



Iowa Farm Bureau Carbon Credit Program

Forestry Offsets From Tree Plantings & Reforestation

Forestry Contract v070621
Forestry Offset Enrollment Worksheet
CCX Forestry Offset Tables

Iowa Farm Bureau
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APPLICATION FOR PARTICIPATION IN FORESTRY OFFSET POOL And SALES CONTRACT for EXCHANGE FORESTRY OFFSETS (XFOs)

| | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Mail Contract to: Carbon Credit Program Farm Bureau Management Corp 5400 University Ave West Des Moines, IA 50266 | If you have questions, Please call: <p style="text-align: center;">515-225-5431</p> | Contract Number <p style="text-align: center;">XFO-_____</p> |
| Contract Size Classification: Please check the appropriate size classification | | |
| Small_____ Medium_____ Large_____ Annual CO2: less than 2,000 MT 2,001 MT – 12,500 MT More than 12,500 MT | | |

| | | | |
|-------------------------|---------------|-----------------------------|--------------------------|
| Seller | Date | Associate Aggregator | Aggregator Number |
| Farm Name | Phone | Firm Name | Phone |
| Address | E-mail | Address | E-mail |
| City, State, Zip | | City, State, Zip | |

I, _____, hereby apply for participation in a forestry carbon pool managed by the Farm Bureau Management Corporation to register Exchange Forestry Offsets (XFOs) with the Chicago Climate Exchange (CCX) for the years 2003-2010 on _____ acres of property that I own or control. I hereby attest that I hold full legal title to the Greenhouse Gas mitigation rights registered as CCX Offsets that are associated with the facilities and sites included in the registered project. I hereby agree that the forest project has as a primary purpose the long-term storage of atmospheric carbon in accordance with the CCX terms of participation and that it is the intentions of the owners of the enrolled forested lands to maintain such lands in compliance with the principles and practices of sustainable forestry production systems. I hereby attest that the project is in the U.S. and involves afforestation (via plantings and/or natural regeneration) initiated on or after January 1, 1990, on land not forested on December 31, 1989 The quantity of XFOs to be issued to a CCX-registered forestry project shall be based on the annual increase in stored carbon (expressed in metric tons of carbon dioxide equivalence) on eligible sites included in the project during years the 2003 through 2010. I further agree that I will abide by the rules of the CCX as they pertain to XFOs and to the conditions for Pool participation as set forth in this Agreement.

Statement of Intent to Maintain Forest Cover and Manage Forestry Offset Land in a Sustainable Forestry System: I hereby attest that it is the intent of the owners of the property enrolled in the Chicago Climate Exchange Forestry Offset program through this Iowa Farm Bureau Management Corporation contract to maintain the enrolled land in forest cover and to manage such lands in compliance with the principles and practices of sustainable forestry systems.

Purchaser agrees to buy and seller agrees to sell and deliver to purchaser free from liens and encumbrances at 5400 University Ave, West Des Moines, Iowa, the rights to the Exchange Forestry Offsets (XFOs) created during the years 2003 through 2010 on land located at: (See Forestry Enrollment Worksheet)

Seller agrees that the XFOs registered on the Chicago Climate Exchange through this contract shall be in compliance with the rules of the Chicago Climate Exchange at the time of credit registration and will abide by the rules for participation in the forestry carbon pool as set forth by this contract. In the event that the project fails to meet these requirements, all XFOs from such land shall be null and void and any payments for XFOs delivered prior to January 1, 2011 shall be repaid subject to interest and penalties as provided in this agreement.

*The transfer price of the XFOs covered by this contract shall be the sales price as determined by sale through the Chicago Climate Exchange less a 10% service fee retained by Iowa Farm Bureau. Contracts facilitated by an Associate Aggregator will be subject to an additional 10% service fee which will be paid to the Associate Aggregator. Exchange offset registration fees and offset verification costs are the responsibility of the offset project owner. Offset registration fees will be deducted from pool proceeds prior to payment calculations.

