

SALE OF GOVERNMENT PROPERTY- BID AND AWARD

INVITATION FOR BIDS NO.

PAGE NO.

(See SF 114C for Privacy Act Statement)

DACW38-9-20-44

1

ISSUED BY			ADDRESS YOUR BID TO:		
REAL ESTATE DIVISION			AGENCY'S NAME		BUREAU/SERVICE/OFFICE
FOR INFORMATION CONTACT:			USAED		VICKSBURG
NAME			STREET ADDRESS		
ANGELA M. WILLIAMS			4155 CLAY STREET		
TELEPHONE			CITY		STATE ZIP CODE
			VICKSBURG		MS 39183-3435
AREA CODE	NUMBER	EXTENSION	PLACE		
(601)	631-5230		ROOM 203		
E-MAIL ADDRESS			BIDS WILL BE OPENED AT		DATE TIME
Angela.M.Williams@usace.army.mil					August 5, 2020 1:00 p.m.

SEALED BIDS

Sealed bids for purchasing any or all items listed on the accompanying schedule, will be received at the place designated above until the date and time specified above and at that time publicly opened. <i>(Copies of the below mentioned forms, if not attached, are on file at the issuing office and are available upon request).</i> Bidder is required to pay for any or all of the items listed on the Item Bid page(s) as part of this Bid, at the price sent opposite each.	NO. OF COPIES 3 (Pages 1-4)
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SUBJECT TO

SF 114C, General Sale Terms and Conditions		Incorporated by reference:
Other Special Terms and Conditions Attached		
BID DEPOSIT REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	IF "YES", PERCENTAGE OF TOTAL BID 20%	DEPOSIT MADE PAYABLE TO "FAO, USAED"
		PAYMENT DUE (Calendar Days) 5 Aug 2020
		REMOVAL OF PROPERTY (Calendar Days) 30 March 2023

BID (Completed by Bidder)

In compliance with the above, the undersigned offers and agrees, if this Bid is accepted (60 calendar days if no period is specified by the Government or the Bidder, but not less than 10 calendar days in any case) after date of Bid opening, to pay for and remove the property.

BID ACCEPTANCE (Calendar Days)	TOTAL AMOUNT	DEPOSIT ATTACHED <input type="checkbox"/> YES <input type="checkbox"/> NO	DEPOSIT FORM(S)	AMOUNT OF DEPOSIT
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BIDDER REPRESENTS THAT: (Check appropriate boxes)			BIDDER REPRESENTS THAT: (Check appropriate boxes) (Complete if the total amount of the bid(s) exceeds \$25,000.)		
ACTION	YES	NO	ACTION	YES	NO
Property was inspected			Bidder paid or agreed to pay any company or person (other than a full-time, bona fide employee working solely for the Bidder) any fee, commission, percentage or brokerage fee, contingent upon or resulting from the award of this contract.		
Bidder is an individual					
Bidder is a small business. (See CFR, title 13, Chapter 1, Part 121, Sec. 121.3-9, for the definition of small business.)			Bidder agreed to furnish information relating to use of a company or person in securing or soliciting contract as requested by the Chief, Real Estate Division.		
Bidder employed or retained any company or person (other than a full-time, bona fide employee working solely for the Bidder) to solicit or secure this contract.					

BIDDER'S INFORMATION	NAME			BIDDER ID NUMBER		BIDDER'S TIN/SOCIAL SECURITY NO.	
	STREET			SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS BID		DATE OF BID	
	CITY	STATE	ZIP CODE				
	TELEPHONE	AREA CODE	PHONE	EXTENSION	NAME OF SIGNER (Type or print)		JOB TITLE OF SIGNER (Type or print)

ACCEPTANCE BY THE GOVERNMENT (This section for Government Use Only)

ACCEPTED AS TO ITEM(S) NUMBERED	AMOUNT(\$)	CONTRACT NUMBER(S)
BY - UNITED STATES OF AMERICA	NAME (Type or print) CHRYSTAL SPOKANE	
DATE OF ACCEPTANCE	JOB TITLE (Type or print) CHIEF, REAL ESTATE DIVISION	

BID SHEET
U.S. ARMY CORPS OF ENGINEERS – BOLTER, MASON AND
PORTAGE ISLANDS, MISSOURI

IFB #: _____

BID OPENING DATE: _____

BIDDER: _____

SALE AREA 1 Bolter Island, Missouri	Quantity	BID
The timber sale area is located in NE 1/4 of the NE 1/4 of S25, T48N, R04E, St Charles County, MO. The timber sale contains approximately 48 acres.	706.64 MBF	\$_____ / MBF Mixed Hardwood Sawtimber
	1011.55 cords	
Sale Area 2 Mason Island, Missouri The timber sale area is located in the NE 1/4 of the SW 1/4 of S33, T49N, R05E, St Charles County, MO. The timber sale contains approximately 57 acres.	1610.71 MBF	\$_____ / cord Hardwood Pulpwood
	1124.07 cords	
Sale Area 3 Portage Island, Missouri The timber sale area is located on the Mississippi River between river miles 213-214, St Charles County, MO. The timber sale contains approximately 10 acres.	119.93 MBF	
	165.29 cords	

CERTIFICATE OF CORPORATE BIDDER

I, _____(name), certify that I am the
_____(position) of the corporation named as bidder herein;
that _____(name) who signed this bid on behalf of the bidder was
then the _____(position) of said corporation; that said bid was
duly signed for and in behalf of said corporation by authority of its governing body and is
within the scope of its corporate powers.

BY:

AFFIX

CORPORATE

SEAL

NAME

TITLE

CERTIFICATE AS TO SMALL BUSINESS STATUS

The bidder certifies that he (is) (is not) a small business concern within the terms of the following definition: In sales of Army forest timber a "small business" is a concern that: (1) is primarily engaged in the logging or forest products industry; (2) is independently owned and operated; (3) is not dominant in its field of operation; and (4) together with its affiliates does not employ more than 500 persons.

(From 13 CFR 121.3-9 b), Rev. 29
Rev. 29 Fed. Reg. 2988, 5 Mar 64)

Date

Signature of Bidder

Intentional falsification of this certificate is a criminal offense punishable by a fine of not more than \$5,000 or by imprisonment for not more than two years, or both. (Title 15, United States Code, Section 645 (a).)

INSTRUCTIONS. This certificate must be attached to and is a part of every invitation to bid on the sale of Army timber with an estimated value of \$2,000 or more. Failure to properly execute this certificate will not invalidate a bid, but a proper statement must be signed before the bid is accepted by the Government. Refusal or delay in executing a proper statement is grounds for rejecting the bid.

SPECIAL CONDITIONS

1. **PERSONS EXCLUDED FROM BIDDING:** Officers and enlisted personnel of Armed Forces on active duty, civilian employees of the military establishment, and immediate members of their households, dependents, or agents will be excluded from the field of bidders, and bids from such persons will not be accepted or considered.
2. **FACSIMILE OR TELEGRAPHIC BIDS AND MODIFICATIONS:** Facsimile or telegraphic bids will not be accepted, but modifications by facsimile or telegram of bids already submitted will be considered if received prior to the exact time set for the opening of bids.
3. **LATE BIDS AND MODIFICATIONS OR WITHDRAWALS:** Late bids, modifications of bids, or withdrawals of bids thereof received at the office designated in the invitation for bids after the exact time set for opening of bids shall not be considered unless received before contract award, and either (1) sent by registered or certified mail not later than 5 calendar days before the bid receipt date specified; or (2) sent by mail and it is determined by the Government that the late receipt was due solely to mishandling by the Government after receipt at the Government installation; or (3) sent by U. S. Postal Service Express Mail Next Day Service - Post Office to Addressee not later than 5:00 p.m. at the place of mailing 2 working days prior to the date specified for receipt of bids. (The term "working days" excludes weekends and Federal holidays). However, a modification which is received from an otherwise successful bidder and which makes the terms of the bid more favorable to the government will be considered at any time it is received and may thereafter be accepted.
4. **BID PRICE DETERMINATION:** When bids are solicited on more than one item, bidders will insert their individual bid prices in the space provided for each item beginning on page 2. The total bid price for each sale area will be used for the purpose of bid evaluation, award and all phases of contract administration.
5. It will be the duty of each bidder to see that his bid is delivered by the time and at the place prescribed in this invitation. Bids received prior to the time of opening will be securely kept, unopened. The officer whose duty it is to open them will decide when the specified time has arrived. No responsibility will attach to an officer for the premature opening of a bid not properly addressed and identified.

6. Sealed bids (pages 1-4 inclusive) shall be submitted **IN TRIPLICATE** in a sealed envelope addressed to:

**District Engineer
Vicksburg District
U. S. Army Corps of Engineers
ATTN: CEMVK-RE-M (Angela Williams)
4155 Clay Street
Vicksburg, Mississippi 39183-3435**

and plainly marked in the lower left-hand corner of envelope as follows:

**ATTN: Real Estate Division
BID FOR TIMBER - Inv. No. DACW38-9-20-44
TO BE OPENED AT - 1:00 p.m., Wednesday, August 5, 2020, Room 203**

FAILURE TO PROPERLY ADDRESS AND IDENTIFY SEALED BID MAY RESULT IN FORFEITURE OF BID.

7. The Purchaser, for himself, his successors, and heirs, hereby releases the United States and its officers, agents, or employees from all claim or claims for damages or injury in connection with use of the premises as herein contemplated either to person or property, arising or to arise, from operations of the Government, or from floods of any kind or character, or arising from or incident to any other Governmental activity, and provide further that said release from damages shall extend to any "act of God."

8. The Purchaser will assume responsibility and liability for all injuries to persons or damages to property directly or indirectly due to, or arising out of, the operations of the Purchaser under this contract and the Purchaser agrees to indemnify and save harmless the United States against any and all claims of whatsoever kind and nature due to, or arising out of, this contract area.

