

April 8th, 2024

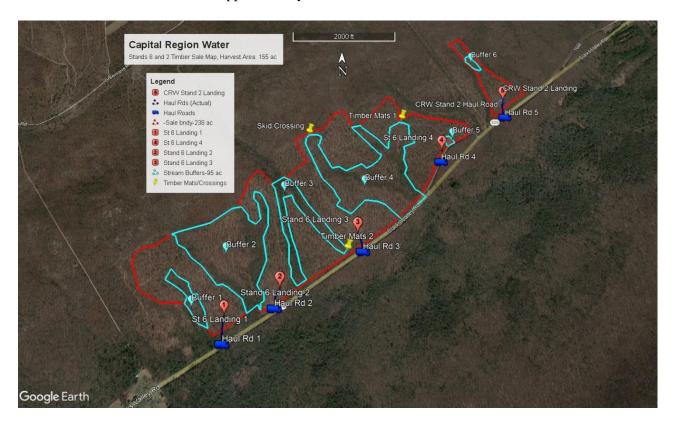
Appalachian Forest Consultants, LLC

Invites Your Bid on the...

Capital Region Water – DeHart Property – Timber Sale (Management Units 6 and 2 - combined)

Located in:

Rush Township, Dauphin County, PA Approximately 155 Acre Harvest Area



Highlights of this Timber Sale:

- Approximately 155 acre harvest area
- Approximately (10 BAF prism cruise) 660,009 bf sawlogs
- Approx. 382,402 bf White Oak and 143,998 bf Chestnut Oak estimated
- FSC certified under TNC Group Certification as NC-FM/COC-000238 FSC 100%

Estimated Volumes per Acre and Total – Scribner, FC 78...

MU 6:

Species	Bf volume/acre	Total estimated Saw volume (bd ft.)
White Oak	2423	346,489
Scarlet Oak	713.3	102,002
Chestnut Oak	867.1	123,995
Dead Chestnut Oak	31	4,433
Red Oak	40.1	5,734
Yellow Poplar	75.4	10,782
Total	4,149.9	593,435 board feet
Acres	143	
Avg. dbh	16.4"	
Pulp Tons	11 tons/acre	1,573 tons total

MU 2:

Species	Bf volume/acre	Total estimated Saw volume (bd ft.)
White Oak	2873.5	35,913
Scarlet Oak	852.6	10,658
Chestnut Oak	1600.2	20,003
Total	5,326.3/acre	66,574 board feet
Acres	12.5	
Avg. dbh	17.2"	
Pulp Tons (hardwood)	12.5 tons/acre	156 tons total hwd pulp

Diameter Distribution Details...

MU 6:

Overstory Species x Diameter Table: STOCK TABLE (Stand 6) Volume/Diameter Per Species/Acre

MU 2:

Overstory Species x Diameter Table: STOCK TABLE, Volume/Diameter/Species (STAND 2)

Net board-foot volume, Scribner (live and dead trees)

	all species	WO	CO	SO
+	0.0 0.0 0.0 0.0 0.0 80.5 826.1 1616.4 1630.3 820.6 218.0 0.0 134.4	0.0 0.0 0.0 0.0 80.5 660.9 1288.7 657.7 185.7 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 165.3 212.7 702.5 167.3	0.0 114.9 270.0 467.6 0.0 0.0 0.0
MD SAW LG SAW Total Percent	2668.9 134.4 5326.3	843.4 0.0 2873.5	1087.8	737.7 0.0 852.6

Important Information for Bidders:

- Capital Region Water reserves the right to reject any and all bids.
- Buyer will be required to provide the following prior to start of harvest:
 - **Performance bond** of \$10,000.00 (ten thousand dollars) at signing of timber sale agreement
 - o Insurance, Safety, Erosion Control Plan requirements (below)
- Payment Schedule Timber volume scale sheets, pulpwood weigh slips, and corresponding payment check must be forwarded to Appalachian Forest Consultants, LLC (at above address) on the 1st and 15th of each month; payment check(s) made out to "Capital Region Water." This is a "pay as you go" or "pay per unit" timber sale process.
- Buyer will have **18 months** from signing of timber sale agreement to complete all harvest and clean-up activities.
- Sale Tour Guided tour of sale area will be conducted April 24th, 2024. Meet at DeHart Reservoir parking lot along Rt 325 at 10:30 am. Please confirm your attendance by calling Mike Wolf at (814) 659-1280. Tour will only take place if interested parties call to confirm attendance. This is a secure facility. If you are not able to attend the sale tour on April 24th please contact Mike Wolf to discuss alternative arrangements.
- Bid Submission All sealed bids must be mailed to: Capital Region Water, c/o Tanya Dierolf, Chief Strategy Officer, 3003 N. Front Street, Harrisburg, PA 17110. Print "Timber Sale Bid" on outside of envelope. No fax or email bids will be accepted. Capital Region Water will open bids at 1:00 pm on Wednesday, May 22nd, 2024. If interested in the bid opening, contact Tanya Dierolf at tanya.dierolf@capitalregionwater.com for instructions to join virtually. Bid results will be posted on Capital Region Water's website at https://capitalregionwater.com.
- A <u>5-page Harvesting Plan (see pages 7-11)</u> contains important information about this timber sale. Please familiarize yourself with the 3-page Harvesting Plan before you submit the bid sheet. You will notice that the Harvesting Plan details haul road/landing improvement work that is expected of the Buyer.

REQUIREMENTS for INSURANCE / SAFETY / EROSION CONTROL PLAN

INSURANCE

Prior to signing the forest products harvest agreement with Capital Region Water, the successful bidder must provide: a certificate of public liability insurance naming Capital Region Water and Appalachian Forest Consultants, LLC as "Additional Insured", with a carrier acceptable to CRW, with limits of not less than one million (\$1,000,000) dollars for injury or death to one person, two million (\$2,000,000) dollars for injury or death to more than one person, and one hundred thousand (\$100,000) dollars for property damage. Bidder shall further carry adequate workmen compensation and occupational disease coverage, as provided under the laws of the Commonwealth of Pennsylvania, upon all employees brought upon the premises. Bidder further agrees to indemnify, protect and save harmless Capital Region Water and Appalachian Forest Consultants, LLC from any and all damage, cost or expense arising out of or for injuries to persons or damage to property occasioned by or resulting from or growing out of timber harvest operations covered this Agreement. Bidder also agrees to waive all rights of subrogation.

SAFETY

Prior to signing the forest products agreement with Capital Region Water, the successful bidder must provide: A forest products harvesting hazard analysis and risk assessment, along with a health and safety plan.

EROSION CONTROL

After familiarization with harvest area(s), and prior to felling, skidding and hauling forest products, the successful bidder will prepare and provide, (to Appalachian Forest Consultants, LLC): a comprehensive soil erosion / sedimentation control plan, along with a site reclamation plan.

Bid Form for Timber Sale MU 6 & 2 (combined):

	ogs - all grades ave				
speci	es	product	Bid \$ Price/mbf	Tree Scale for Bid - Must Fill In	
			(fill in below)	(Doyle, Scribner, International 1/4"	
WO	white oak	sawlogs			
CO	chestnut oak	sawlogs			
SO	scarlet oak	sawlogs			
RO	red oak	sawlogs			
ΥP	yellow poplar	sawlogs			
Misc	Misc. Hdwd	sawlogs			
Dulny	wood (hdwd)		\$/ton		
ruipt	Wood (Hawa)		(fill in below)		
All		pulpwood	(IIII III Below)		
,		paipweed			
ALTE	RNATIVE: You can	choose to leave all the above blank			
and s	ubmit a LUMP SUN	M BID Price here: \$			
Term	s of lump sum bid	would be 50% due at signing of contract			
and r	emaining 50% due	prior to initiation of harvesting			
on	behalf of	(Company Name)		(Phone Number)	
I re	alize that should	I I be the successful bidder, I will h contract or forfeit th	•	n notification to execute a timber	
				(print name)	
(sign	nature)		(prin	t name)	

All bids should be submitted using this Bid Form – Follow Bid Submission instructions on Page 4.

