR), Virginia Department of Environmental Quality (VDEQ), Pulaski County and Friends of Claytor Lake (FOCL) on April 16, 2019 and to the U.S. Fish and Wildlife Service (FWS) and the New River Valley Regional Commission (NRVRC) on April 17, 2019. Comments were received from Pulaski County, NRVRC, VDGIF, VDCR (Claytor Lake State Park) and FOCL.

The Pulaski County Administrator conveyed the Pulaski County Board of Supervisors' request for a five-foot (5') level because it affords its citizens and property owners the ability to more safely, efficiently and cost effectively clean debris, properly maintain their structures and install necessary erosion control measures along the shoreline that ultimately benefit AEP, the county, the lake ecosystems and all who visit and enjoy the natural resource. The NRVRC indicated that the three-foot drawdown proposal was not in conflict with regional plans, policies and goals. VDGIF indicated that their aquatic biologists reviewed the 2019 Drawdown Plan for the Claytor Project and that based on the freshwater mussels observed and catalogued during the five-foot 2017 drawdown relative to previous three-foot drawdowns, they have no concerns about a five-foot drawdown occurring in 2019. VDCR stated that they had no concerns with a five-foot drawdown. FOCL requested a five-foot drawdown to enable more people to use the drawdown

for shoreline maintenance and that greater maintenance is needed following the recent high inflow events. There were no other written comments.

The drawdown was further discussed at the Water Quality/Water Management Technical Review Committee (WQWMTRC) Annual meeting held on May 16, 2019. Appalachian explained that a three-foot drawdown was proposed because relatively fewer permit applications were received prior to the 2017 five-foot drawdown than prior to the 2015 three-foot drawdown, there was a major shoreline management violation which occurred during the 2017 five-foot drawdown which had only recently been resolved and the potential for erosion is unknown.

FOCL representatives explained that there were very few contractors on the lake and limited available equipment. Thus property owners need to be able to maintain their structures. Further, the Shoreline Management Plan encourages maintenance of its structures. FOCL and Pulaski County agreed to assist Appalachian with publicizing the need to obtain the appropriate permits prior to conducting any work, especially during the drawdown.

A revised five-foot drawdown plan was subsequently forwarded to the WQWMTRC on May 21, 2019 with a request to provide comments on the revised plan by May 30. Appreciation was received from Pulaski County and FOCL. Documentation of consultation is attached.

Appalachian believes that the information provided is in conformance with Article 405 of its license. If there are any questions, please contact the undersigned at 540-985-2441 or ebparcell@aep.com.

Sincerely,



Elizabeth B. Parcell
Process Supervisor

Enclosures

Xc: R.A. Gallimore – American Electric Power
Henry Parker – Appalachian Power Company
Fred Colburn – American Electric Power
DISTRIBUTION LIST

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Scott Kudlas Brian McGurk Mike McLeod George Devlin Ryan Green	Virginia Department of Environmental Quality
Chris Doss	Virginia Department of Conservation and Recreation
Bill Kittrell John Copeland	Virginia Department of Game and Inland Fisheries
Richard McCorkle	U.S. Fish and Wildlife Service
Jonathan Sweet	Pulaski County
Kevin Byrd	New River Planning District Committee
Cheri Strenz Laura Walters Laura Bullard	Friends of Claytor Lake



2019 CLAYTOR LAKE DRAWDOWN PLAN

Revised May 21, 2019

Background

On December 27, 2011, the Federal Energy Regulatory Commission (Commission) issued *Order Issuing New License* (License) authorizing Appalachian Power Company (Appalachian) to continue to maintain and operate the Claytor Hydroelectric Project (Project), on the New River in Pulaski County, Virginia. License Article 405, Water Management Plan (Final - June 2009) allows for non-emergency drawdowns. Specifically, Article 405 of the license requires the licensee to file, for Commission approval, a reservoir drawdown plan at least three months prior to implementing a non-emergency reservoir drawdown. The purpose of the plan is to minimize the impact of any project maintenance activity requiring a reservoir drawdown on aquatic resources in the project reservoir and downstream of the project, and to allow shoreline property owners sufficient time to plan shoreline maintenance activities.