Sale of XFOs covered by this contract shall be at the sole discretion of the Purchaser, however all XFOs shall be priced no later than June 30, 2011. Payment for XFOs covered by this contract shall be made on a semi-annual basis after pricing of the XFOs through the Chicago Climate Exchange. The parties to this contract hereby agree that the title to the XFOs shall be automatically delivered to the Purchaser on the first day of January following the year in which sequestration occurs. Seller further warrants compliance with the terms and conditions contained in the Agreement for the period from January 1, 2003 through January 1, 2011.

| | |
|--------------------|-------------------------------------------------------|
| _____ Date | _____ Date |
| Seller's Signature | Purchaser's Signature, Farm Bureau Management Corp |

Terms and Conditions

CCX Offset Project Terms and Conditions: By registering a project with CCX, each project owner agrees to and acknowledges the following Terms and Conditions in relation to the project and the Exchange Offsets issued by CCX:

1. The enrolled project meets all applicable eligibility rules of the Chicago Climate Exchange.
2. CCX will issue to the CCX Registry account of the project owner or its designated aggregator a quantity of Exchange Offsets that conforms to the applicable CCX Rules. Project owners will be notified of acceptance/rejection of their XFOs into the CCX registry account by the designated aggregator at or before the time of the first payment due the Seller hereunder.
3. Each sale of Exchange Offsets executed through the Chicago Climate Exchange shall represent a complete transfer of all legal rights associated with the mitigation of greenhouse gases that relate to the quantity and time periods associated with the Exchange Offsets that are established through fulfillment of the Terms of this contract.
4. The project owner or its CCX-registered aggregator may sell or retain the Exchange Offsets earned under the provisions of this agreement.
5. Exchange offset registration fees and verification costs are the responsibility of the offset project owner and will be deducted from the net proceeds of the pool before payments are made from the pool.
6. The project owner shall retain full legal ownership of all greenhouse gas mitigation rights that may accrue: (a) on lands or via activities not included in the CCX-registered project; (b) in excess of the quantity of Exchange Offsets issued by CCX to CCX-registered projects; (c) before or after the years 2003 through 2010 for the CCX-registered project.
7. CCX makes no warranty as to the marketability or market value of CCX Exchange Offsets.
8. Each project owner, and, when applicable, its aggregator, is required to periodically submit a signed project report that confirms conformance with the terms herein. Representatives of CCX may conduct on-site inspection of registered projects and related documents. Each project owner agrees to provide access in such cases in a prompt and cooperative manner. All CCX offsets projects and project reports and verification reports are subject to inspection and audit by the provider of regulatory services designated by CCX and by other independent experts as may be engaged by CCX.
9. CCX may request additional information and/or access to registered projects for the purpose of advancing understanding of greenhouse gas mitigation projects. Project owners may decline such access without penalty. In no cases shall research findings cause a reduction in the quantity of Exchange Offsets to be issued to a registered project.
10. Failure to conform to the rules provided herein may result in termination of enrollment in CCX and prohibition from all further participation in CCX.

CCX Eligibility Requirements: Projects that are represented in CCX by an Aggregator are referred to as “pooled projects”. The “pool” refers to the multiple projects represented by the Aggregator. Each aggregator is assigned a CCX registry account which will hold all offsets issued to projects it represents. Aggregators shall also be Authorized Traders in the CCX Trading Platform for such offsets. Aggregators shall be responsible for receiving from individual projects the CCX-required project reports, and for submitting to CCX summary reports of projects they represent.

Verifier: Is a technically expert entity that is approved by CCX to conduct verification of CCX Exchange Offset projects. CCX Forestry Pool participants agree that a CCX-approved verifier may have access to the land and facilities covered by this contract and to conduct activities to verify CCX Exchange Offsets.

Offset Issuance: CCX-eligible greenhouse gas mitigation projects can be recorded in the CCX Registry and will be issued Exchange Offsets on the basis of mitigation tonnage realized during the years 2003 through 2010. All offset project mitigation effectiveness will be quantified on the basis of metric tons of CO₂ equivalence. Each Exchange Offset will represent one hundred metric ton of carbon dioxide (CO₂) and will be identified by annual vintage.

Vintage: The vintage of an instrument is defined as the first year the designated instrument may be used for compliance with the CCX emission reduction schedule, or, as applicable, the CCX electricity purchase reduction schedule.

Trading Authority: Farm Bureau Management Corp. shall have sole authority to access the CCX Trading Platform and Registry account(s) holding the offsets issued to projects it represents and to execute sales on the CCX electronic trading platform on behalf of project owners and distribute sales proceeds to project owners in accordance with the terms stated in this contract.

