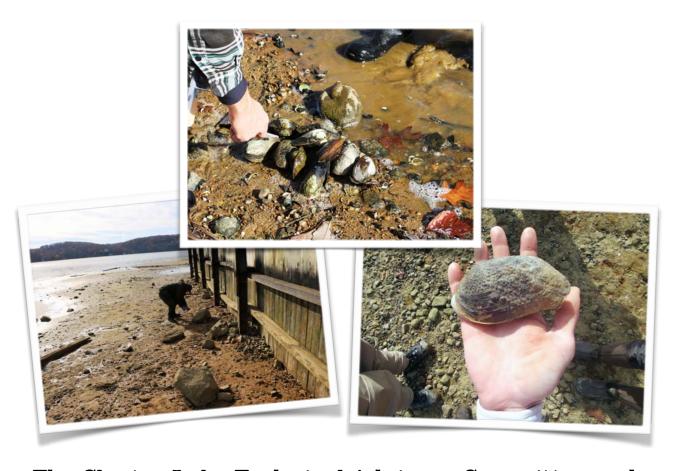


2017 Drawdown Report



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

Claytor Project No. 739 January 1, 2018

Claytor Project No. 739 Water Management Plan 2017 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 2017 Claytor Lake drawdown plan, which was developed through Pulaski County's Claytor Lake Technical Advisory Committee (CLTAC). Following consultation, Appalachian filed the plan with the Commission on May 26, 2017. On June 13, 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 2015. Included were mussel salvage activities to mitigate for impacts to mussels. The drawdown plan for 2017 was patterned after the 2015 drawdown plan. Two main differences between the plans were that a five foot drawdown was approved for 2017 compared to a three foot drawdown for 2015; and a provision was included in the 2017 plan allowing for changes to the drawdown if warranted by unforeseen circumstances. The following is a report on the implementation of the 2017 drawdown.

Publicity/Education

On September 22, 2017 Appalachian sent a letter to Claytor Lake property owners informing them of the details regarding the drawdown scheduled for November 2017. 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. Appalachian also issued news releases informing the public of the pending drawdown as well as of the changes in water levels during the drawdown in the event of high inflows.

Pulaski County advertised the drawdown on the County's Facebook page and website, and verbally told many people about the drawdown. Information about the mussel salvage event and how to participate was sent to the Pulaski County Board of Supervisors, County Administrator, and County staff.

FOCL provided information about drawdown and mussel salvage through its website, on its Facebook page, in emails and in its fall newsletter. In the newsletters sent to lake area residents was 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 2017 drawdown began Monday, November 6, 2017 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 11. The reservoir remained five feet down until 10 p.m. Sunday, November 19, when it was scheduled to begin refilling. The lake returned to the minimum required level for November of 1845 by Tuesday, November 28.

Mussel Salvage Event

As with the 2015 drawdown plan, a key component of the 2017 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 11, 2017. 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 eight individuals participated in the volunteer mussel salvage event on November 11. Volunteers included 5 from Appalachian, 14 from VDGIF, 10 FOCL members, 22 from Pulaski High School, 12 from the New River Chapter of Master Naturalists, 9 Radford University Wildlife Society members, 7 Virginia Tech Wildlife Society members, 4 from the Virginia Tech American Fisheries Society, 2 from Virginia Tech's Freshwater Mollusk Conservation Center, 7 from Radford University's Geography Club, 4 from Boy Scout Troop 141, 3 staff members from Claytor Lake State Park, 2 Pulaski County staff members including an emergency response boat on call, and 7 local citizens and property owners.

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 10 main mussel salvage sites on foot, by car, and by boats provided by VDGIF, Appalachian, FOCL and private citizens. Multiple teams were sent to sites with long stretches of shoreline. In order to compare data from year-to-year, the same sites salvaged in 2015 were selected for salvage in 2017, with the exception of one site that was discontinued due to low numbers of mussels.

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 did identify mussel species at their salvage sites. Species identified were Giant Floater (Pyganodon grandis)(52.08%), Paper Pondshell (Utterbackia imbecillis)(42.93%), Eastern Elliptio (Elliptio complanata)(3.60%), Pistolgrip (Tritogonia verrucosa)(1.16%), Pocketbook (Lampsilis ovata)(0.14%), and Purple Wartyback (Cyclonaias tuberculata)(0.09%).

The total number of mussels salvaged during the November 11, 2017 mussel salvage event was 6,204 live mussels. Included were 24 Pistolgrip mussels found at the same site as Pistolgrips were found in 2012 and 2015, and one Pistolgrip found at another site. This 2017 total compares to a total of 1,363 mussels with 20 Pistolgrips salvaged in 2015, and 6,797 total with 4 Pistolgrip mussels salvaged in 2012. Higher water levels during the 2015 drawdown likely resulted in fewer mussels salvaged in 2015 than during 2012's three-foot drawdown and 2017's five-foot drawdown.

<u>Drawdown Use and Mussel Salvage by Shoreline Property Owners</u>

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 post cards were included in FOCL's fall newsletter for property owners to report their use of drawdown and the number of mussels they salvaged. Eighty-three responses were received representing at least 25,512 feet of shoreline.

Of the respondents, the majority reported using drawdown for multiple shoreline maintenance activities. Most (64) reported using it for debris clean up; 38 used drawdown to repair existing shoreline stabilization; 31 did dock maintenance, 3 inspected shoreline structures; 2 noted using drawdown to create fish habitat; and 3 installed new shoreline stabilization.