Further, Article 405 requires the licensee to prepare the plan after consulting with the U.S. Fish and Wildlife Service (FWS), the Virginia Department of Game and Inland Fisheries (VDGIF), the Virginia Department of Conservation and Recreation (VDCR), the Virginia Department of Environmental Quality (VDEQ), Pulaski County, the New River Valley Planning District Committee (New River Valley), and the Friends of Claytor Lake (FOCL). The licensee must include with the plan documentation of consultation, copies of comments, and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the plan accommodated the agencies' comments. The licensee must allow a minimum of 30 days for the agencies to comment, and make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons based on project-specific information.

Prior to the drawdown, the licensee must notify the public and property owners along the shoreline by mail 45 days prior to implementing the drawdown to allow property owners sufficient time to plan shoreline maintenance activities. The notification must include rate (feet per day), limit in feet, term of the drawdown, and any provisions. The Commission reserves the right to require changes to the plan. Upon Commission approval of the plan, the licensee must implement it, including any changes required by the Commission.

Efforts began in 2011, through Pulaski County's Claytor Lake Technical Advisory Committee (CLTAC), to modify previous non-emergency drawdown plans in order to decrease impacts to mussels. (The CLTAC includes representatives from a majority of the above referenced agencies.) Modified drawdowns for shoreline maintenance were held in 2011 and 2012 according to plans developed in consultation with the CLTAC. A 2014 drawdown plan was developed with the CLTAC and approved by the Commission. However, prior to implementation, the drawdown was cancelled at the request of Pulaski County due to siltation problems with the County's water intake in the lake. A 2015 drawdown plan was also developed and approved by the Commission. However, full implementation was impacted by rain and higher flows. A drawdown plan for 2017, approved by the Commission, was implemented with a five foot drawdown.

2019 Drawdown Proposal

1. Conduct drawdown from November 9 through November 17, 2019. (Drawdown scheduled during mid-November to avoid freezing temperatures, and to minimize the impact to recreation.)
2. Depth of drawdown to be five feet from full pond elevation of 1846 NGVD.

3. Lake level to be drawn down one foot per day starting 8 a.m. Monday, November 4, 2019 to reach 1841 NGVD by 8 a.m. Saturday, November 9, 2019.
4. Duration of the drawdown to be nine days, including two weekends.
5. Lake to be allowed to begin refilling at 10 p.m. Sunday, November 17, 2019, with targeted return to normal elevation by 10 p.m. Friday, November 22, 2019, depending upon inflow.
6. Should the 9-day drawdown be impacted by high inflows which prohibit Appalachian from performing the five-foot drawdown, then the drawdown may be extended an equivalent number of days.
7. Appalachian will inform the public of the drawdown at least 45 days prior to implementation.
8. FOCL will encourage participation and publicize information about the drawdown and mussel salvage through media, mailings, phone calls and internet. Information will include distinction between Asian Clams, pistolgrip mussels and other mussels, and the importance of mussel salvage.
9. FOCL will gather information about drawdown usage and mussel salvage from landowners and volunteers. (Send drawdown questionnaire card just prior to drawdown.)
10. A volunteer mussel salvage event will be conducted on the first Saturday of the full drawdown to increase the number of dewatered mussels returned to the water. (Event will be similar to that conducted in 2017.) Team leaders, boat transportation, materials, meeting locations, volunteers and volunteer recruitment, refreshments and organization to be provided by FOCL, VDGIF, Appalachian, Claytor Lake State Park, Pulaski County and others. Additional details include:
 - a. FOCL will conduct meetings for organizers and team leaders prior to the event, and on Saturday morning prior to the arrival of volunteers, organize the event, and train and coordinate team leaders in mussel identification, location (GPS) and data collection, site and volunteer selection, and distribution of materials and logistics of the event.
 - b. Volunteer training will be provided by VDGIF prior to deployment of teams of volunteers with team leaders Saturday morning. Volunteers will be trained in returning mussels to the water and be provided information with which to distinguish between Asian Clams (not to be salvaged), and pistolgrips and other mussels. Volunteers to be provided information prior to the event on what to expect and how to come prepared.
 - c. VDGIF to provide up to three teams experienced in mussel identification to identify and tally mussels by species; other volunteer teams to focus on counting and salvaging total numbers of mussels. (Volunteers to identify only pistolgrip mussels.)
 - d. Appropriate data collection sheets will provided.
 - e. Mussel salvage sites will be selected and prioritized based on likely mussel habitat and previous mussel findings.
 - f. Hours of event will be organized to optimize volunteer time.
 - g. Adequate food and drink will be provided.

h. Coordination with mussel salvage by other entities, such as the Claytor Lake State Park, will be continued.