9. Specific contract conditions are listed below:

a. The three timber sale areas will be advertised under one Invitation for Bids (IFB) and awarded as a single lump sum sale. **Prospective bidders will be required to bid on all of the sales areas.** Bidders must insert their individual bid price on the space provided for each product. A bid sheet is enclosed. **The bidder must complete the harvest at all three sites.** Sale Area 1 consists of a 48-acre regeneration harvest using the seed-tree method. The objective is to create conditions for the establishment of early successional forest. Sale Area 2 consists of a 57-acre regeneration harvest using the seed-tree method. The objective of this harvest is also to promote conditions for the establishment of early successional forest. Sale Area 3 consists of a 10-acre regeneration harvest using the seed-tree method. The objective is to create conditions for the establishment of early successional forest.

b. Trees to be harvested are marked with blue tree marking paint at eye level. All trees marked with blue paint are to be felled. All woody material will be removed from site to facilitate seed catch from seed trees. All timber sale boundaries are marked with yellow tree marking paint at eye level. Orange ribbon will also be tied to boundary trees to further facilitate identification. Retained trees are marked with red tree marking paint at eye level and on the stump. Cutting of red painted trees shall not be permitted.

c. All standing snags greater than 12 inches DBH will be left standing, regardless of tree marking paint.

d. Maximum stump height will be 18 inches from ground level.

e. **Specific Requirements and Equipment Limitations:**

i. Sale Area 1. Bolter Island – 48 acres. Notify project forester prior to logging. Placement of barge landing sites, loading decks, and skid trails/haul roads will be coordinated with project forester prior to placement. Access from or across private lands will be the responsibility of the buyer. No wet weather logging will be permitted. All haul roads and decks will be cleaned, smoothed and seeded upon completion.

ii. Sale Area 2. Mason Island – 57 acres. Notify project forester prior to logging. Placement of barge landing sites, loading decks, and skid trails/haul roads will be coordinated with project forester prior to placement. Access from or across private lands will be the responsibility of the buyer. No wet weather logging will be permitted. All haul roads and decks will be cleaned, smoothed and seeded upon completion.

iii. Sale Area 3 – Portage Island – 10 acres. Notify project forester prior to logging. Placement of barge landing sites, loading decks, and skid trails/haul roads will be coordinated with project forester prior to placement. Access from or across private lands will be the responsibility of the buyer. Not wet weather logging will be permitted. All haul roads and decks will be cleaned, smoothed and seeded upon completion.

f. All tree cutting activities will take place between 01 October and 31 March of any given year, during the non-active roost season for woodland bat species.

g. Felling, skidding, and hauling operations shall be executed in a safe and prudent manner in order to minimize damages to the forest soils and residual stand. Excessively damaged residual trees, or non-designated cut trees, will be sold to the purchaser at rates equal to double stumpage values. The project forester will regularly inspect the purchaser's harvesting operations for contract compliance. The purchaser shall pay the original per unit bid price if the project forester approves the removal of additional trees while the contract is in effect.

h. Slash may be concentrated and burned on site.

i. Construction or repair of temporary skid trails/haul roads will be the responsibility of the purchaser. Equipment and materials used to construct or repair temporary haul roads shall be supplied by the purchaser. The purchaser shall be responsible for obtaining permits or easements from state or county road departments, if required.

j. The contract period for the sale area will expire on **30 March 2023**. The purchaser(s) shall cut and remove all timber and complete all associated work on the sale areas within the contract period. An extension may be granted by the Government at 10 percent of the purchase price if written request(s) are made and considered to be in the best interest of the Government. The buyer shall submit such request(s) to the Chief of Real Estate Division, or a designated representative, at least 10 days before the sale expiration.

k. Harvest operations may be temporarily halted by the project forester if logging operations become poor enough to cause permanent site and soil degradation (wet ground conditions). The operation of equipment will not be permitted when the site is wet enough to cause severe rutting.

l. All ferry/barge landing sites, staging areas, primary skid trails, stream/slough crossings, and haul roads must be approved by the project forester prior to placement.

m. The purchaser will assume responsibility and liability for the restoration of all haul roads, primary skid trails, and staging areas that are utilized in the timber harvest operations. The purchaser shall ensure that the logging roads and log sets are smoothed when harvesting is complete. Berms and/or water bars will be constructed and/or replaced on haul roads and primary skid trails where soil erosion may occur. The purchaser shall apply seed to sets and haul roads when logging is complete, if required by the project forester. The seed type shall be suited to the season when logging is complete. The Government may require the purchaser to delay seed application in the absence of adequate ground moisture or excessive flooding. The purchaser shall remove slash (tops and limbs) and other logging debris from stream channels and the rights-of-way of improved roads on a daily basis.

n. It will be the responsibility of the purchaser to ensure that the work sites are left free of litter and debris that normally occur during timber harvest operations. The purchaser shall prevent the spillage of any oil, fluid, or other contaminants onto the ground or into waterways during harvesting operations. Any such material will be collected and properly disposed of off Government property.

o. The purchaser shall ensure that all workers engaged in timber harvesting operations on Corps property utilize appropriate safety apparel and equipment in accordance with the State of Missouri workman's compensation laws.

p. The project forester must be notified prior to commencing harvesting operations.

q. The purchaser will assume complete responsibility and liability for any damages that may arise due to negligence in operation.

r. The project forester may immediately halt harvesting if deemed necessary by noncompliance with these harvesting specifications.

s. Temporary traffic control signs shall be posted to provide warning to vehicle operators of potentially hazardous conditions associated with the harvesting operation, if requested by the project forester. Signs shall be posted at least 500 feet on either side of locations where log trucks enter main public roadways. The purchaser shall remove all signs upon completion of harvesting.

t. Mr. Robert Cosgriff, Forester, is available to answer any questions and arrange for show-me times and dates. Interested buyers should contact Mr. Cosgriff at (618) 792-5479.

11. This Invitation, Bid and Acceptance, including all the terms and conditions set forth herein, when accepted by the Government shall constitute the contract of sale between the successful bidder and the Government. Such agreement shall constitute the whole contract unless modified in writing and signed by both parties. No oral statements or representations made by, for, or ostensibly on behalf of either party shall be part of such contract. Neither this contract, nor any interest therein, shall be transferred or assigned by the successful bidder.

12. In the event of failure of the Purchaser to comply with the terms of this contract of sale, the Government may declare the Purchaser in default and he shall forfeit any and all rights held under this contract.

13. During the time that this agreement remains in force, the Purchaser shall independently do all in his power to prevent and suppress forest fires on the sale area and in its vicinity, and shall require his employees, subcontractors, and employees of subcontractors to do likewise. All trucks and tractors used on this sale operation shall be equipped with suitable mufflers or spark arrestors.

14. Access across other than Government-owned lands will be provided by the Purchaser. Access across Government-owned lands will not injure cropland, pasture, or hayland.

15. Any method of logging other than by those set forth in this invitation may be employed only with the advance approval in writing by the Chief of Real Estate Division and under such conditions and restrictions as he may require. The Contractor will be authorized to build, within the limits of the sale area, temporary roads, structures, and other improvements necessary in the logging of the timber included in this contract; **PROVIDED**, that all such roads, structures, and improvements shall be located and operated subject to such regulations as may be prescribed by the Chief of Real Estate Division.

16. All telephone lines, power lines, gas lines, ditches, and fences, located within or immediately outside the exterior boundaries of the sale area, shall be protected so far as possible in logging operations and if injured shall be repaired immediately by the Purchaser. Roads and trails shall at all times be kept free of logs, brush, and debris resulting from the Purchaser's operations hereunder. Any road or trail used by the Purchaser in connection with this sale that is damaged or injured beyond ordinary wear and tear through such use, shall promptly be repaired by him to its original condition.

17. The Government shall not be liable for delays in operation or for loss or destruction of or damage to property of the Purchaser in connection with this contract caused by any of the following perils: fire, lightning, windstorm, cyclone, tornado, hail, explosion, riot, riot attending a strike, vandalism and malicious mischief, earthquake or floods, meaning thereby rising of rivers, streams, and the operation of the reservoir for flood control purposes.

18. Notice by the Government of acceptance of the bid, if not personally made to the successful bidder or a duly authorized representative of such bidder, shall be deemed to have been sufficiently given when mailed in a postpaid or franked envelope to the bidder at the address indicated in this bid.

19. Neither this contract nor any interest therein shall be assigned or transferred by the Purchaser to any other party. (Section 3737, Revised Statutes, as amended; 41 U.S.C. 15.)

20. During the performance of this contract, the Contractor agrees as follows:

a. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, physical handicap, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated fairly during employment, without regard to their race, color, religion, sex, physical handicap, or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Chief of Real Estate Division setting forth the provisions of this Equal Opportunity clause.

b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, physical handicap, or national origin.

c. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency Chief of Real Estate Division advising the labor

union or workers' representative of the Contractor's commitments under this Equal Opportunity clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The Contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 of October 13, 1967, and by the rules, regulations, and orders of the Secretary of Labor or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

e. In the event of the Contractor's noncompliance with the Equal Opportunity clause of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 of October 13, 1967, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11375 of October 13, 1967, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

f. The Contractor will include the provisions of paragraphs a through e in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 of October 13, 1967, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance; **PROVIDED**, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

21. A bid executed by an attorney or agent on behalf of the bidder must be accompanied by copies of his Power of Attorney or other evidence of his authority to act on behalf of the bidder. If the bidder is a corporation, the **CERTIFICATE OF CORPORATE BIDDER** must be executed. If the bid is signed by the secretary of the corporation, the **CERTIFICATE** must be executed by some other officer of the corporation under the corporate seal. In lieu of the **CERTIFICATE OF CORPORATE BIDDER**, there may be attached to the bid copies of so much of the records of the corporation as will show the official character and authority of the officer signing, duly certified by the secretary or assistant secretary, under the corporate seal, to be true copies.

22. The right is reserved, as the interest of the Government may require, to reject any or all bids, to waive any defect or informality in bids received, and to accept or reject any bid or portion thereof.

23. Except as otherwise provided in this Invitation, Bid, and Acceptance, any dispute concerning a question of fact arising under this invitation, which is not disposed of by agreement, shall be decided by the Chief of Real Estate Division who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Purchaser. The decision of the Chief of Real Estate Division shall be final and conclusive unless within 30 calendar days from the date of receipt of such copy the Purchaser mails or otherwise furnishes to the Chief of Real Estate Division written appeal addressed to the Secretary of the Army. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this clause, the Purchaser shall be afforded an opportunity to be heard and to offer evidence in support of his appeal. Pending final decision of a dispute hereunder, the Purchaser shall proceed diligently with the performance of the contract and in accordance with the Chief of Real Estate Division's decision. This condition does not preclude consideration of law questions in connection with those decisions; provided, that nothing in this contract shall be construed as making final the decision of any administrative official, representative, or board on the question of law.