Several respondents expressed their thanks for drawdown, remarking that it was important, making shoreline maintenance possible and the shoreline safer for swimming. Some specifically stated that the 5 foot drawdown made it possible to do work that couldn't be done with a 3 foot drawdown. One said a 7 foot drawdown would be better.

Most respondents made note of mussels. Fifteen responded that no mussels were found along their shorelines. Respondents who found mussels salvaged 1,882 mussels. One property owner reported finding 15 Pistolgrip mussels whose identity was confirmed via photos with DGIF 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 11, a total of 8,086 mussels were salvaged during the 2017 five-foot drawdown. This compares to 1,792 total mussels salvaged during the 2015 drawdown, and 8,975 total mussels salvaged during the 2012 three-foot drawdown.

Included with this report:

AEP letter to FERC requesting approval (contains 2017 drawdown plan) FERC Order Approving Reservoir Drawdown Plan Appalachian Sept 22, 2017 letter to property owners photos of Nov 11 mussel salvage event Nov 11 mussel salvage counts by site Nov 11 species count by VDGIF led teams FOCL drawdown response card & website form spreadsheet of property owner responses 2017 drawdown forebay levels



A unit of American Electric Power

Appalachian Power Hydro Generation P O Box 2021 Roanoke, VA 24022-2121 Appalachian Power.com

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

May 26, 2017

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 2017 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 5-foot drawdown starting Wednesday, November 8, 2017.

The proposed plan was provided to the U.S. Fish and Wildlife Service (FWS), Virginia Department of Game and Inland Fisheries (VDGIF), Virginia Department of Conservation and Recreation (VDCR), Virginia Department of Environmental Quality (VDEQ), Pulaski County, New River Valley Regional Commission (NRVRC), and Friends of Claytor Lake (FOCL) on April 17, 2017 for review and comment. Comments were received from NRVRC, VDGIF, FOCL, Pulaski County, and FWS. All comments were favorable. VDGIF indicated that their support did not reflect a desire to return to a 5-foot drawdown going forward and that the increased drawdown will allow for a comparison of the number of mussels exposed during the 3-foot drawdowns in 2012 and 2015. Also, VDGIF indicated that the 5-foot drawdown may provide landowners with an opportunity to conduct additional work along their shoreline, since the 2015 drawdown did not achieve the full 3-foot for the entire period due to with rain and increased inflow.

FWS indicated that their support of the proposed drawdown is contingent upon implementation of the mussel salvage effort to be organized by FOCL, with volunteer training and teams experienced in mussel identification provided by VDGIF. FWS has not identified any federally listed, threatened, or endangered species in the lake that would be affected by the proposed drawdown. If federally listed mussels are found, they must remain exactly where found and all specimens should be photo documented and coordination with the FWS and VDGIF must occur to determine future actions. All comments are attached. There were no other comments.

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 Senior

Enclosure

Xc: Brad Jones - American Electric Power

Henry Parker – Appalachian Power Company Fred Colburn – American Electric Power

DISTRIBUTION LIST

DISTRIBUTION LIST

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 Danny Wilson	Pulaski County
Kevin Byrd	New River Planning District Committee
Cheri Strenz Laura Walters	Friends of Claytor Lake

APPALACHIAN POWER COMPANY CLAYTOR PROJECT No. 739 2017 CLAYTOR LAKE DRAWDOWN PLAN

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, 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.

2017 Drawdown Proposal

- 1. Conduct drawdown from November 11 through November 19, 2017. (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. on November 6, 2017 to reach 1841 NGVD by 8 a.m. Saturday, November 11, 2017.
- 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 19, 2017, with targeted return to normal elevation by 10 p.m. Friday, November 24, 2017, depending upon inflow.
- 6. Should the 9-day drawdown be impacted by high inflows which prohibit Appalachian from performing the full five-foot drawdown then the drawdown down 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 2015.) 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 be 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, 2017, 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, 2017 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.



159 FERC ¶ 62,271 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Appalachian Power Company

Project No. 739-057

ORDER APPROVING RESERVOIR DRAWDOWN PLAN PURSUANT TO ARTICLE 405

(Issued June 13, 2017)

1. On May 26, 2017, 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. 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

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

- 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.
- 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. Lastly, the Commission approved a drawdown plan, similar to this plan, in 2015;⁴ however, rain and higher flows affected full implementation of the plan.

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 6, 2017, at 8:00 am, and continuing until the reservoir reaches 1,841 feet NGVD, by November 11, 2017, at 8:00 am. The duration of the drawdown would be nine days, including two weekends. The licensee would begin refilling the reservoir on November 19, 2017, at 10:00 pm, and return to normal elevation by November 24, 2017, at 10:00 pm, 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

² Appalachian Power Company, 141 FERC \P 62,008 (2012).

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

 $^{^4}$ Appalachian Power Company, 151 FERC \P 62,230 (2015).

with the Friends, Pulaski County, and the Virginia DGIF to encourage participation and to provide information about the drawdown and the importance of mussel salvage. This information will educate the public about 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 consulted on the plan with the following agencies: the FWS, the Virginia DGIF, the Virginia DCR, the Virginia DEQ, the New River Valley, Pulaski County, and the Friends. The licensee provided a copy of the draft plan by an email dated April 17, 2017, to the agencies and stakeholders, and provided 30 days for comments. The licensee received comments from the New River Valley, Virginia DGIF, the Friends, Pulaski County, and the FWS.