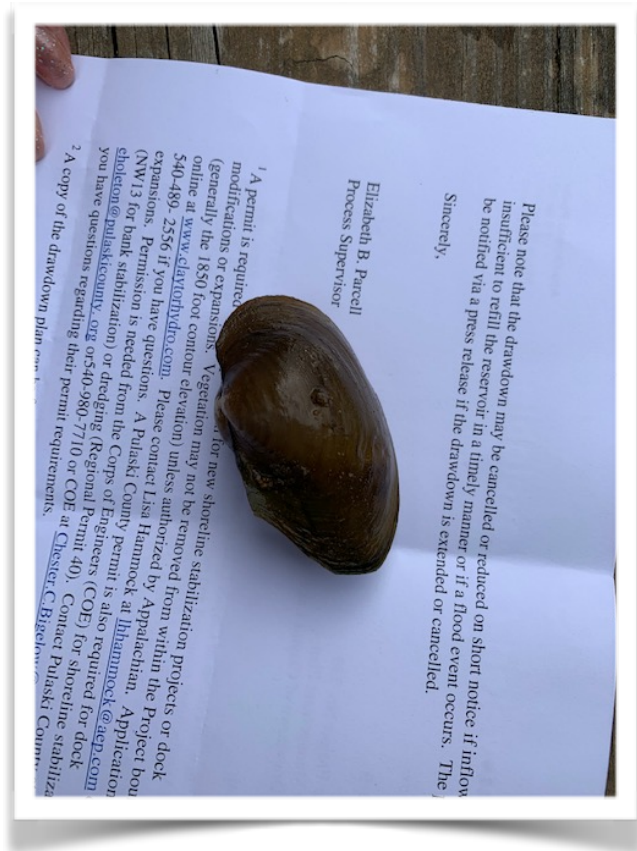
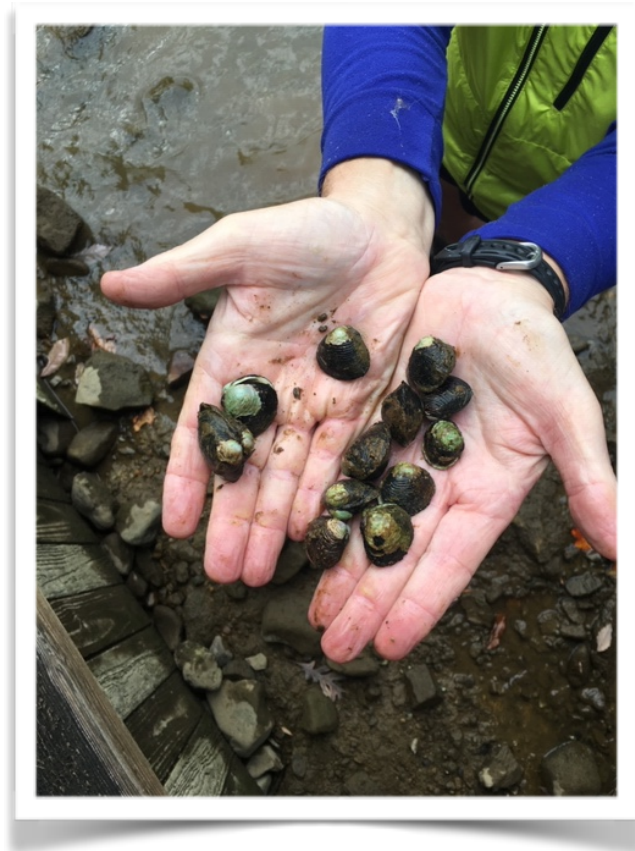
10. Regulatory agencies will have 30 days, beginning no later than April 17, 2019 to comment on the drawdown plan prior to Appalachian's submission to the Commission.

11. Appalachian to file the drawdown plan with the Commission no later than June 1, 2019 to allow for the Commission's required three month review period. Included with the filing will be documentation of consultation with stakeholders as required in Appalachian's license.

12. Changes may be made to drawdown including but not limited to dates and duration if unforeseen circumstances (such as occurred in 2015) warrant it at the time. Agencies, stakeholders and the public will be notified immediately of any changes.

13. A summary report following the drawdown will be prepared through CLTAC with assistance from FOCL, VDGIF and others as needed.