24. Any awarded contract may be subject to Executive Order 13658 and Executive Order 13706.

25. Additional copies of this advertisement may be obtained from the Real Estate Division, Vicksburg District, U.S. Army Corps of Engineers, 4155 Clay Street, Vicksburg, Mississippi 39183-3435, or by calling Angela Williams at (601) 631-5230 (office) or (601) 831-0172 (cell). Please contact Mr. Robert Cosgriff at (618) 792-5479 for any questions regarding this timber sale.

AUTHORITY FOR SALE: Federal Property and Administrative Services Act of 1949, as amended (40 USC 471, et seq.) and ER 405-1-12, Chapter 11.

Sale Area 1

TIMBER SALE INFORMATION SHEET

Rivers Project Office, Bolter Island, Stands 13 and 15 02JAN2020

Location to Nearest Quarter Section and Topographic Feature:

Sale Area 1 is located on Bolter Island on the Mississippi River between River Miles 224-227. It is 48 acres (between two management stands) located in the NE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of S25, T48N, R04E, St Charles County, MO.

System of Tree Marking:

Trees to be harvested are marked with blue tree marking paint at eye level. All trees marked with blue paint are to be felled. All woody material will be removed from site to facilitate seed catch from seed trees. Retained trees are marked with red tree marking paint at eye level and on the stump. Cutting of red painted trees shall not be permitted.

System of Boundary Marking

All timber sale boundaries are marked with yellow tree marking paint at eye level. Orange ribbon will also be tied to boundary trees to further facilitate identification.

Volume by Species:

Approximate volumes are 706.64 MBF hardwood sawtimber and 1011.55 cords mixed hardwood pulpwood.

Purpose of Sale:

This sale is to reset conditions for the establishment of early successional forest. The regeneration harvest will remove all woody stems and retain approximately 4 trees/acre or 10-25 ft² BA/acre of seed trees to reforest the site.

Possible Show-Me Time, Date and Location:

Tuesday through Friday from 0700 to 17300.

Contact Robert Cosgriff at 618-792-5479

Other Information

Notify Project Forester prior to logging. Placement of loading decks will be coordinated with Project Forester prior to placement. Access across private lands will be the responsibility of the buyer. No wet weather logging will be permitted. All haul roads and decks will be cleaned, smoothed and seeded upon completion.

Sale Area 1 Stand 13 Timber Volume Summary

Product: Sawtimber**Species Mixed Hardwood****02JAN2020**

Bolter 13	Per Acre			Total (31 Acres)	
DBH	Trees	Basal Area	Board Feet	Trees	Board Feet
10	0.032258	0.019387	0.681613	1	21.13
12	1	0.805129	33.22935	31	1030.11
14	2.032258	2.064194	102.7919	63	3186.55
16	2.967742	3.960161	250.4535	92	7764.06
18	2.483871	4.142452	348.69	77	10809.39
20	2.032258	4.234323	483.5919	63	14991.35
22	2.096774	5.335645	762.2255	65	23628.99
24	1.709677	5.195194	857.6823	53	26588.15
26	1.548387	5.456935	962.2468	48	29829.65
28	1.290323	5.390613	1163.881	40	36080.3
30	1.451613	6.88329	1477.831	45	45812.76
32	1.451613	7.87071	1714.227	45	53141.04
34	0.419355	2.617774	686.7155	13	21288.18
36	0.387097	2.638774	731.7745	12	22685.01
38	0.387097	2.957839	688.1397	12	21332.33
40	0.225806	1.922194	489.1848	7	15164.73
42	0.193548	1.830161	501.6677	6	15551.7
44	0.064516	0.650613	98.12903	2	3042
46	0.064516	0.728581	139.5806	2	4327
48	0	0	0	0	0
50	0	0	0	0	0
52	0	0	0	0	0
54	0.032258	0.503581	276.6413	1	8575.88
56	0.096774	1.596645	167.8065	3	5202
58	0.032258	0.571645	135.9194	1	4213.5
60	0	0	0	0	0
62	0	0	0	0	0
64	0	0	0	0	0
66	0.032258	0.743355	60.01613	1	1860.5
Total	22.03226	68.11919	12133.11	683	376126.3

Product: Pulpwood**Species Mixed Hardwood****02JAN2020**

Bolter 13	Per Acre			Total (31 Acres)	
DBH	Trees	Basal Area	Cords	Trees	Cords
4	10.51613	1.0459355	0.526935	326	16.335
6	27.70968	4.6308065	1.69871	859	52.66
8	18	5.5802581	1.839677	558	57.03
10	12.67742	6.2694516	2.135	393	66.185
12	8.935484	6.4280323	2.135161	277	66.19
14	5.83871	5.713129	2.166613	181	67.165
16	3.580645	4.6994516	1.655323	111	51.315
18	1.612903	2.6669032	0.923387	50	28.625
20	1	2.130129	0.76129	31	23.6
22	0.580645	1.4710323	0.522581	18	16.2
24	0.258065	0.8024839	0.232258	8	7.2
26	0.290323	1.0390968	0.385484	9	11.95
28	0.258065	1.0416452	0.487097	8	15.1
30	0.16129	0.7553226	0.208065	5	6.45
32	0.096774	0.5249355	0.145161	3	4.5
34	0.193548	1.1779032	0.290323	6	9
36	0.064516	0.4335806	0.072581	2	2.25
38	0.096774	0.7317419	0.145161	3	4.5
40	0.129032	1.1106452	0.217742	4	6.75
42	0	0	0	0	0
44	0	0	0	0	0
46	0	0	0	0	0
48	0	0	0	0	0
50	0	0	0	0	0
52	0	0	0	0	0
54	0	0	0	0	0
56	0	0	0	0	0
58	0	0	0	0	0
60	0.032258	0.6333871	0.072581	1	2.25
62	0	0	0	0	0
64	0	0	0	0	0
66	0	0	0	0	0
68	0	0	0	0	0
70	0	0	0	0	0
72	0	0	0	0	0
74	0	0	0	0	0
76	0.032258	1.0162258	0.072581	1	2.25
Total	92.06452	49.902097	16.69371	2854	517.505

Sale Area 1 Stand 15 Timber Volume Summary

Product: Sawtimber

Species Mixed Hardwood

02JAN2020

Bolter 15	Per Acre			Total (17 Acres)	
DBH	Trees	Basal Area	Board Feet	Trees	Board Feet
10	0.058824	0.035353	1.242941	1	21.13
12	0.764706	0.597059	24.28941	13	412.92
14	2.705882	2.707294	123.3176	46	2096.4
16	3.529412	4.615176	282.6876	60	4805.69
18	4	6.704824	500.7265	68	8512.35
20	3.294118	6.845882	728.4912	56	12384.35
22	2.764706	7.066353	808.1588	47	13738.7
24	2.176471	6.624118	1065.202	37	18108.43
26	1.705882	6.06	1079.377	29	18349.41
28	2.352941	9.787294	1788.28	40	30400.76
30	1.823529	8.632176	1466.091	31	24923.55
32	2.294118	12.43512	2628.138	39	44678.34
34	1.764706	10.73412	2491.678	30	42358.53
36	1.058824	7.311176	1733.718	18	29473.2
38	0.823529	6.216294	1425.429	14	24232.3
40	0.529412	4.534235	1235.465	9	21002.91
42	0.352941	3.310471	862.1329	6	14656.26
44	0.411765	4.228	1002.794	7	17047.49
46	0.058824	0.667118	101.7976	1	1730.56
48	0	0	0	0	0
50	0.058824	0.764059	118.0612	1	2007.04
Total	32.52941	109.8761	19467.08	553	330940.3

Product: Pulpwood**Species Mixed Hardwood****02JAN2020**

Bolter 15	Per Acre			Total (17 Acres)	
DBH	Trees	Basal Area	Cords	Trees	Cords
4	6.352941	0.623118	0.336471	108	5.72
6	14.47059	2.379765	0.859412	246	14.61
8	10.82353	3.346	1.040588	184	17.69
10	11.17647	5.481588	1.755294	190	29.84
12	8.647059	6.217176	1.982941	147	33.71
14	5.588235	5.542353	1.881176	95	31.98
16	2.411765	3.100824	1.102059	41	18.735
18	2.294118	3.824824	1.067941	39	18.155
20	1.352941	2.834118	0.988235	23	16.8
22	0.411765	1.065235	0.305882	7	5.2
24	0.411765	1.223	0.247059	7	4.2
26	0.470588	1.745471	0.514706	8	8.75
28	0.176471	0.715588	0.326471	3	5.55
30	0.235294	1.128471	0.511765	4	8.7
32	0.352941	1.918647	0.661765	6	11.25
34	0.235294	1.430059	0.264706	4	4.5
36	0.058824	0.397529	0.132353	1	2.25
38	0.117647	0.936353	0.132353	2	2.25
40	0	0	0	0	0
42	0	0	0	0	0
44	0	0	0	0	0
46	0.117647	1.337294	0.264706	2	4.5
48	0	0	0	0	0
50	0	0	0	0	0
52	0	0	0	0	0
54	0.058824	0.904647	0.132353	1	2.25
Total	65.76471	46.15206	14.50824	1118	246.64