Questions: Call Mike Wolf Phone: (814) 659-1280

Email: mike.wolf.afc@gmail.com

CAPITAL REGION WATER

STANDS 6 AND 2

HARVESTING PLAN

April 2024

TREATMENT GOAL: Treatment in Stands 6 and 2 will be an Overstory Removal from a Shelterwood harvest conducted in 2012. Both Stands will be included in this timber sale. The focal point of this treatment is to remove the majority of the Seed Trees of residual timber and release the advanced desirable regeneration of Tulip Poplar, Oak species, and Red Maple. Residual basal area will range from 5-10 square feet, consisting of reserved conifers (Hemlock and White Pine), mast producing trees (scattered Oak, hickory and Gum), noted den trees with cavities, and bark-free snags for wildlife diversity.

CURRENT CONDITIONS: The sale boundary for Stands 6 and 2 consists of 238 acres of Oak Hardwood timber. Within the sale area, approximately 155 acres are scheduled for harvest, with another 95 acres of no harvest/access stream buffers. Following the original Shelterwood treatment, some Chestnut Oak and a few White Oak residual trees have died, likely due to repeated Anthracnose and Gypsy Moth events. Buffers have been expanded in acreage from the original estimates based on shifting hydrology and formation of wet zones and springs in certain areas. All mapped buffer zones are closed for harvesting except where individual crossings are noted (2) to access isolated blocks of available timber. Otherwise, harvesting of trees or equipment within these zones is prohibited.

Within Stand 6 only, basal area of timber to be harvested is 42.6 square feet/acre, dominated by White Oak, Chestnut Oak, Scarlet Oak, Yellow Poplar and Red Oak. Total acreage of harvest area in Stand 6 is 143 acres.

Regeneration in Stands 6 and 2 is dominated by advanced Yellow Poplar and Sweet Birch, much of which is three feet tall or greater. Desirable Seedlings observed through a recent Silvah cruise consist of the following per acre: 2,609 (Yellow Poplar), 174 (Conifer spp.), 0 (Established Oak), 348 (Competitive Oak), 609 (Other Desirable, being Red Maple, Black Gum, Sassafras, Aspen). Oak is scarce on the lower two thirds of the sale, though much more present in the drier uplands as slope increases up Peters Mountain. Much of the lower two thirds of the sale area are dominated by advanced Yellow Poplar and Birch. Forty Three percent of plots contained Yellow Poplar regeneration, with 22 percent containing Competitive Oak. Sixty Five percent of plots contained species considered Tall Woody Interference for establishing Oak regeneration, primarily consisting of either Red Maple, Sweet Birch, Black Gum, or Tulip Poplar. Lowbush Blueberry occurs at varying density throughout the sale area, but likely does not inhibit regeneration. Seventy percent of plots contained Mountain Laurel at varying density, likely restricting desirable forest regeneration where present in high density. Much of the Yellow Poplar regeneration is overtopping or staying with the birch. Deer browse was most evident on Black Gum and some Oak regeneration. Overall, 65% of plots are stocked with desirable established regeneration, and 65% are stocked with competitive regeneration, mostly in Yellow Poplar, Oak, Conifer, Red Maple, Black Gum, and Sassafras. It is likely this stand will revert to a dominance of Yellow Poplar and Birch in the lower two thirds of the stand, while the upper third will be representative of an Oak/Pine stand with pockets

of Tulip Poplar, Birch, and Red Maple on the best soils. Surface rock is not abundant throughout the stand, however small ledges are present on the upper third of the sale area. Mountain Laurel, sometimes dense and up to 5 feet tall, is present. Slope is gentle to moderate in most areas.