14. Future drawdown plans to be based on the previous years' results, and revised as appropriate.



169 FERC ¶ 62,020
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Appalachian Power Company

Project No. 739-063

ORDER APPROVING RESERVOIR DRAWDOWN PLAN PURSUANT TO
ARTICLE 405

(Issued October 10, 2019)

1. On May 31, 2019, Appalachian Power Company, licensee for the Claytor Hydroelectric Project No. 739 filed a Reservoir Drawdown Plan, for Commission approval, pursuant to Article 405 of the license.¹ The project is located on the New River, in Pulaski County, Virginia, and does not occupy any federal lands.

Background

2. Article 405 of the license requires the licensee to file, for Commission approval, a reservoir drawdown plan at least three months prior to implementing a non-emergency reservoir drawdown. The purpose of the plan is to minimize the effect of any project maintenance activity requiring a reservoir drawdown on aquatic resources in the project reservoir and downstream of the project, and to allow shoreline property owners sufficient time to plan shoreline maintenance activities.

3. Article 405 requires the licensee to prepare the plan after consulting with, the U.S. Fish and Wildlife Service (FWS), the Virginia Department of Game and Inland Fisheries (Virginia DGIF), the Virginia Department of Conservation and Recreation (Virginia DCR), the Virginia Department of Environmental Quality (Virginia DEQ), Pulaski County, the New River Valley Planning District Committee (New River Valley), and the Friends of Claytor Lake (Friends). The licensee must include with the plan documentation of consultation, copies of comments, and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the plan accommodated the agencies' comments. The licensee must allow a minimum of 30 days for the agencies to comment, and make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons based on project-specific information.

¹ *Appalachian Power Company*, 137 FERC ¶ 62,258 (2011).

4. The licensee must notify the public and property owners along the shoreline by mail of the drawdown 45 days prior to implementing the drawdown to allow property owners sufficient time to plan shoreline maintenance activities. The notification must include rate (feet per day), limit in feet, and term of the drawdown. The Commission reserves the right to require changes to the plan. Upon Commission approval of the plan, the licensee must implement it, including any changes required by the Commission.

5. The Commission approved a previous drawdown plan in 2012 that allowed shoreline property owners enough time to conduct shoreline maintenance activities.² The Commission also approved a drawdown plan in 2014;³ however, the licensee canceled the drawdown at the request of Pulaski County due to problems with Pulaski County's water intake in the lake. The Commission also approved a drawdown plan, in 2015;⁴ however, rain and higher flows affected full implementation of the plan. Lastly, in 2017,⁵ the Commission approved a drawdown plan that was implemented with a five foot drawdown.

Licensee's Plan

6. In its drawdown plan, the licensee proposes an impoundment drawdown of five feet from the normal impoundment elevation of 1,846 feet National Geodetic Vertical Datum (NGVD) to allow property owners to perform shoreline maintenance and construction activities. The drawdown would begin by lowering the impoundment elevation by one-foot per day starting on November 4, 2019, at 8:00 a.m., and continuing until the reservoir reaches 1,841 feet NGVD, by November 9, 2019, at 8:00 a.m. The duration of the drawdown would be nine days, including two weekends. The licensee would begin refilling the reservoir on November 17, 2019, at 10:00 p.m., and return to normal elevation by November 22, 2019, at 10:00 p.m., depending on inflow. The licensee would inform the public about the drawdown at least 45 days prior to its implementation.

7. The licensee proposes to increase its efforts to measure and reduce impacts to mussels, within Claytor Lake, caused by the drawdown. The licensee would work with the Friends to encourage participation, and to provide information about the drawdown and the importance of mussel salvage. This information will educate the public about

² *Appalachian Power Company*, 141 FERC ¶ 62,008 (2012).

³ *Appalachian Power Company*, 148 FERC ¶ 62,194 (2014).

⁴ *Appalachian Power Company*, 151 FERC ¶ 62,230 (2015).

⁵ *Appalachian Power Company*, 159 FERC ¶ 62,271 (2017).

mussel salvage through media, mailings, phone calls, and the internet. In addition, information will be gathered regarding Asian Clams, pistolgrip, and other mussels, by means of sending a questionnaire card to land owners and volunteers just prior to the drawdown.