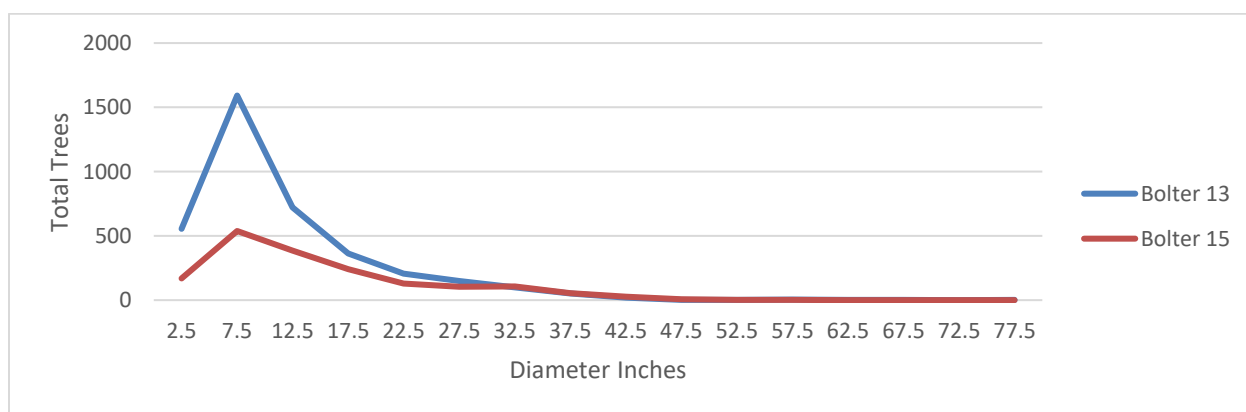
Number of 16 foot logs by species (includes retained trees)

Site	Species	0.5	1	1.5	2	2.5	3	3.5	
Bolter 13	American elm	64	16	0	0	0	0	0	
Bolter 13	Boxelder	79	12	2	0	0	0	0	
Bolter 13	Eastern cottonwood	4	40	80	100	22	1	0	
Bolter 13	green ash	19	21	27	23	3	0	0	
Bolter 13	hackberry	1	0	0	0	0	0	0	
Bolter 13	honey locust	1	0	0	0	0	0	0	
Bolter 13	Kentucky coffeetree	4	4	2	0	0	0	0	
Bolter 13	pecan	6	4	4	4	0	0	0	
Bolter 13	silver maple	95	71	37	9	0	0	1	
Bolter 13	sycamore	8	8	1	1	0	0	0	
	Total	281	176	153	137	25	1	1	
	Total Logs	140.5	176	229.5	274	62.5	3	3.5	889
Site	Species	0.5	1	1.5	2	2.5	3		
Bolter 15	American elm	35	3	0	0	0	0		
Bolter 15	Boxelder	54	5	0	0	0	0		
Bolter 15	Eastern cottonwood	5	39	78	57	16	2		
Bolter 15	green ash	2	7	9	5	4	0		
Bolter 15	honey locust	0	1	0	0	0	0		
Bolter 15	Kentucky coffeetree	1	1	0	1	0	0		
Bolter 15	pecan	1	2	2	0	0	0		
Bolter 15	silver maple	119	97	43	8	0	0		
Bolter 15	sycamore	1	7	3	4	1	1		
	Total	218	162	135	75	21	3		
	Total Logs	109	162	202.5	150	52.5	9	685	

Volume by Species

Site	Species	% Cut	% Retain	N	Volume_Doyle	Volume_Scribner	Pulp Cords
Bolter 13	American elm	100	0	777	11959.72	12330.53	111.755
Bolter 13	black locust	100	0	2	0	0	0.11
Bolter 13	boxelder	100	0	1238	8305.595	9380.66	210.405
Bolter 13	Eastern cottonwood	77.57	22.43	263	192668.9	184903.9	24.035
Bolter 13	green ash	99.45	0.55	183	64515.54	62728.02	18.745
Bolter 13	hackberry	60.1	39.9	203	0	0	8.885
Bolter 13	shellbark hickory	0	100	1	0	0	0
Bolter 13	honey locust	100	0	8	160.205	165.5459	0.815
Bolter 13	Kentucky coffeetree	13.89	86.11	36	842.31	879.8889	1
Bolter 13	red muhlberry	100	0	109	0	0	10.83
Bolter 13	pecan	3.45	96.55	29	0	0	2.25
Bolter 13	silver maple	100	0	500	95953.29	93133.05	115.125
Bolter 13	sycamore	73.96	26.04	96	1296.375	1476.48	12.49
Bolter 13	white muhlberry	100	0	18	0	0	1.06
	Total	94	6	3765	375701.9	364998.1	517.505
Site	Species	% Cut	% Retain	N	Volume_Doyle	Volume_Scribner	Pulp Cords
Bolter 15	American elm	100	0	524	2672.165	3104.122	65.2
Bolter 15	boxelder	100	0	203	5003.53	5672.325	53.15
Bolter 15	Eastern cottonwood	80.38	19.62	209	181343.1	171850.3	19.495
Bolter 15	green ash	92.45	7.55	53	28499.49	26580.97	7.16
Bolter 15	hackberry	73.53	26.47	102	0	0	4.3

Bolter 15	honey locust	100	0	2	686.44	656.1116	0.09
Bolter 15	Kentucky coffeetree	36.36	63.64	11	0	0	1.2
Bolter 15	red muhlberry	100	0	21	0	0	1.44
Bolter 15	pecan	50	50	6	812.095	837.7711	0.235
Bolter 15	silver maple	100	0	449	104046.8	102563.9	93.9
Bolter 15	sycamore	42.11	57.89	19	7876.685	7368.381	0.47
	Total	94.73	5.27	176	330940.3	318633.9	246.64



Size Distribution

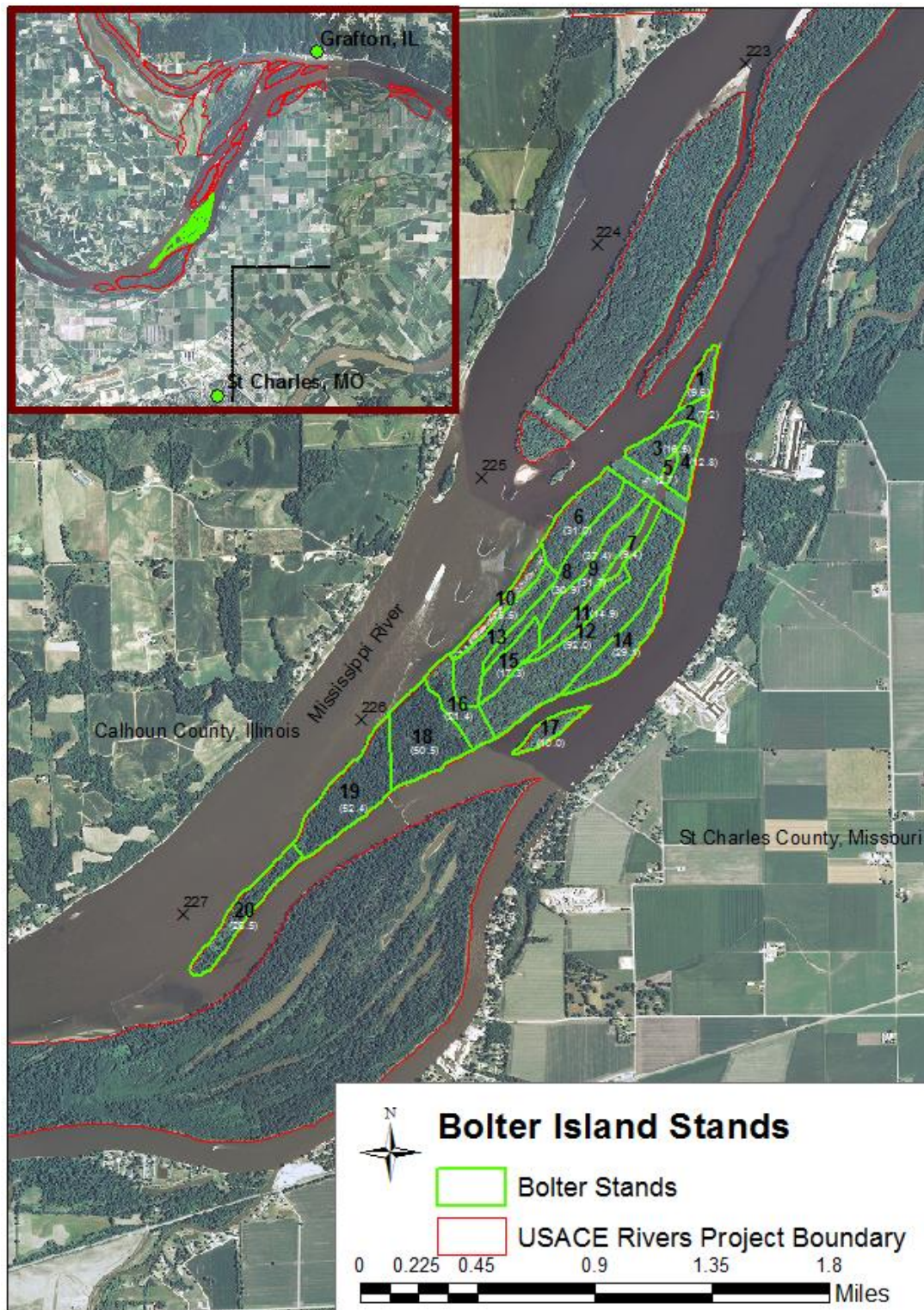


Figure 1. Bolter Island is located between Mississippi River Mile 224 and 227 near St Charles, MO.