Japanese Stiltgrass was found on three plots within the sale area, and has also been found and treated for two years prior on haul roads and established landings.

Within Stand 2, basal area of timber to be harvested is 51.7 square feet/acre, dominated by White Oak, Chestnut Oak, and Scarlet Oak. Total harvest area for Stand 2 is 12.5 acres.

HARVESTING: Sale access entry points are located along State Route 325, approximately 20.7 miles east of the intersection of State Routes 325 and 225 just north of the town of Dauphin. The sale is located immediately north of Route 325, with the eastern portion of the sale area in Stand 6 located off a cable gated access road used by Capital Region Water. Five different landings will be used for this timber harvest. Landings and Haul Roads can be viewed on the map. Haul Road and Landing 1 will be newly constructed. The Buyer must coordinate with PennDot for construction of this haul road onto Route 325. Haul Roads and Landings 2, 3, and 5 were previously constructed for the past Shelterwood harvest. Landing 4 will be a newly constructed landing located adjacent to the macadam access road used by Capital Region Water. For specifics on haul road and landing construction, please refer to the "Haul Roads and Landing Construction" section of this Harvesting Plan. Existing skid trails are easily located within the designated harvested areas and should be used by the logging crew. Adding rock/shale for landing stabilization and haul road performance will be on an as needed basis and determined in consultation with the Forester. Haul Road improvements are noted as an estimate for each Haul Road noted in the Haul Roads and Landing Construction section. Final determinations will be made in consultation with the Forester and winning Buyer onsite.

The sale boundary consists of a single horizontal band of EITHER Red or Dark Orange paint with a corresponding stump mark. Double bands indicate where the boundary corners to a different direction. No Access stream/wet soil buffer boundaries consist of single horizontal bands or spots (saplings) of light blue paint. There are 6 buffer zones within the sale area. Double blue bands indicate where a no access buffer corners to a different direction. Any blue painted buffer line with an orange diagonal slash over the blue band (one exists) indicates an old buffer line that was changed by the Forester in sale preparation. These diagonal orange over blue lines are not the actual buffers to be adhered to. Two designated buffer crossings are noted on the map as "Timber Mat 1" and Timber Mat 2". Each of these crossings must use timber mats (2-3 mats each) for access to adjacent harvest areas. Neither of these crossings require a GP8 stream crossing permit to be in place prior to skidding. Otherwise, all skidding of trees in the remainder of the sale area must work around the buffer zones and back to designated landings.

Within Stands 6 and 2, all trees 10" DBH and greater are to be felled excepting all Conifer (Hemlock, Pitch Pine, and White Pine), and any tree marked with a single spot of red or dark orange paint on the north and south sides of the tree (and corresponding stump mark). Standing dead trees with 50% or more bark <u>retained</u> may be felled and removed by the Buyer as dead timber (by species). Standing dead snags with 50% or more bark <u>removed</u> are to be retained, unless they pose a hazard to the harvest operator, in which they can be felled but retained at the felling site. All reserve trees are to remain with skinning damage kept to a minimum, therefore planning of skid trails and roads should be coordinated to minimize reserve tree damage.

Within Stand 6 only, an average of 4,683 board ft/acre of sawtimber (International 1/4) is to be removed, primarily consisting of White Oak, Chestnut Oak, and Scarlet Oak, with lesser volume in Yellow Poplar, Dead Chestnut Oak, and Red Oak. Approximately 11 tons of pulpwood/acre will be removed. Total estimated volume to be harvested in the stand is 669,669 bd/feet of sawtimber and 1,573 tons of pulpwood. Volume estimates tallied used the International ¼ FC 78, with a variable plot sample taken. Thirty eight (38) plots were taken in Stand 6. Confidence level for the timber cruise is 90%. The data was analyzed using the SILVAH program.