- 11. The New River Valley, on April 18, 2017, responded that the plan is not in conflict with regional plans, policies, and goals. On April 19, 2017, the Virginia DGIF commented that it supports the proposed drawdown and is okay with the five-foot drawdown this year; however, this does not represent a desire for a five-foot drawdown going forward. The Virginia DGIF continues to explain that the increased drawdown will allow it to compare the number of mussels exposed in previous three-foot drawdowns and may allow landowners an opportunity to conduct additional work along their shoreline.
- 12. The Friends, on April 20, 2017, commented that it strongly supports the proposed drawdown. Pulaski County, on May 8, 2017, responded that it fully supports the proposed drawdown. The plan meets the desires of Pulaski County of a regular five-foot drawdown to allow property owners an opportunity to perform maintenance activities. Pulaski County also acknowledges that having the ability to extend the drawdown in the event of a high flow event is extremely helpful.
- 13. The FWS, on May 16, 2017, commented that it supports the drawdown contingent upon implementation of mussel salvage efforts described in the plan. The FWS has not identified any federally listed threatened or endangered species in the lake that would be affected by the drawdown. The licensee must coordinate with the FWS and the Virginia DGIF, leave the specimens exactly where they are found, and take photo documentation if it finds federally listed mussels.

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 2017 should be approved.

The Director orders:

- (A) Appalachian Power Company's Reservoir Drawdown Plan, filed May 26, 2017, 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 2017, in order to allow property owners to perform shoreline maintenance and construction activities is approved.
- (B) This 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 § 313(a) of the Federal Power Act, 16 U.S.C. § 825*l* (2012), and the Commission's regulations at 18 C.F.R. § 385.713 (2016). 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





September 22, 2017

Re:

Claytor Project No. 739 Water Management Plan

2017 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 2017. The purpose of the drawdown is to provide property owners an opportunity to perform shoreline stabilization, cleanup and other maintenance related activities along the shoreline¹. Vegetation removal from within the Project boundary (generally the 1850 foot contour elevation and below) is not allowed unless prior approval is obtained from Appalachian.

The 2017 drawdown is scheduled to begin Monday, November 6, 2017 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 11, 2017. The reservoir will start refilling on the evening of Sunday, November 19, 2017 with a target date of being back to normal elevation by Friday evening, November 24, 2017. Depending upon inflow, water levels may fluctuate during the drawdown period.

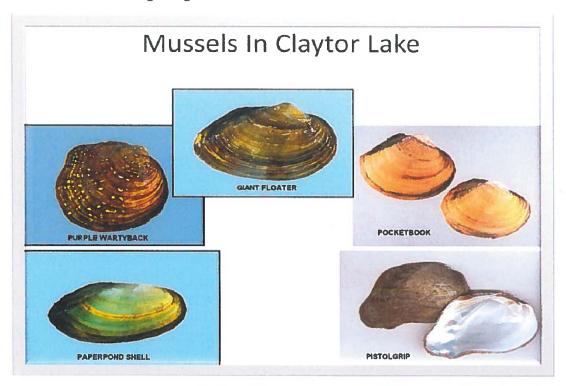
Commission approval was based on a drawdown plan² developed in consultation with FOCL, Pulaski County and various state agencies. The drawdown plan includes proposed mitigation for impacts to mussels. This is where you come in. Mitigation for 2017 includes efforts to increase mussel salvage during the 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 in FOCL's October newsletter 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 11 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 540-392-3055 or www.side@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 cancelled.

Sincerely,

Elizabeth B. Parcell Process Supervisor 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 mm40 - 70 mm

Paper Pondshell (*Utterbackia imbecillis*) Purple Wartyback (Cyclonaias tuberculata)

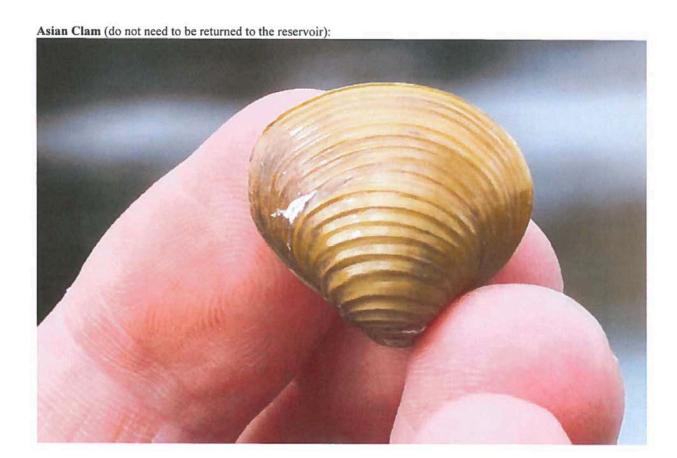
70 - 90 mm

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.

¹ A permit is required from Appalachian for new shoreline stabilization projects or dock expansions. Vegetation may not be removed from within the Pproject boundary (generally the 1850 foot contour elevation) unless authorized by Appalachian. Please contact Lisa Hammock at Ihhammock@aep.com or 540-985-2469 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 dwilson@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.

^{*} Smaller or larger individuals may still be found.



