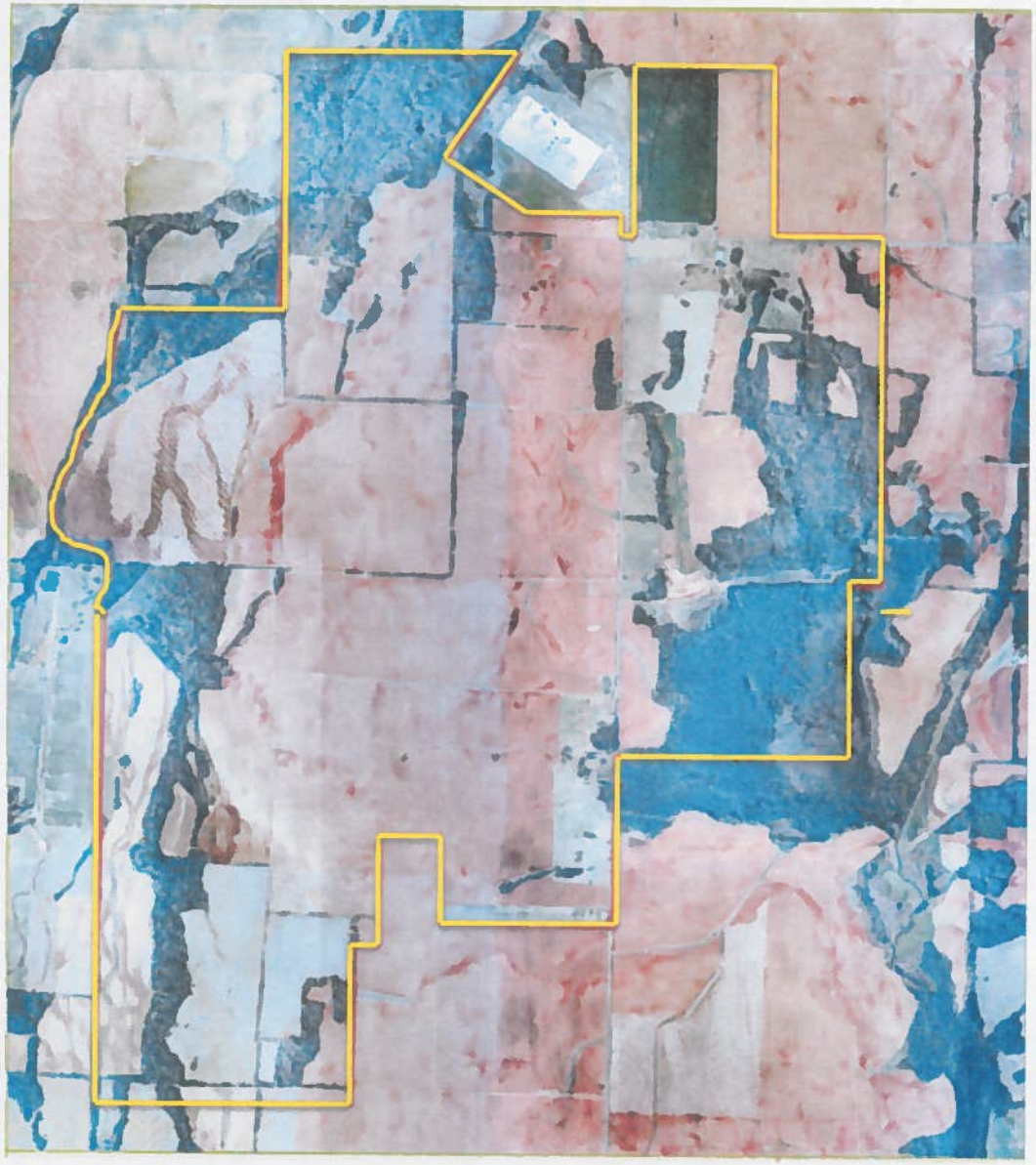
Appendix A



Belle Mina Farm Ltd. Boundary Map
The "Enrolled Land"

222.71 Acre Tract
Part of Sections 8 & 9
Township 4 South, Range 3 West,
Limestone County, Alabama

All that part of Section 8 and part of the Southwest quarter of Section 9, Township 4 South, Range 3 West, Limestone County, Alabama, particularly described as beginning at the center of the East boundary of said Section 8;