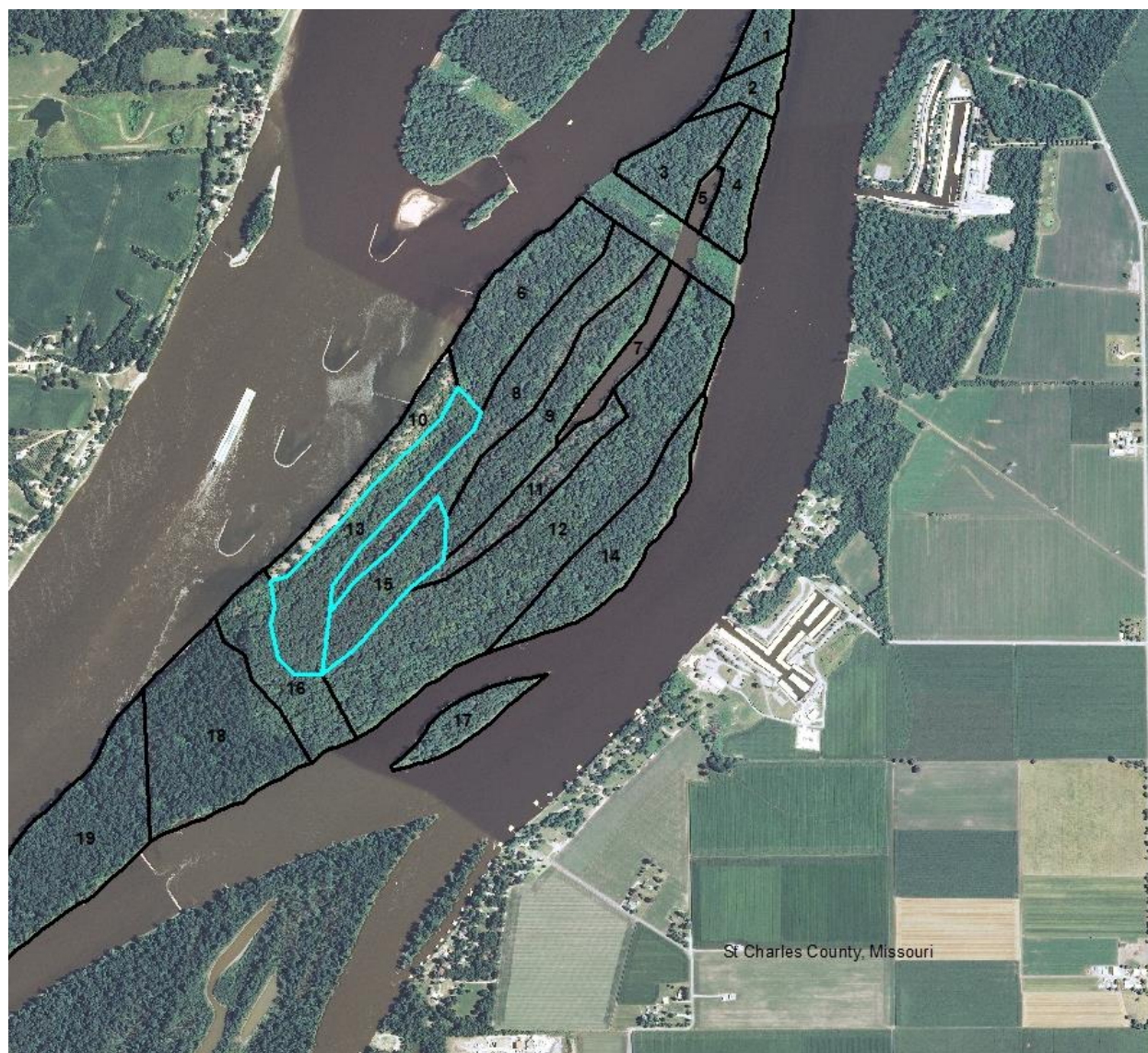
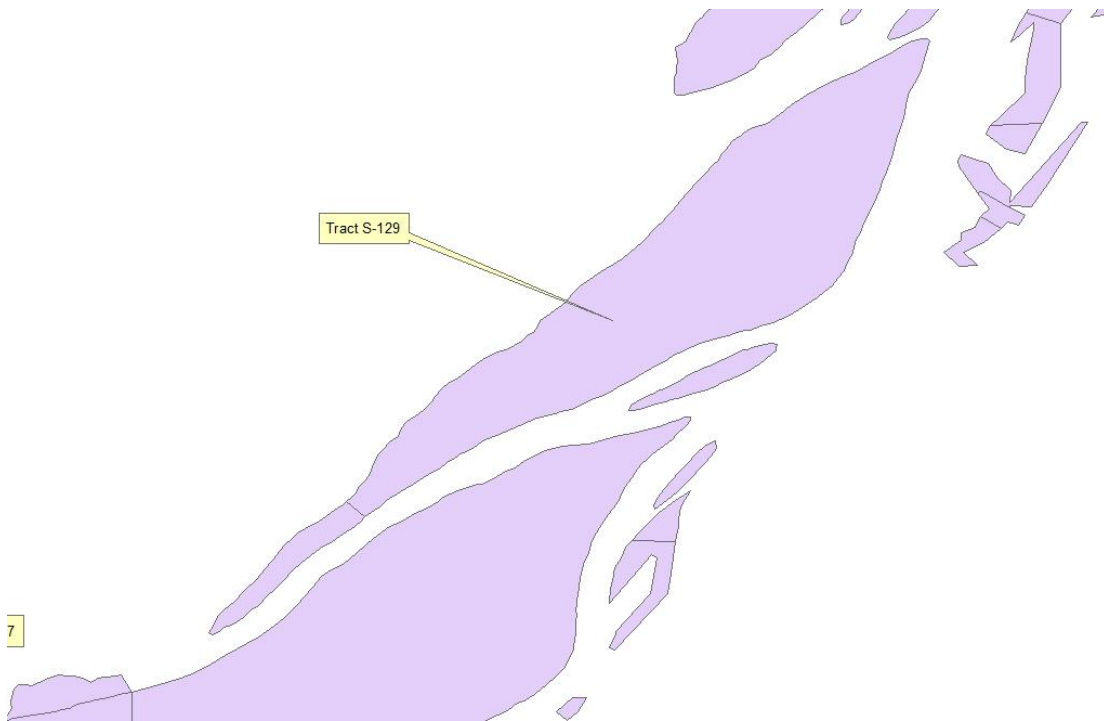


Figure 2. Stands 13 and 15 are connected stands in the interior of Bolter Island.



Sale Area 2

TIMBER SALE INFORMATION SHEET

Rivers Project Office, Mason Island, Stands 7 and 9 02JAN2020

Location to Nearest Quarter Section and Topographic Feature:

Sale Area 2 is located on Mason Island on the Mississippi River between River Miles 219-220.5. It is 57 acres (between two management stands) located in the NE ¼ of the SW ¼ of S33, T49N, R05E, St Charles County, MO.

System of Tree Marking:

Trees to be harvested are marked with blue tree marking paint at eye level. All trees marked with blue paint are to be felled. All woody material will be removed from site to facilitate seed catch from seed trees. Retained trees are marked with red tree marking paint at eye level and on the stump. Cutting of red painted trees shall not be permitted.

System of Boundary Marking

All timber sale boundaries are marked with yellow tree marking paint at eye level. Orange ribbon will also be tied to boundary trees to further facilitate identification.

Volume by Species:

Approximate volumes are 1610.71 MBF hardwood sawtimber and 1124.07 cords mixed hardwood pulpwood.

Purpose of Sale:

This sale is to reset conditions for the establishment of early successional forest. The regeneration harvest will remove all woody stems and retain approximately 4 trees/acre or 10-25 ft² BA/acre of seed trees to reforest the site.

Possible Show-Me Time, Date and Location:

Tuesday through Friday from 0700 to 17300.
Contact Robert Cosgriff at 618-792-5479

Other Information

Notify Project Forester prior to logging. Placement of loading decks will be coordinated with Project Forester prior to placement. Access across private lands will be the responsibility of the buyer. No wet weather logging will be permitted. All haul roads and decks will be cleaned, smoothed and seeded upon completion.

Sale Area 2 Stand 7 Timber Volume Summary

Product: Sawtimber**Species Mixed Hardwood****02JAN2020**

Mason 7	Per Acre			Total (14 Acres)	
DBH	Trees	Basal Area	Board Feet	Trees	Board Feet
10	0.785714	0.451571	16.845	11	235.83
12	5	3.772286	191.8807	70	2686.33
14	6.214286	6.291357	467.535	87	6545.49
16	6.071429	7.877714	798.5314	85	11179.44
18	6.642857	11.20443	1388.21	93	19434.94
20	4.714286	9.860929	1425.716	66	19960.02
22	4.571429	11.51943	2165.954	64	30323.35
24	5.142857	15.67221	3310.553	72	46347.74
26	3.142857	11.14	2508.709	44	35121.92
28	2.714286	11.22336	2870.151	38	40182.12
30	1.428571	6.751071	2154.728	20	30166.19
32	1.142857	6.105286	2128.164	16	29794.29
34	1.428571	8.773357	3122.179	20	43710.51
36	1	6.878357	2520.371	14	35285.19
38	0.428571	3.238643	1274.109	6	17837.52
40	0.142857	1.225071	274.6757	2	3845.46
42	0.071429	0.661286	296.5371	1	4151.52
44	0.071429	0.710357	160.4671	1	2246.54
46	0.071429	0.8065	369.0536	1	5166.75
Total	50.78571	124.1632	27444.37	711	384221.2

Product: Pulpwood**Species Mixed Hardwood****02JAN2020**

Mason 7	Per Acre			Total (14 Acres)	
DBH	Trees	Basal Area	Cords	Trees	Cords
4	4	0.399071	0.22	56	3.08
6	10.14286	1.703286	0.662857	142	9.28
8	11.71429	3.653929	1.328571	164	18.6
10	10.21429	5.131143	1.95	143	27.3
12	6.071429	4.328143	1.683929	85	23.575
14	3.642857	3.617786	1.586786	51	22.215
16	2.642857	3.453643	1.551071	37	21.715
18	1.857143	3.082929	1.511071	26	21.155
20	1.5	3.151071	1.6	21	22.4
22	1.142857	2.8615	1.428571	16	20
24	0.428571	1.255	0.6	6	8.4
26	0.642857	2.323214	1.082143	9	15.15
28	0.357143	1.422286	0.660714	5	9.25
30	0.428571	2.104286	0.95	6	13.3
32	0.071429	0.381643	0.160714	1	2.25
34	0.071429	0.419143	0.160714	1	2.25
36	0	0	0	0	0
38	0	0	0	0	0
40	0.071429	0.623357	0.160714	1	2.25
42	0.142857	1.358143	0.321429	2	4.5
44	0	0	0	0	0
46	0.071429	0.795929	0.160714	1	2.25
Total	55.21429	42.0655	17.78	773	248.92