CLAYTOR LAKE MUSSEL SALVAGE EVENTS Number of Mussels Salvaged

SITES	<u>11/11/17</u> (5')	11/7/2015 (3')	2012 #'s (3')
<u>311E3</u>	<u>11/11/1/</u> (5)	<u>11///2015</u> (3)	2012 # 3 (3
Bullard Farm	1,431	423	1,341
	(includes 1		
	Pistolgrip)		
Roseberry &	722	79	224
Dublin Hollows			
Mallard Pt & Island	723	128	760
btw Roseberry & Dublin Hollow	/S		
Claytor Lake State Park	1,580	440	1,758
Baptist Camp	114	29	247
Claytor Lake Estates	200	6	146
Harry DeHaven	652	92	1,202
Lakeview & Shadowland	731	36	595
Cecil's Chapel	not done	20	260
Sprakers/Fintels	51	104	257
	(includes 24	(includes 20	(includes 4
	Pistolgrip)	Pistolgrip)	Pistolgrip)
Blackberry Lane	not done	6	7
TOTALS	6,204	1,363	6,797
2017 - 5' drawdown			
2015 & 2012 - 3' drawdowns			
(2012 #'s include salvage #'s			
from several days)			

FOCL

CLAYTOR LAKE MUSSEL SALVAGE, NOV 2017 DRAWDOWN Species Counts

dead 0 00 0 0 Pistolgrip (sunken island) 1.16% <u>alive</u> 24 25 00 0 0 dead 00 0 0 0 0 0 Purple | Wartybac | Pocketbook alive 0 0 0 0 \sim 7 dead 0 0 0 0 0 0 0 alive 0.09% 7 0 0 0 7 0 0 dead Pondshell Eastern Eliptio 0 00 0 0 0 0 alive 3.65% 33 12 28 0 dead / 7 8 0 0 0 12 43.43% Paper alive 929 489 354 29 2 _ Floater dead \sim 0 7 0 0 \sim ∞ 52.69% Giant <u>alive</u> 1,127 274 375 147 221 89 7 ("handful of deads" not id'd) Bill Kittrell w/Caitlin Carey w/Anna Dellapenta of VT's DeHaven to Lakeview (deads not reported) 2017 Mussel Salvage John Copeland Tiffany Leach **Bullard Farm** Alive: 2,164 **Brian Watson** of VT's AFS 7 Site/Leader Mussel Lab Mallard Pt DeHaven Tim Lane Sprakers TOTALS Island Dead:

2017 DRAWDOWN - Property Owners' Use of Drawdown and Mussel Salvage Efforts

New	Stabilization	Dock			# Mussels	Total Feet	Comments/Notes
Stabilization	_		Clean-up	<u>Other</u>		Shoreline	
			yes				
			yes		22	200,	drawdown is very important to me
		yes	yes		0	208	
	yes	yes			12	100,	
	yes	yes	yes		63	125'	75' accessible
		yes	yes		13	250'	
		yes			0	100,	
	yes	yes			9	170,	
		yes	yes	inspected structures	_	.66	
	yes	yes	yes		210	40,	
	yes		yes		3	,029	485' accessible
			yes		0	100,	90' accessible
	yes	yes	yes		200	.09	
			yes		2	148'	
					4	300,	100' accessible
	yes		yes		0	.08	
	yes		yes		30	400,	350' accessible
	yes		yes			298'	
			yes	inspected structures	12	100,	50' accessible
		yes	yes			185	too much debris to see mussels
		yes	yes			150'	125' accessible
	yes			stacked rock for fish habit	100	148	
		yes	yes		4	125'	
			yes		10	74'	
		yes	yes		80	100,	
	yes		yes		35	275'	
			yes		2	200,	50' accessible
			yes			100,	
			yes		0	100,	
			yes		0	,002	
		yes			0	100,	50' accessible
		yes	yes			.099	
New	Stabilization	Dock			# Mussels Total Feet	Total Feet	<u>Comments/Notes</u>

2017 DRAWDOWN - Property Owners' Use of Drawdown and Mussel Salvage Efforts

						5' drawdown better than 3'; 7' would be great		100' accessible														5' dd made shoreline work possible; pls. cont. dds at 5'	5' dd was much more useful than 3'	thank you! drawdown so helpful		couldn't have done work with only 3' drawdown	drawdown helped make shoreline safer for swimming			thank you; could only make repairs during drawdown			Comments/Notes	
Shoreline	25'	20,	1000,	160	100,	430,	100,	957.	332'	.08	100,	200,	20,	.08	125'	200,	1000,	125'	160'	320'	150,	3000,	1200,	20, 1		100,	130'	25'	1000,		175'	,008	Total Feet	Shoreline
Salvaged	0		10	10	8	16		0	100	m		15	0	10	17	40	200	0		12	200		70	3		8	0	17	27	163	0	09	# Mussels	Salvaged
<u>Other</u>																					inspected structures													<u>Other</u>
Clean-up	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes			yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes		yes	yes		yes	yes	yes	yes		Clean-up
<u>Maint.</u>	yes	yes	yes		yes	yes					yes									yes				yes		yes			yes	yes			Dock	Maint.
Repair	yes					yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes	yes	yes			yes	yes	yes			yes		yes		yes	Stabilization	Repair
Stabilization																		yes				yes											New	<u>Stabilization</u>

2017 DRAWDOWN - Property Owners' Use of Drawdown and Mussel Salvage Efforts

TOTALS for 83 responses	25,512	1,882	64	31	38	3
	10	32				
	45	22	yes	yes	yes	
160' accessible	200,	9		yes		
	125'	10	yes		yes	
	112	0				
0' accessible	100,					
out of town; usually do shoreline maintenance	200,					
0' accessible	200,					
	275	0	yes			
	1800,	0	yes		yes	yes
	93'		yes	yes		
10' accessible	150′	0				
	25'	0	yes			
moved sunken driftwood to deeper water for fish habita	100,	3	yes			
	400,	12	yes		yes	
	300,	12	yes		yes	
found 15 confirmed Pistolgrips; above the bridge	2000,	28		yes	yes	
thank you; drawdown made repairs possible	143'	10	yes	yes	yes	
	175	4	yes			