Forestation: Projects in the U.S., Canada, Brazil and Mexico involving afforestation (via plantings and/or natural regeneration) initiated on or after January 1, 1990, on land not forested on December 31, 1989, may earn XFOs. The quantity of XFOs to be issued to a CCX-registered forestry project shall be based on the annual increase in stored carbon (expressed in metric tons of carbon dioxide equivalence) on eligible sites included in the project during years the 2003 through 2010.

Small forestation projects are defined for CCX purposes as projects that are owned by entities for which the minimum annual gross accumulation (during years 2003 through 2010) of stored carbon on all sites enrolled in CCX by the project owner, as defined and quantified under CCX rules, is expected to be less than 2,000 (two thousand) metric tons CO₂ per year. If the project fits into the CCX small size forest classification for the majority of years in the program, the quantification and verification requirement that are applicable to small sized forest offsets may be applied for the length of the project in current CCX program.

Medium-sized forestation projects are defined for CCX purposes as projects that are owned by entities for which the minimum annual gross accumulation of stored carbon (during years 2003 through 2010), on all sites enrolled in CCX by the project owner, as defined and quantified under CCX rules, is expected to be more than 2,000 (two thousand) but less than 12,500 (twelve thousand five hundred) metric tons CO₂ per year. If the project fits into the CCX medium size forest classification for the majority of years in the program, the quantification and verification requirement that are applicable to medium sized forest offsets may be applied for the length of the project in current CCX program.

Large forestation projects are defined for CCX purposes as projects that are owned by entities for which the minimum annual gross accumulation of stored carbon (during years 2003 through 2010), on all sites enrolled in CCX by the project owner, as defined and quantified under CCX rules, is expected to be more than 12,500 (twelve thousand five hundred) metric tons CO₂ per year. If the project fits into the CCX large size forest classification for the majority of years in the program, the quantification and verification requirement that are applicable to large sized forest offsets may be applied for the length of the project in current CCX program.

The CCX forest carbon baseline is the quantity of stored carbon in the CCX-included carbon pools (expressed in metric tons CO₂ equivalent) in place on lands included in the CCX-registered project at the end of calendar year 2002.

Carbon quantification methods: As applicable in the provisions below, direct measurement of forest carbon must be conducted by a CCX-approved verification entity that shall use the CCX-recognized forest carbon direct quantification methods in a manner consistent with the provisions herein. The cost of verification of such direct measurements will be borne by the project owner. Issuance of XFOs based on annualized gross carbon accumulation estimates calculated using the method shall occur at a rate that is 90% of the central estimate of annual carbon accumulation calculated through application of CCX-recognized forest carbon direct quantification methods (i.e. a 10% discount is applied).

Carbon accumulation in small and medium-size projects in the U.S. and Canada may be quantified using the CCX-recognized forest carbon direct quantification methods (with issuance subject to a 10% discount relative to the central estimate calculated through application of that method) or through use of the carbon accumulation coefficients provided in Appendix Table 9.3. The elected quantification method shall be employed for all years during the contract period.

Small forestation projects shall be subject to inspection by verification entities approved by CCX. All information contained in the project registration filing for medium-sized projects must be verified by a CCX-approved verification entity. Project registration filings for small and medium-sized CCX forestation projects must document at the time of project registration the quantity of trees involved in the project, acreage included, description of included tree species and their age, size and planting density at the time of project registration.

Annual gross accumulation of stored carbon (expressed in CO₂ equivalent increases per year) for medium-sized projects in the U.S. and Canada may be quantified using either direct measurement by a CCX-approved verification entity or through use of the CCX Reforestation Carbon Accumulation Tables provided in Appendix Table 9.3 of the CCX Rule Book. The coefficients in Appendix Table 9.3 of the CCX Rule Book shall be applied for reforestation and afforestation undertaken in the U.S. and Canada for projects involving plantings in excess of 250 stems per acre. The coefficients in Appendix Table 9.3B2 of the CCX Rule Book shall be applied for widely spaced tree planting projects, including urban and suburban tree planting programs, riparian buffers and windbreaks undertaken in the U.S. and Canada.