Sale Area 2 Stand 9 Timber Volume Summary

Product: Sawtimber**Species Mixed Hardwood****02JAN2020**

Mason 9	Per Acre			Total (32 Acres)	
DBH	Trees	Basal Area	Board Feet	Trees	Board Feet
10	1.28125	0.730375	25.47938	41	815.34
12	3.59375	2.652813	137.9556	115	4414.58
14	4.5625	4.592344	368.3338	146	11786.68
16	4.15625	5.479281	581.1122	133	18595.59
18	3.84375	6.476094	913.3031	123	29225.7
20	3.9375	8.187313	1441.39	126	46124.47
22	2.625	6.703281	1475.75	84	47224.01
24	2.40625	7.316219	1988.036	77	63617.14
26	2.71875	9.641531	3024.897	87	96796.69
28	2.28125	9.448594	3304.783	73	105753
30	1.84375	8.805281	3538.982	59	113247.4
32	2	10.85122	4462.765	64	142808.5
34	1.84375	11.30459	4580.03	59	146561
36	0.75	5.197938	2166.413	24	69325.21
38	0.90625	6.901281	3180.459	29	101774.7
40	0.5625	4.786281	2276.772	18	72856.69
42	0.28125	2.616719	1172.858	9	37531.45
44	0.34375	3.534906	1677.458	11	53678.67
46	0.25	2.803156	1334.888	8	42716.43
48	0.09375	1.187969	488.84	3	15642.88
50	0.03125	0.40425	187.3209	1	5994.27
Total	40.3125	119.6214	38327.82	1290	1226490

Product: Pulpwood**Species Mixed Hardwood****02JAN2020**

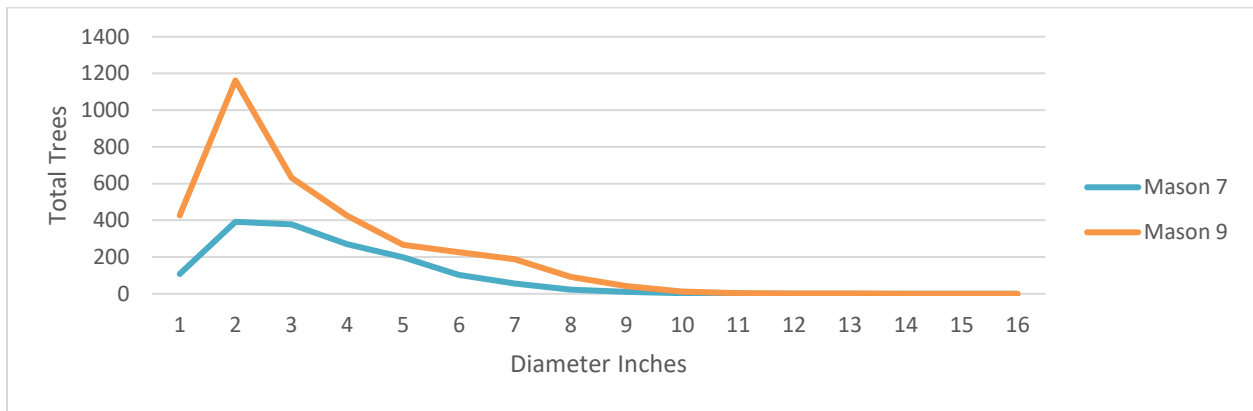
Mason 9	Per Acre			Total (32 Acres)	
DBH	Trees	Basal Area	Cords	Trees	Cords
4	6.9375	0.677688	0.378125	222	12.1
6	16.71875	2.761563	1.077031	535	34.465
8	14.28125	4.45425	1.610313	457	51.53
10	8.90625	4.293438	1.617656	285	51.765
12	4.46875	3.242219	1.252656	143	40.085
14	2.96875	2.934813	1.317344	95	42.155
16	1.78125	2.331188	1.03875	57	33.24
18	1.40625	2.318969	1.127344	45	36.075
20	0.59375	1.230656	0.6375	19	20.4
22	0.84375	2.085469	1.0375	27	33.2
24	0.65625	2.010813	0.975	21	31.2
26	0.59375	2.090156	0.973438	19	31.15
28	0.3125	1.318594	0.615625	10	19.7
30	0.15625	0.743875	0.342188	5	10.95
32	0.09375	0.515188	0.210938	3	6.75
34	0.21875	1.3645	0.492188	7	15.75
36	0.0625	0.429688	0.140625	2	4.5
38	0.0625	0.475594	0.140625	2	4.5
40	0.0625	0.511875	0.140625	2	4.5
42	0	0	0	0	0
44	0.0625	0.652469	0.140625	2	4.5
46	0.03125	0.365375	0.070313	1	2.25
Total	61.21875	36.80838	15.33641	1959	490.765

Number of 16 foot logs by species (includes retained trees)

Site	Species	0.5	1	1.5	2	2.5	3	3.5	4					
Mason 7	American elm	16	11	2	0	0	0	0	0					
Mason 7	Boxelder	2	0	0	0	0	0	0	0					
Mason 7	Eastern cottonwood	0	1	1	16	20	40	10	6					
Mason 7	green ash	13	15	9	17	5	1	0	0					
Mason 7	silver maple	160	202	59	96	17	8	0	0					
Mason 7	sycamore	0	0	0	1	1	0	0	0					
Mason 7	black willow	0	1	1	1	0	0	0	0					
	Total	191	230	72	131	43	49	10	6					
	Total Logs	95.5	230	108	262	107.5	147	35	24	1009				
Site	Species	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	
Mason 9	American elm	108	60	11	7	2	0	0	0	0	0	0	0	
Mason 9	Boxelder	25	16	0	1	1	0	0	0	0	0	0	0	
Mason 9	Eastern cottonwood	1	2	9	50	77	144	62	67	16	10	4	10	
Mason 9	green ash	1	0	3	0	0	0	0	0	0	0	0	0	
Mason 9	hackberry	1	0	1	1	0	0	0	0	0	0	0	0	
Mason 9	silver maple	142	240	115	133	43	8	5	3	2	0	0	0	
Mason 9	sycamore	0	1	0	1	0	2	0	0	0	0	0	0	
	Total	278	319	139	193	123	154	67	70	18	10	4	10	
	Total Logs	139	319	208.5	386	307.5	462	234.5	280	81	50	22	60	2549.5

Volume by Species

Site	Species	% Cut	% Retain	N	Volume_Doyle	Volume_Scribner	Pulp Cords
Mason 7	American elm	100	0	326	2189.05	2653.222	37.07
Mason 7	boxelder	100	0	8	219.22	233.8718	1.94
Mason 7	Eastern cottonwood	84.91	15.09	106	161415.4	152826.9	22
Mason 7	green ash	100	0	94	33460.87	33470.26	11.595
Mason 7	hackberry	11.36	88.64	44	0	0	0.31
Mason 7	red muhlberry	100	0	1	0	0	0.055
Mason 7	silver maple	100	0	936	184680.1	190403	158.57
Mason 7	swamp privet	100	0	1	0	0	0.055
Mason 7	sycamore	0	100	2	0	0	0
Mason 7	black willow	100	0	11	2256.455	2215.535	8.48
	Total	96.31	3.69	1546	384221.1	381802.8	240.075
Site	Species	% Cut	% Retain	N	Volume_Doyle	Volume_Scribner	Pulp Cords
Mason 9	American elm	99.85	0.15	1306	16314.35	19391.67	122.175
Mason 9	boxelder	99.38	0.62	323	6519.28	7096.887	93.215
Mason 9	Eastern cottonwood	83	17	494	907043.5	854342.1	73.425
Mason 9	green ash	100	0	75	2295.57	2258.636	6.615
Mason 9	hackberry	6.47	93.53	139	0	0	0.53
Mason 9	Kentucky coffeetree	100	0	1	0	0	0.17
Mason 9	red muhlberry	100	0	44	0	0	3.11
Mason 9	silver maple	100	0	1062	289025.7	295387.7	180.135
Mason 9	swamp privet	100	0	1	0	0	0.09
Mason 9	sycamore	21.43	78.57	14	5292	4726.92	1.69
Mason 9	black willow	100	0	2	0	0	1.435
	Total	93.43	6.57	3484	1226490	1183204	482.59

**Size Distribution**

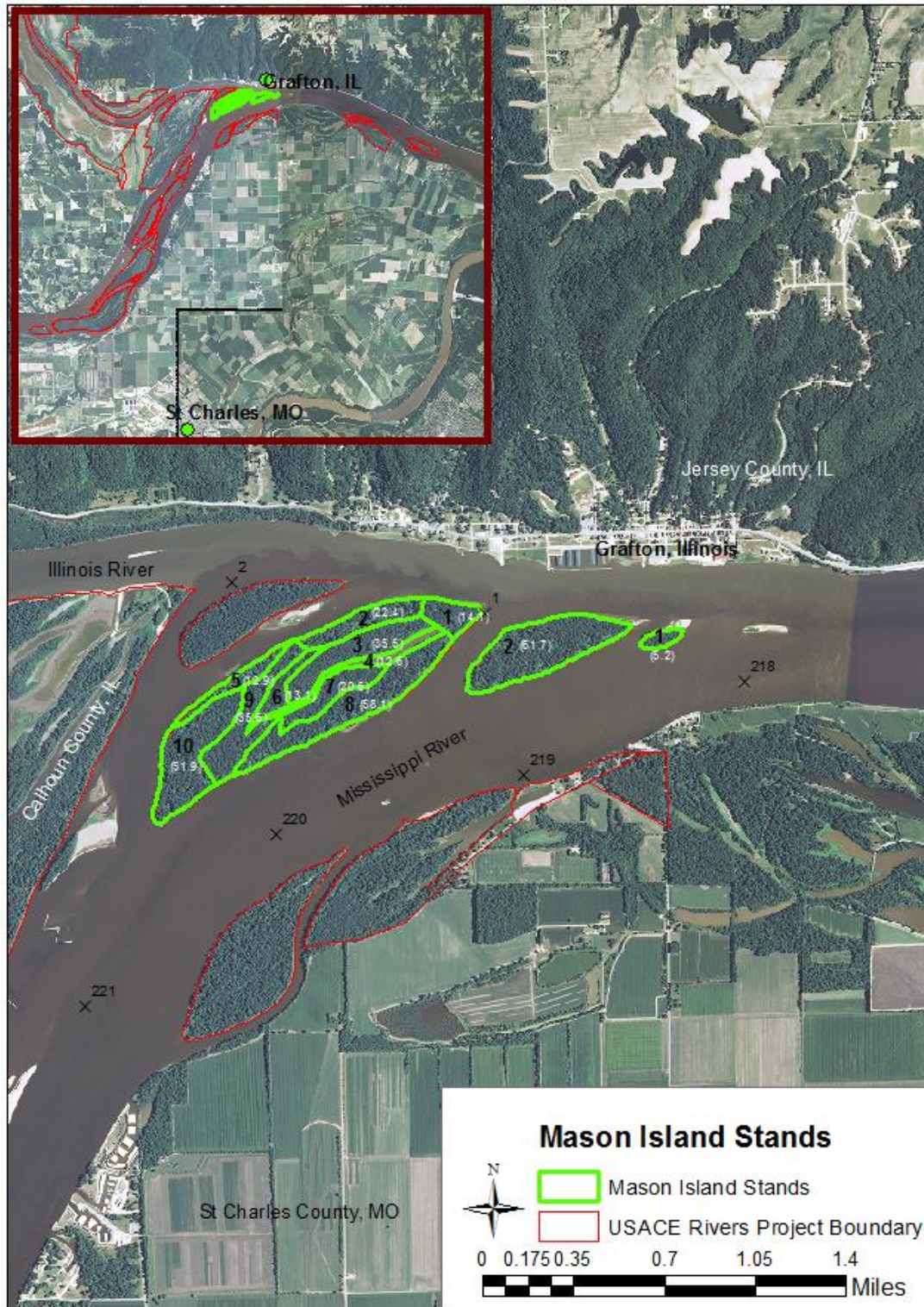


Figure 3. Mason Island is located between Mississippi River Mile 218 and 221 near Grafton, IL.