Date Time	Forebay	Date Time	Forebay	Date Time	Forebay
11/6/17 9:00	1845.5	11/8/17 7:00	1843.5	11/10/17 5:00	1841.6
11/6/17 10:00	1845.5	11/8/17 8:00	1843.5	11/10/17 6:00	1841.6
11/6/17 11:00	1845.4	11/8/17 9:00	1843.5	11/10/17 7:00	1841.5
11/6/17 12:00	1845.4	11/8/17 10:00	1843.5	11/10/17 8:00	1841.5
11/6/17 13:00	1845.4	11/8/17 11:00	1843.4	11/10/17 9:00	1841.5
11/6/17 14:00	1845.3	11/8/17 12:00	1843.4	11/10/17 10:00	1841.4
11/6/17 15:00	1845.3	11/8/17 13:00	1843.3	11/10/17 11:00	1841.4
11/6/17 16:00	1845.2	11/8/17 14:00	1843.2	11/10/17 12:00	1841.4
11/6/17 17:00	1845.2	11/8/17 15:00	1843.2	11/10/17 13:00	1841.3
11/6/17 18:00	1845.1	11/8/17 16:00	1843.2	11/10/17 14:00	1841.3
11/6/17 19:00	1845.1	11/8/17 17:00	1843.2	11/10/17 15:00	1841.3
11/6/17 20:00	1845.1	11/8/17 18:00	1843.1	11/10/17 16:00	1841.3
11/6/17 21:00	1845.0	11/8/17 19:00	1843.0	11/10/17 17:00	1841.2
11/6/17 22:00	1845.0	11/8/17 20:00	1843.0	11/10/17 18:00	1841.2
11/6/17 23:00	1844.9	11/8/17 21:00	1843.0	11/10/17 19:00	1841.2
11/7/17 0:00	1844.9	11/8/17 22:00	1842.9	11/10/17 20:00	1841.2
11/7/17 1:00	1844.8	11/8/17 23:00	1842.9	11/10/17 21:00	1841.2
11/7/17 2:00	1844.8	11/9/17 0:00	1842.9	11/10/17 22:00	1841.1
11/7/17 3:00	1844.8	11/9/17 1:00	1842.8	11/10/17 23:00	1841.1
11/7/17 4:00	1844.7	11/9/17 2:00	1842.8	11/11/17 0:00	1841.1
11/7/17 5:00	1844.6	11/9/17 3:00	1842.7	11/11/17 1:00	1841.1
11/7/17 6:00	1844.6	11/9/17 4:00	1842.7	11/11/17 2:00	1841.0
11/7/17 7:00	1844.6	11/9/17 5:00	1842.6	11/11/17 3:00	1841.0
11/7/17 8:00	1844.5	11/9/17 6:00	1842.6	11/11/17 4:00	1841.0
11/7/17 9:00	1844.5	11/9/17 7:00	1842.6	11/11/17 5:00	1841.0
11/7/17 10:00	1844.4	11/9/17 8:00	1842.5	11/11/17 6:00	1841.0
11/7/17 11:00	1844.4	11/9/17 9:00	1842.5	11/11/17 7:00	1841.0
11/7/17 12:00	1844.3	11/9/17 10:00	1842.4	11/11/17 8:00	1841.0
11/7/17 13:00	1844.3	11/9/17 11:00	1842.4	11/11/17 9:00	1841.0
11/7/17 14:00	1844.2	11/9/17 12:00	1842.4	11/11/17 10:00	1841.0
11/7/17 15:00	1844.2	11/9/17 13:00	1842.3	11/11/17 11:00	1841.0
11/7/17 16:00	1844.1	11/9/17 14:00	1842.3	11/11/17 12:00	1841.0
11/7/17 17:00	1844.1	11/9/17 15:00	1842.3	11/11/17 13:00	1841.0
11/7/17 18:00	1844.0	11/9/17 16:00	1842.2	11/11/17 14:00	1841.0
11/7/17 19:00	1844.0	11/9/17 17:00	1842.1	11/11/17 15:00	1841.0
11/7/17 20:00	1843.9	11/9/17 18:00	1842.1	11/11/17 16:00	1841.0
11/7/17 21:00	1843.9	11/9/17 19:00	1842.0	11/11/17 17:00	1841.0
11/7/17 22:00	1843.8	11/9/17 20:00	1842.0	11/11/17 18:00	1841.0
11/7/17 23:00	1843.8	11/9/17 21:00	1842.0	11/11/17 19:00	1841.0
11/8/17 0:00	1843.8	11/9/17 22:00	1841.9	11/11/17 20:00	1841.0
11/8/17 1:00	1843.7	11/9/17 23:00	1841.9	11/11/17 21:00	1841.0
11/8/17 2:00	1843.7	11/10/17 0:00	1841.8	11/11/17 22:00	1841.0
11/8/17 3:00	1843.6	11/10/17 1:00	1841.8	11/11/17 23:00	1841.0
11/8/17 4:00	1843.6	11/10/17 2:00	1841.7	11/12/17 0:00	1841.0