8. The licensee proposes to assess the impact to mussels based on the information collected during the drawdown. A mussel salvage event would take place on the first Saturday of the full drawdown to increase the number of dewatered mussels returned to the water. The licensee and the cooperating agencies would conduct meetings for organizers and team leaders prior to the event, during the event, and on Saturday morning prior to the arrival of volunteers. The licensee and the cooperating agencies would organize the event, and train and coordinate team leaders in mussel identification, location and data collection, site and volunteer selection, and logistics of the event. The licensee and cooperating agencies would select and prioritize sites based on likely mussel habitat and previous mussel findings. The licensee, the Friends, the Virginia DGIF, the Claytor Lake State Park, Pulaski County, and others would provide volunteers and team leaders, boat transportation, materials, meeting locations, and refreshments.

9. The Virginia DGIF would provide volunteer training prior to deployment in teams with team leaders on Saturday morning. The Virginia DGIF would provide up to three teams that had previous experience in mussel identification to identify and tally mussels by species. In addition, other volunteer teams would focus on counting and salvaging total numbers of mussels. The plan allows for changes to the proposed drawdown, such as the dates and duration, for unforeseen circumstances, and the licensee proposes to base future drawdown plans on previous years' results.

Consultation

10. The licensee provided a copy of the draft plan proposing a three-foot drawdown to Virginia DGIF, Virginia DCR, Virginia DEQ, Pulaski County, and the Friends on April 16, 2019, and the FWS, and the New River Valley on April 17, 2019. The licensee provided 30 days for comments. The licensee received comments from Pulaski County, New River Valley, Virginia DGIF, Virginia DCR, and the Friends.

11. On April 22, 2019, the Pulaski County Administrator conveyed the Pulaski County Board of Supervisors' request for a five-foot drawdown rather than the proposed three-foot drawdown. The county stated that the five-foot drawdown would allow its citizen and property owners the ability to more safely, effectively and cost effectively clean debris, properly maintain their structures, and install necessary erosion control measures along the shorelines that would ultimately benefit the licensee, the county, and the lake ecosystem.

12. The New River Valley, on May 2, 2019, responded that the plan is not in conflict with regional plans, policies, and goals. On May 3, 2019, Virginia DGIF commented that their aquatic biologists reviewed the 2019 drawdown plan, and that based on the freshwater mussels observed and catalogued during the previous drawdowns, they had no concerns about a five-foot drawdown occurring in 2019. The Virginia DCR, on May 3, 2019, commented that they had no concern about the 2019 five-foot drawdown. On May 6, 2019, the Friends strongly urged the licensee to implement a five-foot drawdown to enable more people to use the drawdown for shoreline maintenance.

13. The licensee explains that the drawdown was also discussed at the Water Quality/Water Management Technical Review Committee Annual meeting held on May 16, 2019. Following the requests for a five-foot drawdown, the licensee sent a revised five-foot drawdown plan to the resource agencies on May 21, 2019, and provided 10 days for comments. The licensee received appreciation from Pulaski County and the Friends, and no additional comments were received.

Review

14. The licensee's drawdown plan is necessary to allow property owners to perform shoreline maintenance and construction activities. The licensee provided the agencies and stakeholders 30 days to comment on the draft drawdown plan as required under Article 405. The relatively slow drawdown and refill of the reservoir should minimize any adverse effects to aquatic resources. In addition, performing the drawdown during the month of November, when temperatures are colder and vegetative and animal activities reduced, should minimize the effects on recreation and on biological resources. The licensee, in cooperation with the resource agencies and stakeholders, is taking measures to reduce impacts to mussels within Claytor Lake caused by the drawdown. The licensee has adequately consulted and involved the resource agencies, local governments, stakeholders, and residents along the Claytor reservoir. Based on our review, the licensee's plan to drawdown the Claytor reservoir by as much as five feet for a period of nine days during November 2019 should be approved.

The Director orders:

(A) Appalachian Power Company's Reservoir Drawdown Plan, filed May 31, 2019, for the Claytor Hydroelectric Project No. 739, pursuant to Article 405 of the license, to allow a drawdown of Claytor reservoir by as much as five feet, for a period of nine days during November 2019, in order to allow property owners to perform shoreline maintenance and construction activities is approved. The temporary drawdown is approved until November 17, 2019.