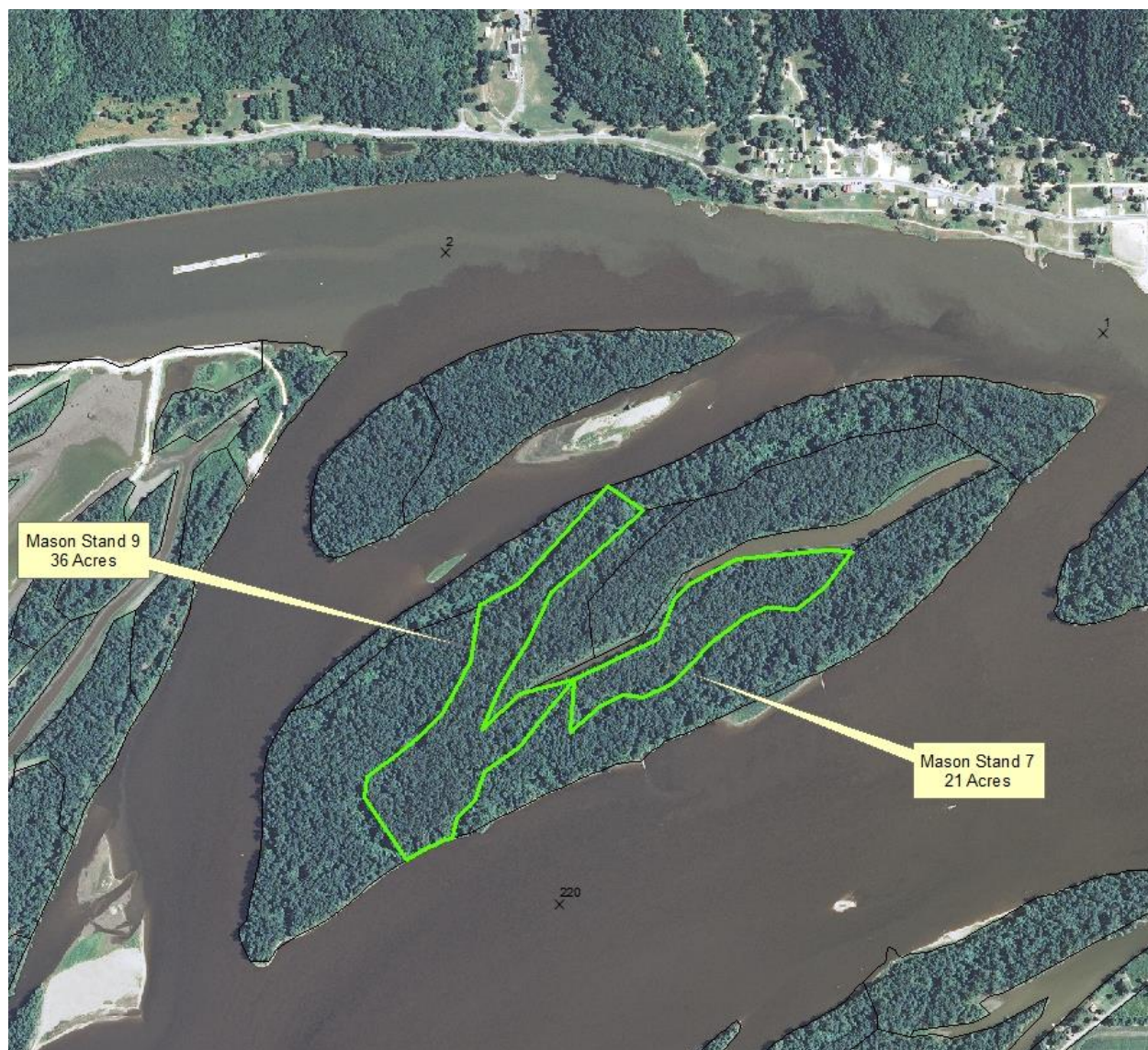
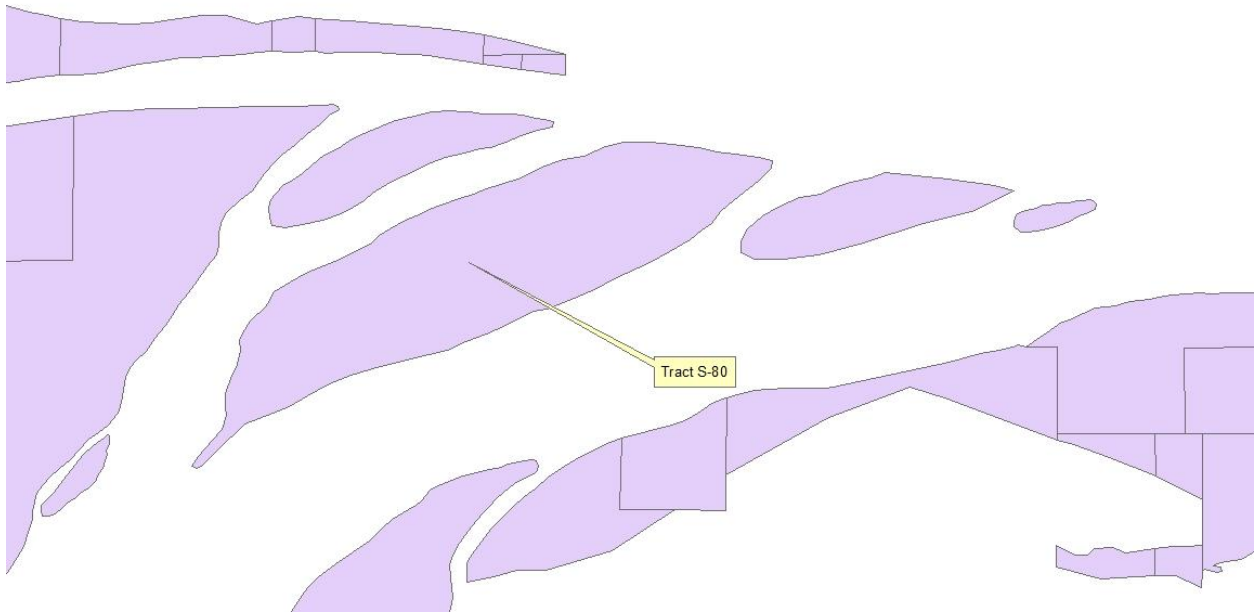


Figure 4. Mason Island stands 7 and 9 are located in the interior of the island and resources should be accessible from a single ferry landing site.



Sale Area 3

TIMBER SALE INFORMATION SHEET

Rivers Project Office, Portage Island 02JAN2020

Location to the Nearest Quarter Section and Topographic Feature

Sale Area 3 (10 acre stand) is located on Portage Island on the Mississippi River between River Miles 213-214, St Charles County, MO.

System of Tree Marking:

Trees to be harvested are marked with blue tree marking paint at eye level. All trees marked with blue paint are to be felled. All woody material will be removed from site to facilitate seed catch from seed trees. Retained trees are marked with red tree marking paint at eye level and on the stump. Cutting of red painted trees shall not be permitted.

System of Boundary Marking

All timber sale boundaries are marked with yellow tree marking paint at eye level. Orange ribbon will also be tied to boundary trees to further facilitate identification.

Volume by Species:

Approximate volumes are 251.85 MBF hardwood sawtimber and 347.11 cords mixed hardwood pulpwood across the 21 acre stand surveyed. However, only 10 acres will be harvested due to the presence of multiple eagle nests around the perimeter of the stand. This reduces the available volume to 119.93 MBF hardwood sawtimber and 165.29 cords mixed hardwood pulpwood.

Purpose of Sale:

This sale is to reset conditions for the establishment of early successional forest. The regeneration harvest will remove all woody stems and retain approximately 4 trees/acre or 10-25 ft² BA/acre of seed trees to reforest the site.

Possible Show-Me Time, Date and Location:

Tuesday through Friday from 0700 to 17300.

Contact Robert Cosgriff at 618-792-5479

Other Information

Notify Project Forester prior to logging. Placement of loading decks will be coordinated with Project Forester prior to placement. Access across private lands will be the responsibility of the buyer. No wet weather logging will be permitted. All haul roads and decks will be cleaned, smoothed and seeded upon completion.