11/8/17 5:00	1843.6	11/10/17 3:00	1841.7	11/12/17 1:00	1841.0
11/8/17 6:00	1843.5	11/10/17 4:00	1841.6	11/12/17 2:00	1841.0
Date Time	Forebay	Date Time	Forebay	Date Time	Forebay
11/12/17 3:00	1841.0	11/14/17 1:00	1841.0	11/15/17 23:00	1841.0
11/12/17 4:00	1841.0	11/14/17 2:00	1841.0	11/16/17 0:00	1841.0
11/12/17 5:00	1841.0	11/14/17 3:00	1841.0	11/16/17 1:00	1841.0
11/12/17 6:00	1841.0	11/14/17 4:00	1841.0	11/16/17 2:00	1841.0
11/12/17 7:00	1841.0	11/14/17 5:00	1841.0	11/16/17 3:00	1841.0
11/12/17 8:00	1841.0	11/14/17 6:00	1841.0	11/16/17 4:00	1841.0
11/12/17 9:00	1841.0	11/14/17 7:00	1841.0	11/16/17 5:00	1841.0
11/12/17 10:00	1841.0	11/14/17 8:00	1841.0	11/16/17 6:00	1841.0
11/12/17 11:00	1841.0	11/14/17 9:00	1841.0	11/16/17 7:00	1841.0
11/12/17 12:00	1841.0	11/14/17 10:00	1841.0	11/16/17 8:00	1841.0
11/12/17 13:00	1841.0	11/14/17 11:00	1841.0	11/16/17 9:00	1841.0
11/12/17 14:00	1841.0	11/14/17 12:00	1841.0	11/16/17 10:00	1841.0
11/12/17 15:00	1841.0	11/14/17 13:00	1841.0	11/16/17 11:00	1841.0
11/12/17 16:00	1841.0	11/14/17 14:00	1841.0	11/16/17 12:00	1841.0
11/12/17 17:00	1841.0	11/14/17 15:00	1841.0	11/16/17 13:00	1841.0
11/12/17 18:00	1841.0	11/14/17 16:00	1841.0	11/16/17 14:00	1841.0
11/12/17 19:00	1841.0	11/14/17 17:00	1841.0	11/16/17 15:00	1841.0
11/12/17 20:00	1841.0	11/14/17 18:00	1841.0	11/16/17 16:00	1841.0
11/12/17 21:00	1841.0	11/14/17 19:00	1841.0	11/16/17 17:00	1841.0
11/12/17 22:00	1841.1	11/14/17 20:00	1841.0	11/16/17 18:00	1841.0
11/12/17 23:00	1841.1	11/14/17 21:00	1841.0	11/16/17 19:00	1841.0
11/13/17 0:00	1841.1	11/14/17 22:00	1841.0	11/16/17 20:00	1841.0
11/13/17 1:00	1841.1	11/14/17 23:00	1841.0	11/16/17 21:00	1841.0
11/13/17 2:00	1841.1	11/15/17 0:00	1841.0	11/16/17 22:00	1841.0
11/13/17 3:00	1841.1	11/15/17 1:00	1841.0	11/16/17 23:00	1841.0
11/13/17 4:00	1841.1	11/15/17 2:00	1841.0	11/17/17 0:00	1841.0
11/13/17 5:00	1841.1	11/15/17 3:00	1841.0	11/17/17 1:00	1841.0
11/13/17 6:00	1841.1	11/15/17 4:00	1841.0	11/17/17 2:00	1841.0
11/13/17 7:00	1841.0	11/15/17 5:00	1840.9	11/17/17 3:00	1841.0
11/13/17 8:00	1841.0	11/15/17 6:00	1840.9	11/17/17 4:00	1841.0
11/13/17 9:00	1841.0	11/15/17 7:00	1840.9	11/17/17 5:00	1841.0
11/13/17 10:00	1841.0	11/15/17 8:00	1840.9	11/17/17 6:00	1841.0
11/13/17 11:00	1841.0	11/15/17 9:00	1840.9	11/17/17 7:00	1841.0
11/13/17 12:00	1841.0	11/15/17 10:00	1841.0	11/17/17 8:00	1841.0
11/13/17 13:00	1841.0	11/15/17 11:00	1841.0	11/17/17 9:00	1841.0
11/13/17 14:00	1841.0	11/15/17 12:00	1841.0	11/17/17 10:00	1841.0
11/13/17 15:00	1841.0	11/15/17 13:00	1841.0	11/17/17 11:00	1841.0
11/13/17 16:00	1841.0	11/15/17 14:00	1841.0	11/17/17 12:00	1841.0
11/13/17 17:00	1841.0	11/15/17 15:00	1841.0	11/17/17 13:00	1841.0
11/13/17 18:00	1841.0	11/15/17 16:00	1841.0	11/17/17 14:00	1841.0
11/13/17 19:00	1841.0	11/15/17 17:00	1841.0	11/17/17 15:00	1841.0
11/13/17 20:00	1841.0	11/15/17 18:00	1841.0	11/17/17 16:00	1841.0