Within Stand 2 only, an average of 5,991 board feet of sawtimber/acre (International ¼) is to be removed, primarily consisting of White Oak, Chestnut Oak, and Scarlet Oak. Yellow Poplar and Red Oak are found within the stand at very low volumes and did not occur on the plots. Approximately 13 tons of pulpwood/acre will be removed. Total estimated volume in Stand 2 is 74,888 bd/feet of sawtimber and 163 tons of pulpwood. Volume estimates tallied used the International ¼ rule, FC 78, with a variable plot sample taken. (6) plots were taken in Stand 2. Confidence level for the timber cruise is 90%. The data was analyzed using the SILVAH program.

EXPECTED FUTURE CONDITIONS: Stands 6 and 2 will result in a young, well stocked stand dominated by saplings of Yellow Poplar, Oak, Birch, Red Maple, Sassafras, Pitch Pine, and Black Gum, with numerous protected spring buffers in place in perpetuity.

HARVEST SEQUENCE: Improvements to existing landings and haul roads should be completed for all landings prior to harvest entry. The winning bidder will be required to establish short haul road sections by opening access to the landing, grading, and depositing rock/shale on the haul road base, ditch (Landing 1 only), and on the landing sites as needed. Once landings are prepared, harvesting may begin at landing of choice by the logging crew.

HAUL ROADS/LANDINGS CONSTRUCTION: Landings and short haul road sections were originally constructed for the previous Shelterwood harvest, located (see map) as Landing 2, 3, and 5 (Stand 2). Each of the above are to be used for this timber sale, with improvements for each found below. Landing 1 will be a newly constructed haul road intersecting Route 325, with a new landing prepared up into Stand 6. Permissions with PennDot to site this new haul road access onto 325 must be secured by the winning bidder. Landing 4 will be a new landing utilizing a hard surface macadam road that intersects with Route 325 behind a cabled gate. This macadam road is in optimal shape with no improvements deemed necessary. Estimated Improvements are as follows:

LANDING 1 (New Landing): Secure meeting with PennDot to construct the haul road and entrance to Route 325. Length and width of haul road are identified onsite with blue paint spots by Forester. Landing 1 will require clearing the road entrance for a distance back approximately 455 feet to the uphill landing location in Stand 6, including clearing of the landing itself. The landing dimensions should be discussed with the Forester before construction. Haul Road width is 15 feet. Clear trees, brush, and organic soil down to mineral soil for the length of the haul road corridor. Add approximately 500 tons of shale to the road base to build a depth of 18" for hauling. Number 3 stone can be used in place of shale to build a depth to 12" if so desired. Approximately 400 tons of #3 stone is estimated with this option. Compact with dozer. Add approximately 50 tons of #4 stone to the ditch adjacent to Route 325 to build up the grade from the ditch to the road side to aid in safe access to Route 325. Compact roadside stone. Final haul road should be curved from northeast to southwest to permit a 45 degree angle approach

onto Route 325 West. Additional #3 stone can be added onto haul road back from ditch to clean mud from tires before entry onto Route 325.

a: Construction Time involved: 16 hours

b. Equipment: D6 dozer, Dumptruck,

b: Materials: Operator Time in Dozer \$80/hour x 16 hours-\$1280.00, 2 truckloads of #4 rock

@\$750/load-\$1500.00, 22 trucks of Shale @\$500/load-\$11,000

Total Cost estimate: \$13,780.00

LANDING #2: (Old, Improved Landing): Landing and Haul Road are already present. Clear organic matter from haul road surface for approximately 350 feet back to landing location. Clear trees inside green ribbon for landing area. Old landing location is not suitable due to wet soil. New landing spot is mostly cleared of trees from past harvest. Add approximately 3 truckloads of #3 stone (70 tons) to low spot prior to entry onto State Route 325 to stabilize and knock mud off tires. Spread and compact to a depth of 6". Prop old tv wire adjacent to Route 325 to permit truck traffic.