(B) The Order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in

section 313(a) of the Federal Power Act, 16 U.S.C. § 8251 (2018), and the Commission’s regulations at 18 C.F.R. § 385.713 (2019). The filing of a request for rehearing does not operate as a stay of the effective date of this order, or of any other date specified in this order. The licensee’s failure to file a request for rehearing shall constitute acceptance of this order

Kelly Houff
Chief, Engineering Resources Branch
Division of Hydropower Administration
and Compliance





An AEP Company

BOUNDLESS ENERGY™

Appalachian Power
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Roanoke, VA 24022-2121
appalachianpower.com

October 14, 2019

Re: Claytor Project No. 739
Water Management Plan
2019 Drawdown of Claytor Lake

Dear Resident:

In cooperation with Friends of Claytor Lake (FOCL) and Pulaski County, Appalachian Power Company (Appalachian) requested and received approval from the Federal Energy Regulatory Commission (Commission) for a temporary drawdown of the Claytor reservoir during November 2019. The purpose of the drawdown is to provide property owners an opportunity to perform shoreline stabilization, cleanup and other maintenance related activities along the shoreline. Permits are required for many activities so if you haven't obtained your permits or started the process, please do so now so that the permits can be issued prior to the drawdown¹. Vegetation removal from within the Project boundary (generally the 1850 foot contour elevation and below) is prohibited unless prior approval is obtained from Appalachian.

The 2019 drawdown is scheduled to begin Monday, November 4, 2019 at 8 am. The reservoir will be lowered approximately one (1) foot per day until it reaches the 1841 foot contour elevation (for a total of 5 feet) on Saturday morning, November 9, 2019. The reservoir will start refilling on the evening of Sunday, November 17, 2019 with a target date of being back to normal elevation by Friday evening, November 22, 2019. Depending upon inflow, water levels may fluctuate during the drawdown period.

Commission approval was based on a drawdown plan² developed in consultation with FOCL, Pulaski County and various state agencies. The drawdown plan includes proposed mitigation for impacts to mussels and we need your help. Mitigation for 2019 includes efforts to increase mussel salvage during the drawdown. This means we need your help in returning mussels (pictures attached) to the water if they are stranded along your shoreline during the drawdown. If you see mussels along the shoreline, please pick them up and gently toss them 5-10 feet into the water. Complete the postcard that you will receive from FOCL in October to document your efforts and mail the completed card to FOCL. If you do not receive the FOCL postcard or would like additional information regarding mussel salvage efforts during the drawdown, please visit FOCL's website, www.focl.org. A mussel salvage event will be held Saturday November 9 during which organized teams of volunteers will walk along the shoreline returning mussels to the water. If you would like to participate in the mussel salvage event, contact Laura Bullard at sunnyside@psknet.com.

For those who participate in the mussel salvage, please note that Asian clams do not have to be returned to the reservoir. A picture of an Asian clam is attached.

Please note that the drawdown may be cancelled or reduced on short notice if inflows are insufficient to refill the reservoir in a timely manner or if a flood event occurs. The public will be notified via a press release if the drawdown is extended or cancelled.