11/13/17 21:00	1841.0	11/15/17 19:00	1841.0	11/17/17 17:00	1841.0
11/13/17 22:00	1841.0	11/15/17 17:00	1841.0	11/17/17 18:00	1841.0
11/13/17 22:00	1841.0	11/15/17 21:00	1841.0	11/17/17 19:00	1841.0
11/13/17 23:00	1841.0	11/15/17 22:00	1841.0	11/17/17 20:00	1841.0
Date Time	Forebay	Date Time	Forebay	Date Time	Forebay
11/17/17 21:00		11/19/17 19:00	1841.1	11/21/17 17:00	1841.9
11/17/17 21:00	1841.0	11/19/17 19:00	1841.1	11/21/17 17:00	1841.9
11/17/17 22:00				11/21/17 18:00	
	1841.0	11/19/17 21:00	1841.1		1841.9
11/18/17 0:00	1841.0	11/19/17 22:00	1841.1	11/21/17 20:00	1842.0
11/18/17 1:00	1841.0	11/19/17 23:00	1841.1	11/21/17 21:00	1842.0
11/18/17 2:00	1841.0	11/20/17 0:00	1841.1	11/21/17 22:00	1842.0
11/18/17 3:00	1841.1	11/20/17 1:00	1841.1	11/21/17 23:00	1842.0
11/18/17 4:00	1841.1	11/20/17 2:00	1841.0	11/22/17 0:00	1842.0
11/18/17 5:00	1841.1	11/20/17 3:00	1841.0	11/22/17 1:00	1842.1
11/18/17 6:00	1841.1	11/20/17 4:00	1841.0	11/22/17 2:00	1842.1
11/18/17 7:00	1841.1	11/20/17 5:00	1841.0	11/22/17 3:00	1842.1
11/18/17 8:00	1841.1	11/20/17 6:00	1841.0	11/22/17 4:00	1842.1
11/18/17 9:00	1841.1	11/20/17 7:00	1841.1	11/22/17 5:00	1842.2
11/18/17 10:00	1841.1	11/20/17 8:00	1841.1	11/22/17 6:00	1842.2
11/18/17 11:00	1841.1	11/20/17 9:00	1841.1	11/22/17 7:00	1842.2
11/18/17 12:00	1841.1	11/20/17 10:00	1841.1	11/22/17 8:00	1842.2
11/18/17 13:00	1841.1	11/20/17 11:00	1841.1	11/22/17 9:00	1842.3
11/18/17 14:00	1841.1	11/20/17 12:00	1841.2	11/22/17 10:00	1842.3
11/18/17 15:00	1841.1	11/20/17 13:00	1841.2	11/22/17 11:00	1842.3
11/18/17 16:00	1841.1	11/20/17 14:00	1841.2	11/22/17 12:00	1842.3
11/18/17 17:00	1841.1	11/20/17 15:00	1841.2	11/22/17 13:00	1842.4
11/18/17 18:00	1841.1	11/20/17 16:00	1841.2	11/22/17 14:00	1842.4
11/18/17 19:00	1841.1	11/20/17 17:00	1841.3	11/22/17 15:00	1842.4
11/18/17 20:00	1841.1	11/20/17 18:00	1841.3	11/22/17 16:00	1842.4
11/18/17 21:00	1841.1	11/20/17 19:00	1841.3	11/22/17 17:00	1842.4
11/18/17 22:00	1841.1	11/20/17 20:00	1841.4	11/22/17 18:00	1842.5
11/18/17 23:00	1841.1	11/20/17 21:00	1841.4	11/22/17 19:00	1842.5
11/19/17 0:00	1841.1	11/20/17 22:00	1841.4	11/22/17 20:00	1842.5
11/19/17 1:00	1841.1	11/20/17 23:00	1841.4	11/22/17 21:00	1842.5
11/19/17 2:00	1841.1	11/21/17 0:00	1841.4	11/22/17 22:00	1842.6
11/19/17 3:00	1841.1	11/21/17 1:00	1841.5	11/22/17 23:00	1842.6
11/19/17 4:00	1841.1	11/21/17 2:00	1841.5	11/23/17 0:00	1842.6
11/19/17 5:00	1841.1	11/21/17 3:00	1841.5	11/23/17 1:00	1842.6
11/19/17 6:00	1841.1	11/21/17 4:00	1841.5	11/23/17 2:00	1842.6
11/19/17 7:00	1841.1	11/21/17 5:00	1841.5	11/23/17 3:00	1842.6
11/19/17 8:00	1841.1	11/21/17 6:00	1841.6	11/23/17 4:00	1842.7
11/19/17 9:00	1841.1	11/21/17 7:00	1841.6	11/23/17 5:00	1842.7
11/19/17 10:00	1841.1	11/21/17 8:00	1841.6	11/23/17 6:00	1842.7
11/19/17 10:00	1841.1	11/21/17 9:00	1841.7	11/23/17 7:00	1842.7
11/19/17 11:00	1841.1	11/21/17 10:00	1841.7	11/23/17 8:00	1842.7
11/17/1/ 12.00	1041.1	11/21/1/ 10.00	1041.7	11/23/1/ 0.00	1042.0