The baseline carbon stock and carbon accumulation for large forest projects must be quantified through use of direct measurement by a CCX-approved verification entity. Offset issuance is determined on the basis of net carbon accumulation, which shall reflect carbon lost from a project site due to harvest, fire pests or other events.

Owners of projects that are quantified through use of direct measurement shall initially quantify the number of offsets generated by the project through use of the applicable coefficients provided in Appendix Table 9.3 of the CCX Rule Book (or other recognized and credible carbon accumulation reference values as may be recommended by the CCX Committee on Mitigation Projects). Final offset issuance quantities for 2003 through 2010 shall be based on direct measurement of carbon increments as determined by a measurement occurring during the third or fourth calendar quarter of 2009. The quantification of gross increases in stored carbon for 2010 will be the annualized average of carbon increases occurring during the period between quantification of the baseline and the measurement undertaken in 2009.

Forest Carbon Reserve Pool: A quantity of Exchange Forestry Offsets equal to twenty percent (20%) of all XFOs generated by CCX-eligible forest carbon projects (as defined and quantified in conformance with CCX Rules) shall be held in a CCX Forest Carbon Reserve Pool. Such accounts shall be established for each medium and large project and for each aggregator of pooled projects. XFOs in the account shall remain the property of the project owner(s) (pool participants in the case of aggregated projects) and all XFOs that remain in the pool shall be released to the project owners in late 2010. In the event that a CCX-registered project experiences a net loss of stored carbon during 2003 through 2010, (e.g. due to events such as fire or tree removal), CCX shall promptly cancel XFOs held in the corresponding CCX Forest Carbon Reserve Pool in an amount equal to the net quantity of carbon (expressed in metric tons CO₂ equivalent) released from the CCX-enrolled project. The maximum amount of carbon loss to be recognized by CCX shall be no more than the total quantity of XFOs issued to the project during its enrollment in CCX.

Long-term commitments: Upon registration of forestation projects with CCX the project owner (or its registered Aggregator) must present to CCX evidence that the forested site has met the CCX requirements for long-term commitment. This requirement is met through the **Statement of Intent to Maintain Forest Cover and Manage Forestry Offset Land in a Sustainable Forestry System** included in this contract or by current enrollment of the project lands in a CRP contract for a minimum term of 15 years.

Non-compliance: Noncompliance with the Terms and Conditions contained in this CCX Exchange Forestry Offsets Contract that are the result of actions of the owner of the noncompliant project shall return a quantity of CCX Exchange Offsets that is equal to the total quantity of XFOs that are found to be in non-compliance, or present payment in an amount equal to the cost of acquiring such replacement offsets or allowances plus applicable exchange fees associated with offset replacement. Options available for the replacement of lost tons, and the associated replacement rates are as follows: (a) If previously issued XFOs are negated by net loss of stored carbon and are replaced with CCX-issued emission allowances or offsets, each previously issued offset must be replaced with one allowance or offset. (b) If previously issued offsets are negated by loss and are replaced by CCX XFOs to be generated by the affected project in later years (but as soon as practicable) as a result of carbon accumulation at the original project site, each cancelled XFO must be replaced with 1.2 later-vintage XFOs. Such replacement instruments will be placed into the forest carbon reserve pool.

In the case of noncompliance that results from adverse weather, natural disaster or pestilence that is not controllable by the project owner, the liability of the project owner shall be limited to forfeiture of any existing reserve credits.

Falsification of Certification Report: A project owner who files a false certification report shall be subject to (1) replacement of any nullified credits; (2) loss of any claim to credits held by the reserve pool; and (3) shall also pay to the aggregator, a penalty equal to twenty percent (20%) of the value of all offsets or allowances covered under this Agreement, as well as interest accruing on said amounts from the date of noncompliance, as well as all costs incurred by aggregator in enforcing this provision, inclusive of reasonable attorney fees. The owner of the noncompliant project may be prohibited from further participation in CCX.

Fulfillment of Obligations: The commitments and obligations of the seller that are created by this contract shall terminate on January 1, 2011.