a. Construction Time involved: 6 hours

b. Equipment: D6 Dozer, Dumptruck,

c. Materials: Operator time in Dozer \$80/hour x 6 hours-\$480, 3 truckloads of #3 stone @750/load-\$2,250.00,

d. Total Cost Estimate: \$2,730.00

LANDING #3: (**Old, Improved Landing**): Landing and Haul Road are present. Old landing site straight in from haul road is wet. New landing site will utilize open area curving from haul road to the west on dry flat area. Distance from Route 325 to new landing site is approximately 300 feet. Clear trees around green ribbon area. Add approximately 2 truckloads of #3 stone (45 tons) to haul road entrance to Route 325 for distance of 100 feet back from Route 325 to knock mud off tires. Spread and compact to a depth of 6". Prop old tv wire adjacent to Route 325 to permit truck traffic.

e. Construction Time involved: 6 hours

f. Equipment: D6 Dozer, Dumptruck,

g. Materials: Operator time in Dozer \$80/hour x 6 hours-\$480, 2 truckloads of #3 stone @750/load-\$1,500.00

h. Total Cost Estimate: \$1,980.00

LANDING #4: (New Landing, Existing Haul Road): Old Landing is too wet and will not be used. New landing will require clearing of brush, shrubs, and trees. New landing is identified with Red painted "L4" on select trees showing the approximate dimensions of the landing. Landing constructed dimensions can vary based on consultation with Forester prior to construction. New landing is located adjacent to

macadam haul road. Clear trees and brush down to mineral soil for landing. Add 1 truckload (22 tons) of #3 stone to dirt surface immediately adjacent to macadam road to knock mud off tires. Spread and compact stone to depth of 4" back into front of landing. Prop old tv wire adjacent to Route 325 to permit truck traffic.

i. Construction Time involved: 4 hours

j. Equipment: D6 Dozer, Dumptruck,

k. Materials: Operator time in Dozer \$80/hour x 4 hours-\$320, 1 truckloads of #3 stone @750/load-\$750.00

I. Total Cost Estimate: \$1,070.00

LANDING #5: (Old, Improved Landing): Old Landing is usable but will likely need expanded in dimension. Open haul road and clear landing of brush and trees down to mineral soil. Landing site is located easily with a Red L5 paint marker on nearby White Oak. Landing constructed dimensions can vary based on consultation with Forester prior to construction. Add 2 truckloads (45 tons) of #3 stone to haul road surface immediately adjacent to Route 325 for 100 feet back towards landing to knock mud off tires. Spread and compact stone to depth of 4". Prop old tv wire adjacent to Route 325 to permit truck traffic.

m. Construction Time involved: 6 hours

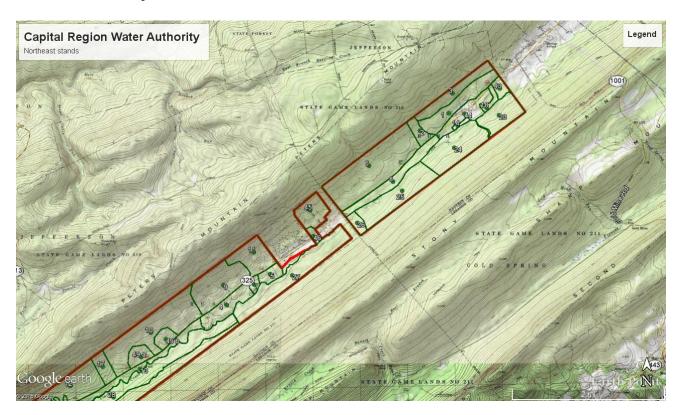
n. Equipment: D6 Dozer, Dumptruck,

o. Materials: Operator time in Dozer \$80/hour x 6 hours-\$480, 2 truckloads of #3 stone @750/load-\$1500.00

p. Total Cost Estimate: \$1,980.00

TOTAL ESTIMATED IMPROVEMENT COSTS FOR TIMBER SALE: \$21,540.00

General Location Map:



Additional Harvest Area Map (topo):