11/10/17 12:00	1041 1	11/21/17 11.00	1041 7	11 /22 /17 0:00	1012.0
11/19/17 13:00		11/21/17 11:00	1841.7	11/23/17 9:00	1842.8
11/19/17 14:00		11/21/17 12:00	1841.8	11/23/17 10:00	1842.8
11/19/17 15:00		11/21/17 13:00	1841.8	11/23/17 11:00	1842.8
11/19/17 16:00	1841.1	11/21/17 14:00	1841.8	11/23/17 12:00	1842.8
11/19/17 17:00		11/21/17 15:00	1841.9	11/23/17 13:00	1842.8
11/19/17 18:00		11/21/17 16:00	1841.9	11/23/17 14:00	1842.9
Date Time	Forebay	Date Time	Forebay	Date Time	Forebay
11/23/17 15:00		11/25/17 13:00	1843.8	11/27/17 11:00	1844.6
11/23/17 16:00		11/25/17 14:00		11/27/17 12:00	1844.6
11/23/17 17:00		11/25/17 15:00	1843.8	11/27/17 13:00	1844.6
11/23/17 18:00		11/25/17 16:00	1843.8	11/27/17 14:00	1844.6
11/23/17 19:00		11/25/17 17:00	1843.9	11/27/17 15:00	1844.6
11/23/17 20:00		11/25/17 18:00	1843.9	11/27/17 16:00	1844.6
11/23/17 21:00		11/25/17 19:00	1843.9	11/27/17 17:00	1844.6
11/23/17 22:00		11/25/17 20:00	1843.9	11/27/17 18:00	1844.7
11/23/17 23:00		11/25/17 21:00	1843.9	11/27/17 19:00	1844.7
11/24/17 0:00	1843.0	11/25/17 22:00	1843.9	11/27/17 20:00	1844.7
11/24/17 1:00	1843.1	11/25/17 23:00	1844.0	11/27/17 21:00	1844.7
11/24/17 2:00	1843.1	11/26/17 0:00	1844.0	11/27/17 22:00	1844.7
11/24/17 3:00	1843.1	11/26/17 1:00	1844.0	11/27/17 23:00	1844.7
11/24/17 4:00	1843.1	11/26/17 2:00	1844.0	11/28/17 0:00	1844.7
11/24/17 5:00	1843.1	11/26/17 3:00	1844.0	11/28/17 1:00	1844.8
11/24/17 6:00	1843.2	11/26/17 4:00	1844.0	11/28/17 2:00	1844.8
11/24/17 7:00	1843.2	11/26/17 5:00	1844.1	11/28/17 3:00	1844.8
11/24/17 8:00	1843.2	11/26/17 6:00	1844.1	11/28/17 4:00	1844.8
11/24/17 9:00	1843.2	11/26/17 7:00	1844.1	11/28/17 5:00	1844.8
11/24/17 10:00	1843.3	11/26/17 8:00	1844.1	11/28/17 6:00	1844.8
11/24/17 11:00	1843.3	11/26/17 9:00	1844.2	11/28/17 7:00	1844.8
11/24/17 12:00	1843.3	11/26/17 10:00	1844.2	11/28/17 8:00	1844.9
11/24/17 13:00	1843.3	11/26/17 11:00	1844.2	11/28/17 9:00	1844.9
11/24/17 14:00	1843.3	11/26/17 12:00	1844.2	11/28/17 10:00	1844.9
11/24/17 15:00	1843.4	11/26/17 13:00	1844.2	11/28/17 11:00	1844.9
11/24/17 16:00	1843.4	11/26/17 14:00	1844.2	11/28/17 12:00	1844.9
11/24/17 17:00	1843.4	11/26/17 15:00	1844.2	11/28/17 13:00	1844.9
11/24/17 18:00		11/26/17 16:00	1844.3	11/28/17 14:00	1844.9
11/24/17 19:00		11/26/17 17:00	1844.3	11/28/17 15:00	1845.0
11/24/17 20:00		11/26/17 18:00	1844.3	11/28/17 16:00	1845.0
11/24/17 21:00		11/26/17 19:00	1844.3	11/28/17 17:00	1845.0
11/24/17 22:00		11/26/17 20:00	1844.3	11/28/17 18:00	1845.0
11/24/17 23:00		11/26/17 21:00	1844.3	11/28/17 19:00	1845.0
11/25/17 0:00	1843.5	11/26/17 22:00	1844.3	11/28/17 20:00	1845.0
11/25/17 1:00	1843.5	11/26/17 23:00	1844.4	11/28/17 21:00	1845.1
11/25/17 2:00	1843.5	11/27/17 0:00	1844.4	11/28/17 22:00	1845.1
11/25/17 3:00	1843.6	11/27/17 1:00	1844.4	11/28/17 23:00	1845.1
11/25/17 4:00	1843.6	11/27/17 2:00	1844.4	11/29/17 0:00	1845.1

11/25/17 5:00	1843.6	11/27/17 3:00	1844.4	11/29/17 1:00	1845.1
11/25/17 6:00	1843.6	11/27/17 4:00	1844.4	11/29/17 2:00	1845.2
11/25/17 7:00	1843.6	11/27/17 5:00	1844.5	11/29/17 3:00	1845.2
11/25/17 8:00	1843.7	11/27/17 6:00	1844.5	11/29/17 4:00	1845.2
11/25/17 9:00	1843.7	11/27/17 7:00	1844.5	11/29/17 5:00	1845.2
11/25/17 10:00	1843.7	11/27/17 8:00	1844.5	11/29/17 6:00	1845.2
11/25/17 11:00	1843.7	11/27/17 9:00	1844.5	11/29/17 7:00	1845.2
11/25/17 12:00	1843.8	11/27/17 10:00	1844.5	11/29/17 8:00	1845.3

FOCL Drawdown Homeowner Card

Document of drawdown w	ork is important. Please	provide the following:
Name: (optional)		
Lake Address: (optional)		
Total Lake Frontage:	feet. Feet of Shorel	ine Accessible:
Work completed during	the drawdown:	
Shoreline stabilization (new) ft	Туре
Dock Maintenance	ft	Туре
Shoreline stabilization r	epair ft	Туре
Shoreline cleanup of de	bris ft	(amount/type)
Other:		
Mussels:		
Please pick up mussels encountere	d during the drawdown and gent	tly toss them into deeper water.
et us know about your efforts:		
# Mussels found	# Mussels relocated _	feet of shoreline