Sincerely,

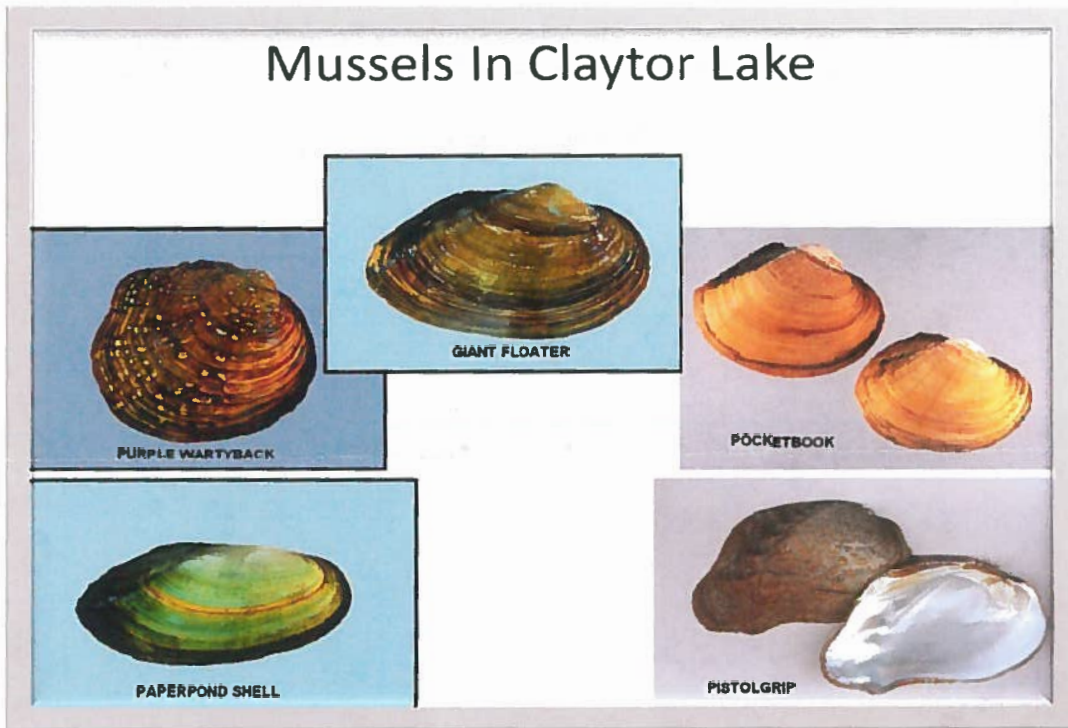


Elizabeth B. Parcell
Process Supervisor

¹ A permit is required from Appalachian for new shoreline stabilization projects or dock modifications or expansions. Vegetation may not be removed from within the Project boundary (generally the 1850 foot contour elevation) unless authorized by Appalachian. Applications are online at www.claytorhydro.com. Please contact Lisa Hammock at lhhammock@aep.com or 540-489- 2556 if you have questions. A Pulaski County permit is also required for dock expansions. Permission is needed from the Corps of Engineers (COE) for shoreline stabilization (NW13 for bank stabilization) or dredging (Regional Permit 40). Contact Pulaski County at eholeton@pulaskicounty.org or 540-980-7710 or COE at Chester.C.Bigelow@usace.army.mil if you have questions regarding their permit requirements.

² A copy of the drawdown plan can be found on www.claytorhydro.com.

Additional information regarding mussels:



There are five species found in Claytor Lake: Typical Size*

- Giant Floater (*Pyganodon grandis*) 70 – 110 mm
- Pocketbook (*Lampsilis ovata*) 70 – 110 mm
- Pistolgrip (*Tritogonia verrucosa*) 70 – 100 mm
- Paper Pondshell (*Utterbackia imbecillis*) 40 – 70 mm
- Purple Wartyback (*Cyclonaias tuberculata*) 70 – 90 mm

The pistolgrip is currently listed as a state threatened species. If you find a suspected pistolgrip mussel, please take a digital photograph, call Brian Watson immediately at (434) 941-5990, and return the pistolgrip to the water. Photographs should be texted to Brian Watson at (434) 914-5990. Please limit the number of photographs of each mussel to a maximum of two and limit the size of each photo to 1 MB.

* Smaller or larger individuals may still be found.

Asian Clams (do not need to be returned to the reservoir):



CLAYTOR LAKE MUSSEL SALVAGE EVENTS
Number of Mussels Salvaged

<u>SITES</u>	<u>2019 (5')</u>	<u>2017 (5')</u>	<u>2015 (3'*)</u>	<u>2012 (3')</u>
Bullard Farm	1,138	1,431 (includes 1 Pistolgrip)	423	1,341
Roseberry & Dublin Hollows	1,447	722	79	224
Mallard Pt & Island btw Roseberry & Dublin Hollows	1,014	723	128	760
Claytor Lake State Park	2,648	1,580	440	1,758
Baptist Camp	not done	114	29	247
Claytor Lake Estates	not done	200	6	146
Harry DeHaven	1,353	652	92	1,202
Lakeview & Shadowland	not done	731	36	595
Cecil's Chapel	not done	not done	20	260
Sprakers/Fintels	4 (includes 3 Pistolgrip)	51 (includes 24 Pistolgrip)	104 (includes 20 Pistolgrip)	257 (includes 4 Pistolgrip)
Blackberry Lane	<u>not done</u>	<u>not done</u>	<u>6</u>	<u>7</u>
TOTALS	7,604	6,204	1,363	6,797
2019, 2017, 2015 #'s are from volunteer salvage event only				
2012 #'s include salvage #'s from several days				
Drawdown depths:				
2019 & 2017 - 5'				
2015* & 2012 - 3'				
(*2015 drawdown depth was not full 3' due to rain & inflow)				