Sale Area 3 Timber Volume Summary

Product: Sawtimber
Species Mixed Hardwood
02JAN2020

Portage	Per Acre			Total (10 Acres)	
DBH	Trees	Basal Area	Board Feet	Trees	Board Feet
10	0	0	0	0	0
12	0.238095	0.187714	7.666190476	2.380952	76.6619
14	1.238095	1.283429	61.9747619	12.38095	619.7476
16	1.761905	2.339762	121.67	17.61905	1216.7
18	1.428571	2.38481	150.9866667	14.28571	1509.867
20	2.190476	4.566619	311.8385714	21.90476	3118.386
22	2	5.031048	446.4009524	20	4464.01
24	2.809524	8.572	829.0809524	28.09524	8290.81
26	1.666667	5.96019	603.837619	16.66667	6038.376
28	2.190476	9.041571	1090.603333	21.90476	10906.03
30	1.47619	6.91919	779.4761905	14.7619	7794.762
32	1.904762	10.33614	1306.80619	19.04762	13068.06
34	1.238095	7.660048	1028.806667	12.38095	10288.07
36	1.333333	9.168952	1373.11	13.33333	13731.1
38	0.380952	2.949762	457.8657143	3.809524	4578.657
40	0.809524	6.843429	1194.345714	8.095238	11943.46
42	0.47619	4.420381	762.487619	4.761905	7624.876
44	0.238095	2.491714	263.4933333	2.380952	2634.933
46	0.285714	3.186524	485.067619	2.857143	4850.676
48	0.095238	1.14019	218.0833333	0.952381	2180.833
50	0.095238	1.249762	241.2885714	0.952381	2412.886
52	0.047619	0.705	110.1719048	0.47619	1101.719
54	0	0	0	0	0
56	0	0	0	0	0
58	0	0	0	0	0
60	0.047619	0.925667	147.737619	0.47619	1477.376
Total	23.95238	97.3639	11992.79952	239.5238	119928

Product: Pulpwood**Species Mixed Hardwood****02JAN2020**

Portage	Per Acre			Total (10 Acres)	
DBH	Trees	Basal Area	Cords	Trees	Cords
4	13.9047619	1.373667	0.720238	139.0476	7.202381
6	27.3333333	4.389333	1.599286	273.3333	15.99286
8	12.9047619	3.924714	1.273333	129.0476	12.73333
10	6.80952381	3.350476	1.091667	68.09524	10.91667
12	5.85714286	4.202	1.344524	58.57143	13.44524
14	3.28571429	3.239143	1.250714	32.85714	12.50714
16	2.28571429	2.995952	0.938333	22.85714	9.383333
18	1.0952381	1.843524	0.675	10.95238	6.75
20	1.61904762	3.329333	1.142857	16.19048	11.42857
22	1.14285714	2.913952	0.72381	11.42857	7.238095
24	0.80952381	2.437429	0.695238	8.095238	6.952381
26	0.66666667	2.369762	0.469048	6.666667	4.690476
28	0.71428571	2.929095	0.557143	7.142857	5.571429
30	0.66666667	3.193429	1.047619	6.666667	10.47619
32	0.71428571	3.850667	1.071429	7.142857	10.71429
34	0.52380952	3.219333	0.321429	5.238095	3.214286
36	0.42857143	2.918714	0.75	4.285714	7.5
38	0.23809524	1.828524	0.214286	2.380952	2.142857
40	0.0952381	0.806619	0.214286	0.952381	2.142857
42	0.0952381	0.907619	0.107143	0.952381	1.071429
44	0.14285714	1.472286	0.214286	1.428571	2.142857
46	0	0	0	0	0
48	0	0	0	0	0
50	0.04761905	0.631238	0.107143	0.47619	1.071429
Total	81.3809524	58.12681	16.52881	813.8095	165.2881

Number of 16 foot logs by species from the full 21 acre survey (includes retained trees)

Site	Species	0.5	1	1.5	2	2.5	
Portage	American elm	34	2	0	0	0	
Portage	Boxelder	14	0	0	0	0	
Portage	Eastern cottonwood	0	8	15	11	2	
Portage	green ash	1	2	0	0	0	
Portage	pecan	1	0	0	0	0	
Portage	silver maple	229	162	44	4	0	
Portage	sycamore	1	0	0	0	0	
	Total	280	174	59	15	2	
	Total Logs	140	174	88.5	30	5	437.5

Volume by species

Site	Species	% Cut	% Retain	N	Volume_Doyle	Volume_Scribner	Pulp Cords
Portage	American elm	100	0	322	1436.692857	1619.578	38.35238
Portage	boxelder	100	0	26	807.1119048	851.5348	9.219048
Portage	Eastern cottonwood	39.53	60.47	20	7637.62381	7061.871	5.880952
Portage	green ash	100	0	82	392.6404762	400.125	7.72619
Portage	hackberry	60.38	39.62	126	0	0	5.447619
Portage	Kentucky coffeetree	100	0	1	0	0	0.111905
Portage	red muhlberry	100	0	91	0	0	6.871429
Portage	pecan	0	100	1	0	0	0
Portage	silver maple	100	0	329	109653.9048	104319.9	90.59286
Portage	swamp privet	100	0	15	0	0	1.004762
Portage	sycamore	33.33	66.67	1	0	0	0.080952
	Total	94.29	5.71	1014	119927.9738	114253	165.2881

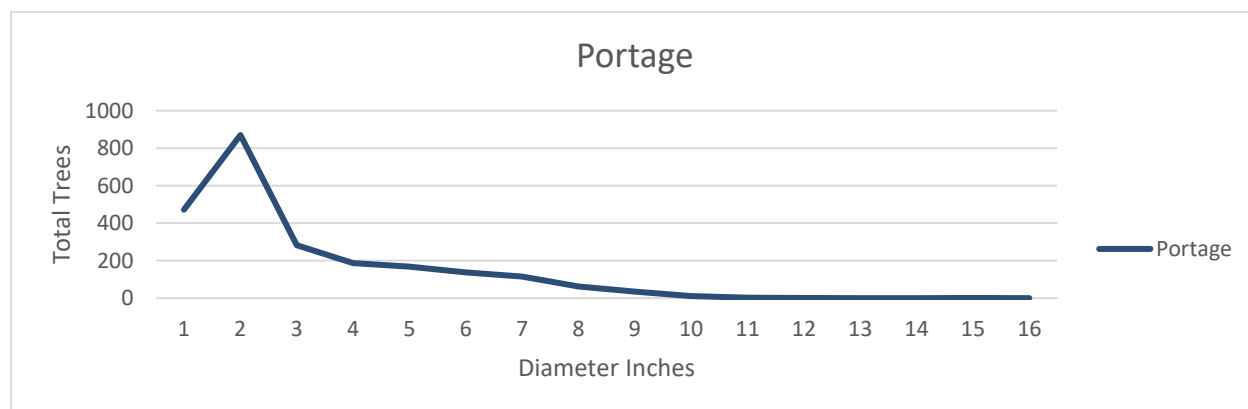

Size Distribution



Figure 5. Portage Island is part of the Mile 215 Management Area and is located between Mississippi River Mile 213-214 in St Charles County, MO, north of St Louis.

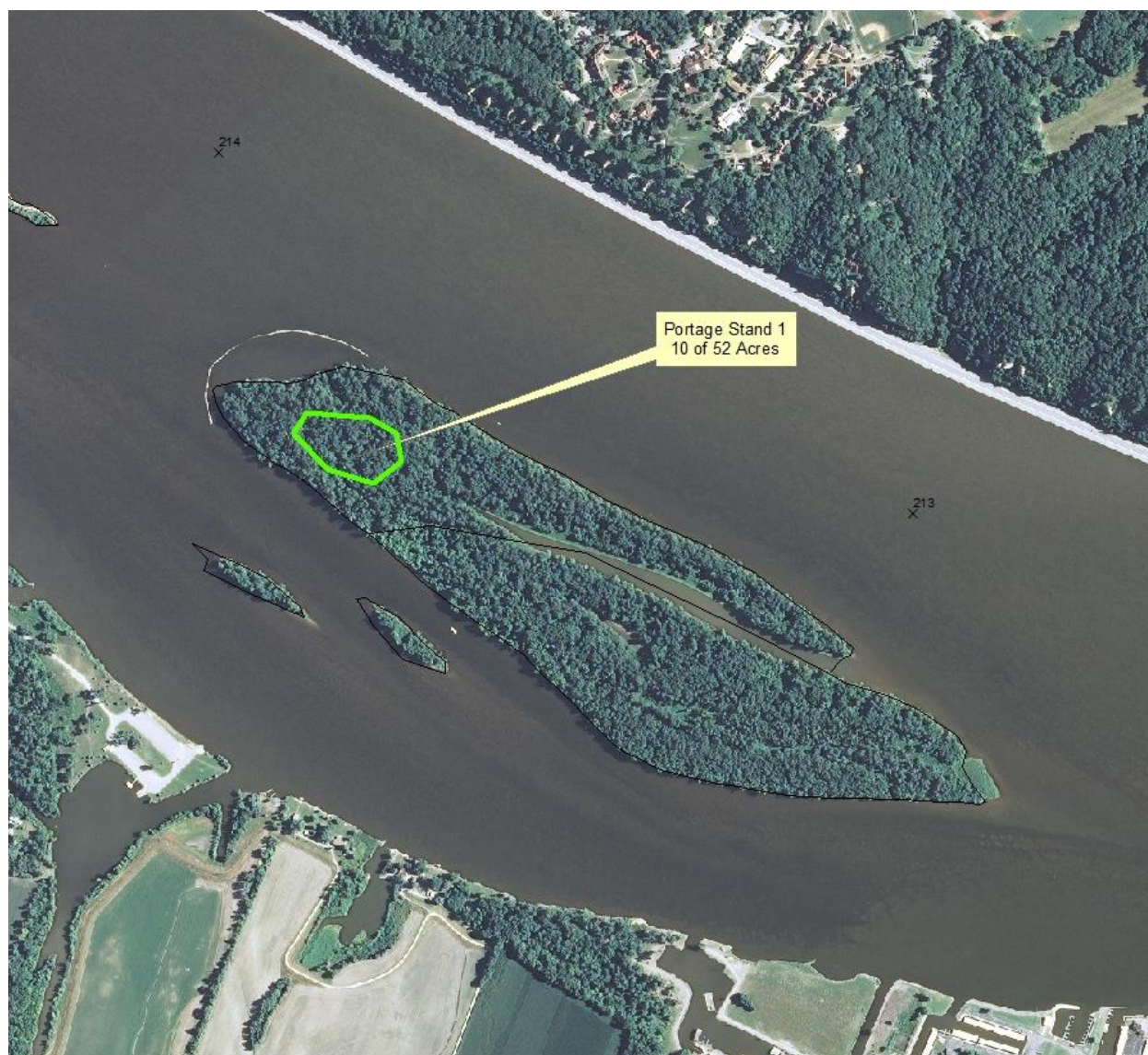


Figure 6. The Portage stand is a 10 acre stand located near the upstream side of the island.