Forestry Offset Enrollment Worksheet

| | | | |
|---------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Name | Contract No. XFO- | Aggregator No. | Worksheet No. |
| Plot No. | Plot Latitude (Degrees & Minutes) N: | Plot Longitude (Degrees & Minutes) W: | |
| Plot Location: State | Plot Location: County | Name of Survey (if applicable) | Abstract Number (if applicable) |
| Name of Township or Parish (if applicable) | Township No. (e.g. T72N) (if applicable) | Range No. (e.g. R22W) (if applicable) | Section No. (e.g. 28) (if applicable) |
| Acres of trees in the Plot | Planting Date of Trees in the Plot <hr/> (Years since planting) in 2003 | Number of trees per acre at time of planting | Number of trees per acre at time of project registration |
| Tree Region | Tree Species/Classification | CO2 Quantification Method to be used Direct Measurement ____ or CCX Table 9.3 ____ | |
| Documentation Submitted with XFO Contract | Direct Measurement (if applicable) | Table 9.3 Coefficient >250 stems/acre (if applicable) | Table 9.3B2 Coefficient Urban/suburban & Riparian buffers (if applicable) |
| Status of plot prior to 1990 | If direct measurement, Model Used | Tons CO2 CO2 Factor Plot Total | Tree Type |
| Crop or grass land _____ | _____ | 2003 _____ | _____ |
| Degraded forest _____ | _____ | 2004 _____ | Tree Count _____ |
| Map of Plot _____ | Trees per acres _____ | 2005 _____ | Tree type: H ____ C ____ |
| Evidence of planting date _____ | Basal area per acre _____ | 2006 _____ | Growth Rare: S _ M _ F _ |
| Forest Management Plan _____ | Total dry biomass _____ | 2007 _____ | DBH _____ |
| Enrollment in ATFS _____ | Height of dominant or co-dominant trees _____ | 2008 _____ | Age _____ |
| CRP Contract _____ | Site index _____ | 2009 _____ | (DBH-1)*3 |
| If degraded forest lands prior to 1990 | Per Acre Above-ground biomass in 2003 _____ | 2010 _____ | CO2 Factor (Per 100 trees) |
| 1995 map of plot _____ | Above-ground biomass in 2010 _____ | | 2003 _____ |
| Other evidence of degraded status _____ | Average Annual Above-Ground Biomass _____ | | 2004 _____ |
| Additional Owners (if applicable) | Calculated weight of Carbon in biomass _____ | | 2005 _____ |
| Name: _____ | Average Annual CO2 (Factor 3.66667) _____ | | 2006 _____ |
| Address: _____ | | | 2007 _____ |
| City, State, Zip _____ | | | 2008 _____ |
| Share: _____ | | | 2009 _____ |
| Name: _____ | | | 2010 _____ |
| Address: _____ | | | |
| City, State, Zip _____ | | | |
| Share: _____ | | | |

Appendix Table 9.3

**Dense Planting (>250 stems per acre) Forestation Project Carbon Accumulation Table
(Metric tons CO₂ per acre per year)¹**

| U.S. region and species* | Years since planting | | | |
|-------------------------------------|----------------------|------|-------|-------|
| | 0-4 | 5-10 | 11-15 | 16-20 |
| SE Loblolly | 1.51 | 1.86 | 6.99 | 6.17 |
| SE Slash | 1.51 | 1.75 | 6.52 | 5.83 |
| SE longleaf pine | 1.40 | 1.51 | 5.24 | 4.78 |
| Delta loblolly | 2.21 | 2.80 | 7.81 | 7.92 |
| Delta slash pine | 2.10 | 2.68 | 7.69 | 7.69 |
| Southern plains loblolly | 2.10 | 2.45 | 6.87 | 6.87 |
| Appalachian loblolly | 1.63 | 1.98 | 7.11 | 6.41 |
| Appalachian shortleaf pine | 1.51 | 1.75 | 6.52 | 5.71 |
| Northeast white/Norway spruce | 1.28 | 1.28 | 1.40 | 2.56 |
| Northeast red pine | 2.68 | 3.38 | 3.50 | 3.50 |
| Lake States, white spruce | 3.61 | 4.78 | 4.66 | 5.01 |
| Lake States, red pine | 2.10 | 2.45 | 2.56 | 4.31 |
| Corn Belt mixed hardwoods | 3.50 | 4.54 | 4.66 | 4.78 |
| Corn Belt mixed softwoods | 3.96 | 5.13 | 5.36 | 3.50 |
| Northern Plains, mixed hardwoods | 1.98 | 2.45 | 2.45 | 2.45 |
| Rocky Mountains, ponderosa pines | 1.40 | 1.40 | 1.51 | 2.33 |
| Pacific Coast Douglas fir | 1.05 | 1.40 | 1.28 | 3.26 |
| Pacific Coast ponderosa pine | 1.63 | 0.70 | 0.82 | 0.93 |
| Lake States bottomland Hardwoods | 0.70 | 1.16 | 1.40 | 2.10 |
| SE Bottomland hardwoods | 0.00 | 0.47 | 0.93 | 3.03 |
| South Central Bottomland hardwoods | 0.23 | 1.63 | 2.56 | 3.49 |
| Central States Bottomland hardwoods | 1.16 | 2.80 | 3.03 | 1.63 |