CLAYTOR LAKE MUSSEL SALVAGE, NOV 2019 DRAWDOWN
Species Counts

2019 Mussel Salvage Site/Leader	Giant		Floater		Paper		Pondshell		Eastern		Elliptio		Purple		Wartybac		Pocketbook		Pistolgrip	
	alive	dead	alive	dead	alive	dead	alive	dead	alive	dead	alive	dead	alive	dead	alive	dead	alive	dead	alive	dead
Bullard Farm John Copeland	138	0	22	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mallard Pt Island Brian Watson	435 104	10 2	148 20	21 4	155 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Claytor Lake State Park Dr. Karen Powers w/RU	175	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DeHaven Tim Lane	371	24	903	154	13	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
DeHaven to Lakeview not done																				
Sprakers Bill Kittrell w/Alissa Ganser of VT's AFS	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
TOTALS	1,224	36	1300	179	199	0	2	0	2	0	0	0	0	0	0	2	0	3	0	0
Alive: 2,730	42.78%		50.22%		6.76%		0.07%									0.07%		0.10%		
Dead: 215																				
Total 2,945																				

2019 DRAWDOWN - Property Owners' Use of Drawdown and Mussel Salvage Efforts

New Stabilization	Stabilization Repair	Dock Maint.	Clean-up	Other	# Musrels Salvaged	Total Feet Shoreline	Comments/Notes
			100'	dock inspection	15	289	
	240'		240'		0	100	
	125'	yes	125'		55	240	
			300'		0	125	
			200'		5	500	200' accessible
			400'		3	400	
					2	100	
	75'		75'		30	75	
		yes	50'		30	60	
					88	100	
			40'		0	130	
		yes	200'			200	
		yes	42'		200	42	
	500'		200'			530	
					0	325	100' accessible
			150'			235	
	yes	yes	100'			100	
					7	110	
			yes				
	yes	yes	100'		0	100	
	20'				10	100	
	200'	yes	200'		2	800	200' accessible
		yes	90'			90	work only possible during drawdown; thanks
			100'		0	100	
		yes	60'		15	60	
	40'	yes	40'		22	40	
	yes				0	200	
		yes	yes			85	
	110'		60'		7	170	
	100'	yes			0	100	
	500'	yes	450		20	500	
New Stabilization	Stabilization Repair	Dock Maint.	Clean-up	Other	# Musrels Salvaged	Total Feet Shoreline	Comments/Notes

2019 DRAWDOWN - Property Owners' Use of Drawdown and Mussel Salvage Efforts

					400'				17	400		
	300'				500'				100	500		
	105'				150'				22	220	150' accessible	
	15'				40'				14	65		
					300'		inspected seawall			1465		
	75'		yes		300'					300		
					80'				28	80		
	12'								10	100		
	yes		yes		yes				25	100		
75'					170'					700	400' accessible	
225'					225'					13,200	drawdown made it possible to stabilize shoreline	
			yes		yes				80	180		
	100'				100'					300		
			yes		100'				1	100		
					60'					60	wish for annual drawdown to clean and make repairs	
			yes		yes				0	660		
	yes		yes		yes				30	150		
20'					30'				0	100	60' accessible	
50'			yes		200'				5	200		
					yes		removed old steps & rail			50		
					100'				0	100		
					45'				30	60	45' accessible	
					100'				8	100		
	50'				200'					200		
			yes		yes				22	3,000		
	40'				50'							
							inspected maintenance		0	100		
	35'				50'					800	50' accessible	
			yes		100'				1	100		
	45'				175'				73	175		
	yes				yes				75			
	50'		yes		yes				57	50	drawdown makes it possible to do work and cleanup	
New Stabilization	Stabilization Repair	Stabilization	Dock Maint.	Clean-up	Other	# Mussels Salvaged	Total Feet Shoreline				Comments/Notes	
						100				1,250	cancelled planned work due to family deaths	

2019 DRAWDOWN - Property Owners' Use of Drawdown and Mussel Salvage Efforts

			250'		0	250	debris much worse than prior drawdowns
85'		yes	yes		0	500	
		yes			4		
80	yes				9	80	
yes		yes	seawall & dock inspection		46	1,500	45 live pistolgrips verified by Brian Watson, VDGIF
		yes			0		
yes	yes	yes			48		
		yes					work wouldn't have been done without drawdown
yes		yes			0		no mussels along 1 mile at Little Wytheville
		yes					
		yes					drawdown makes clean up and use of cove possible
		yes					
		yes					thanks for drawdown that helped so much
		yes			0	180	
		yes					
		yes			1		able to do much needed repairs with drawdown
yes		yes			14		
yes		yes			1		
		yes			37		
yes	yes	yes			42		
		yes					need 7' drawdown; 5' not enough to do maintenance
110'	yes	110'			8	110	
					21		
yes		yes					
40	32	74			1,440	33,491	90 responses