* If the species and region combinations do not match your project, apply the carbon accumulation values for the species you have that are applicable to a climatically similar climate.

Region definitions:

SE (southeast): AL, FL, GA, SC;
Delta: AR, LA, MS;
Southern plains: OK, TX;
Appalachian: KY, NC, VA, TN, WV;
Northeast: CT, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT,
Lake States: MI, MN, WI;
Corn Belt: IA, IL, IN, MO, OH;
Northern Plains: KS, ND, NE, SD;
Rocky Mountains: AZ, CO, ID, MT, NM, NV, UT, WY;
Pacific Coast: CA, OR, WA;
SE Bottomlands: FL, GA, SC;
South Central Bottomlands: AL, AR, LA, MS, OK, TN, TX;
Central States Bottomlands: IA, IL, IN, KS, MO, NE, SD;

Table 9.3B2
Annual Sequestration Rates by Tree Type and Growth Rate
For widely spaced trees in urban/suburban plantings, riparian buffers and windbreaks
(metric tons CO₂ per one hundred trees)

| Tree Age* | Tree dbh | Hardwood | | | Conifer | | |
|-----------|----------|----------|----------|------|---------|----------|------|
| | | Slow | Moderate | Fast | Slow | Moderate | Fast |
| 0 | 1 inch | 0.15 | 0.22 | 0.31 | 0.08 | 0.12 | 0.16 |
| 1 | 1.33" | 0.19 | 0.31 | 0.47 | 0.10 | 0.17 | 0.26 |
| 2 | 1.66" | 0.23 | 0.41 | 0.63 | 0.13 | 0.23 | 0.36 |
| 3 | 2.00" | 0.28 | 0.50 | 0.80 | 0.16 | 0.29 | 0.48 |
| 4 | 2.33" | 0.33 | 0.61 | 0.99 | 0.19 | 0.36 | 0.61 |
| 5 | 2.66" | 0.37 | 0.71 | 1.18 | 0.22 | 0.43 | 0.75 |
| 6 | 3.00" | 0.43 | 0.83 | 1.38 | 0.26 | 0.51 | 0.89 |
| 7 | 3.33" | 0.48 | 0.94 | 1.59 | 0.29 | 0.59 | 1.04 |
| 8 | 3.66" | 0.54 | 1.06 | 1.81 | 0.33 | 0.68 | 1.19 |
| 9 | 4.00" | 0.58 | 1.19 | 2.03 | 0.36 | 0.77 | 1.36 |
| 10 | 4.33" | 0.64 | 1.31 | 2.25 | 0.41 | 0.86 | 1.54 |
| 11 | 4.66" | 0.70 | 1.43 | 2.48 | 0.44 | 0.96 | 1.71 |
| 12 | 5.00" | 0.76 | 1.57 | 2.72 | 0.49 | 1.06 | 1.90 |
| 13 | 5.33" | 0.82 | 1.70 | 2.96 | 0.54 | 1.15 | 2.09 |
| 14 | 5.66" | 0.87 | 1.84 | 3.21 | 0.57 | 1.26 | 2.28 |
| 15 | 6.00" | 0.94 | 1.97 | 3.46 | 0.62 | 1.38 | 2.49 |
| 16 | 6.33" | 1.00 | 2.11 | 3.72 | 0.66 | 1.48 | 2.70 |
| 17 | 6.66" | 1.06 | 2.26 | 3.97 | 0.71 | 1.60 | 2.91 |
| 18 | 7.00" | 1.13 | 2.40 | 4.23 | 0.77 | 1.71 | 3.14 |
| 19 | 7.33" | 1.19 | 2.55 | 4.50 | 0.82 | 1.83 | 3.36 |
| 20 | 7.66" | 1.26 | 2.70 | 4.78 | 0.86 | 1.95 | 3.59 |
| 21 | 8.00" | 1.33 | 2.84 | 5.05 | 0.92 | 2.07 | 3.82 |
| 22 | 8.33" | 1.40 | 3.01 | 5.33 | 0.97 | 2.20 | 4.07 |
| 23 | 8.66" | 1.46 | 3.16 | 5.61 | 1.03 | 2.33 | 4.31 |
| 24 | 9.00" | 1.53 | 3.31 | 5.90 | 1.07 | 2.46 | 4.56 |
| 25 | 9.33" | 1.60 | 3.47 | 6.19 | 1.13 | 2.59 | 4.81 |
| 26 | 9.66" | 1.67 | 3.64 | 6.48 | 1.19 | 2.73 | 5.07 |
| 27 | 10.00" | 1.75 | 3.79 | 6.77 | 1.25 | 2.87 | 5.33 |
| 28 | 10.33" | 1.82 | 3.95 | 7.08 | 1.31 | 3.01 | 5.59 |
| 29 | 10.66" | 1.89 | 4.11 | 7.38 | 1.36 | 3.15 | 5.86 |

* Tree age equals diameter at breast height (dbh) minus 1 inch times 3.

Year "zero" in Table 9.3B2 corresponds to the sixth year after seedlings are planted.

In the case of tree plantings involving larger trees (e.g. 2 to 4 inch diameter trees), treat year zero as the first year of carbon accumulation for a 1 inch tree. Assume trunk diameters grow 0.33 inches per year (e.g. a four-inch tree planted in 2002 will be treated as a "nine year old tree" in applying the table.

| Tree types and growth rates applied to urban and suburban tree plantings | | | | | | |
|--------------------------------------------------------------------------|------|----------------|----------------------------------------------------------|------|----------------|--|
| Species Type: H = Hardwood, C = Conifer | Type | Growth Rate | Species Growth Rate: S = Slow, M = Moderate, F = Fast | Type | Growth Rate | |
| Ailanthus, Ailanthus altissima | H | F | Maple, bigleaf, Acer macrophyllum | H | S | |
| Alder, European, Alnus glutinosa | H | F | Maple, Norway, Acer platanoides | H | M | |
| Ash, green, Fraxinus pennsylvanica | H | F | Maple, red, Acer rubrum | H | M | |
| Ash, mountain, American, Sorbus americana | H | M | Maple, silver, Acer saccharinum | H | M | |
| Ash, white, Fraxinus americana | H | F | Maple, sugar, Acer saccharum | H | S | |
| Aspen, bigtooth, Populus grandidentata | H | M | Mulberry, red, Morus rubra | H | F | |
| Aspen, quaking, Populus tremuloides | H | F | Oak, black, Quercus rubra | H | M | |
| Baldcypress, Taxodium distichum | C | F | Oak, blue, Quercus douglasii | H | M | |
| Basswood, American, Tilia americana | H | F | Oak, bur, Quercus macrocarpa | H | S | |
| Beech, American, Fagus grandifolia | H | S | Oak, California black, Quercus kelloggii | H | S | |
| Birch, paper (white), Betula papyrifera | H | M | Oak, California White, Quercus lobata | H | M | |
| Birch, river, Betula nigra | H | M | Oak, canyon live, Quercus chrysolepis | H | S | |
| Birch, yellow, Betula alleghaniensis | H | S | Oak, chestnut, Quercus prinus | H | S | |
| Boxelder, Acer negundo | H | F | Oak, Chinkapin, Quercus muehlenbergii | H | M | |
| Buckeye, Ohio, Aesculus glabra | H | S | Oak, Laurel, Quercus laurifolia | H | F | |
| Catalpa, northern, Catalpa speciosa | H | F | Oak, live, Quercus virginiana | H | F | |
| Cedar-red, eastern, Juniperus virginiana | C | M | Oak, northern red, Quercus rubra | H | F | |
| Cedar-white, northern, Thuja occidentalis | C | M | Oak, overcup, Quercus lyrata | H | S | |
| Cherry, black, Prunus serotina | H | F | Oak, pin, Quercus palustris | H | F | |
| Cherry, pin, Prunus pennsylvanica | H | M | Oak, scarlet, Quercus coccinea | H | F | |
| Cottonwood, eastern, Populus deltoides | H | M | Oak, swamp white, Quercus bicolor | H | M | |
| Crabapple, Malus spp. | H | M | Oak, water, Quercus nigra | H | M | |
| Cucumbertree, Magnolia acuminata | H | F | Oak, white, Quercus alba | H | S | |
| Dogwood, flowering, Cornus florida | H | S | Oak, willow, Quercus phellos | H | M | |
| Elm, American, Ulmus americana | H | F | Pecan, Carya illinoensis | H | S | |
| Elm, Chinese, Ulmus parvifolia | H | M | Pine, European black, Pinus nigra | C | S | |
| Elm, rock, Ulmus thomasii | H | S | Pine, jack, Pinus banksiana | C | F | |
| Elm, September, Ulmus serotina | H | F | Pine, loblolly, Pinus taeda | C | F | |
| Elm, Siberian, Ulmus pumila | H | F | Pine, longleaf, Pinus palustris | C | F | |
| Elm, slippery, Ulmus rubra | H | M | Pine, ponderosa, Pinus ponderosa | C | F | |
| Fir, balsam, Abies balsamea | C | S | Pine, red, Pinus resinosa | C | F | |
| Fir, Douglas, Pseudotsuga menziesii | C | F | Pine, Scotch, Pinus sylvestris | C | S | |
| Ginkgo, Ginkgo biloba | H | S | Pine, shortleaf, Pinus echinata | C | F | |
| Hackberry, Celtis occidentalis | H | F | Pine, slash, Pinus elliotii | C | F | |
| Hawthorne, Crataegus spp. | H | M | Pine, Virginia, Pinus virginiana | C | M | |
| Hemlock, eastern, Tsuga canadensis | C | M | Pine, white eastern, Pinus strobus | C | F | |
| Hickory, bitternut, Carya cordiformis | H | S | Poplar, yellow, Liriodendron tulipifera | H | F | |
| Hickory, mockernut, Carya tomentosa | H | M | Redbud, eastern, Cercis canadensis | H | M | |
| Hickory, shagbark, Carya ovata | H | S | Sassafras, Sassafras albidum | H | M | |
| Hickory, shellbark, Carya laciniosa | H | S | Spruce, black, Picea mariana | C | S | |
| Hickory, pignut, Carya glabra | H | M | Spruce, blue, Picea pungens | C | M | |
| Holly, American, Ilex opaca | H | S | Spruce, Norway, Picea abies | C | M | |
| Honeylocust, Gleditsia triacanthos | H | F | Spruce, red, Picea rubens | C | S | |
| Hophornbeam, eastern, Ostrya virginiana | H | S | Spruce, white, Picea glauca | C | M | |
| Horsechestnut, common, Aesculus | H | F | Sugarberry, Celtis laevigata | H | F | |
| Hippocastanum | | | | | | |
| Kentucky coffeetree, Gymnocladus dioicus | C | F | Sweetgum, Liquidambar styraciflua | H | F | |
| Linden, little-leaf, Tilia cordata | H | F | Sycamore, Platanus occidentalis | H | F | |
| Locust, black, Robinia pseudoacacia | H | F | Tamarack, Larix laricina | C | F | |
| London plane tree Platanus_X_acerifolia | H | F | Walnut, black, Juglans nigra | H | F | |
| Magnolia, southern, Magnolia grandifolia | H | M | Willow, black, Salix nigra | H | F | |

Items to be submitted for Forestry Offset Application

1. Forestry Offset Contract (XFO contract)
2. Forestry Offset Enrollment Worksheet
3. FSA, Forest Service or NRCS maps of enrolled areas
4. Copies of supporting documents (i.e. Planting records, CRP contracts, Forestry management plan, etc.
5. Supporting documents for direct measurement calculations (if applicable)
6. Supporting documents for urban/suburban and riparian buffer plantings (if applicable)