Thence from the point of true beginning North 88 degrees 19 minutes 04 seconds East 2668.96 feet;

Thence South 02 degrees 20 minutes 53 seconds East 1075.91 feet;

Thence South 88 degrees 12 minutes 55 seconds West 5900.81 feet to a point on the West bank of Limestone Creek;

Thence along the West bank of said Limestone Creek the following bearings and distances:

North 16 degrees 16 minutes 04 seconds East 151.09 feet;

North 08 degrees 26 minutes 04 seconds East 189.17 feet;

North 09 degrees 12 minutes 51 seconds East 255.96 feet;

North 15 degrees 59 minutes 56 seconds East 319.62 feet and North 22 degrees 57 minutes 39 seconds East 178.28 feet;

Thence leaving said West bank of Limestone Creek North 87 degrees 33 minutes 43 seconds East 268.0 feet;

Thence North 02 degrees 18 minutes 28 seconds West 1327.50 feet;

Thence North 87 degrees 23 minutes 05 seconds East 2655.50 feet;

Thence South 02 degrees 09 minutes 34 seconds East 1335.73 feet to the point of true beginning and containing 222.71 acres, more or less.

The above described tract is subject to easements for power lines.

Appendix B

219.72 Acre Tract in the
South Half of Section 8, and the
Southwest Quarter of Section 9,
Township 4 South, Range 3 West
Limestone County, Alabama

All that part of the South half of Section and the Southwest Quarter of Section 8, Township 4 South, Range 3 West, Limestone County, Alabama, particularly described as beginning at the Southeast corner of said Section 8;

Thence from the point of true beginning South 88 degrees 05 minutes 52 seconds West 2581.66 feet to a point on the West bank of Limestone Creek;

Thence along the West bank of said Limestone Creek the following bearings and distances:

North 16 degrees 45 minutes 29 seconds West 114.52 feet;

North 68 degrees 28 minutes 51 seconds West 127.89 feet;

North 85 degrees 07 minutes 51 seconds West 200.57 feet;

South 88 degrees 48 minutes 11 seconds West 156.32 feet;

North 71 degrees 51 minutes 25 seconds West 92.41 feet;

North 53 degrees 02 minutes 36 seconds West 131.21 feet;

North 75 degrees 44 minutes 43 seconds West 132.96 feet;

North 67 degrees 05 minutes 56 seconds West 100.97 feet;

North 06 degrees 44 minutes 02 seconds West 407.05 feet;

North 00 degrees 07 minutes 23 seconds West 125.90 feet;

North 15 degrees 35 minutes 58 seconds East 297.40 feet;

North 24 degrees 59 minutes 31 seconds East 146.06 feet;

North 25 degrees 42 minutes 31 seconds East 148.55 feet; and

North 22 degrees 14 minutes 15 seconds East 153.40 feet;

Thence leaving said West bank of Limestone Creek North 88 degrees 12 minutes 55 seconds East 5900.81 feet;

Thence South 02 degrees 20 minutes 53 seconds East 1598.42 feet;

Thence South 88 degrees 22 minutes 39 seconds West 2677.78 feet to the point of true beginning and containing 219.72 acres, more or less.

The above described tract is subject to easements for power lines.

An additional tract of land containing 2698.56 acres, more or less, known previously as the Lowe Farm containing:

A tract of land lying in Sections 3, 4, 9, 10, 15, 16, 17, 20, and 21, all in Township 4 South, Range 3 West, and being more particularly described as follows,

Commence at an existing railroad spike at the Southeast corner of Section 16, Township 4 South, Range 3 West, thence North 00 degrees 07 minutes 26 seconds East along the East boundary of said Section 16 a distance of 265.00 feet to an existing railroad spike, said railroad spike being in Powell Road, said railroad spike also being the Point of True Beginning of the tract herein described,

Thence from the Point of True Beginning North 89 degrees 41 minutes 19 seconds West a distance of 2641.45 feet to an existing 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS", said 5/8" rebar being in an established possession fence line, passing an existing 5/8" rebar with

cap stamped "Dunivant Engr. Co., CA-0044-LS" on the west right-of-way of Powell Road at a distance of 32.46 feet,

Thence North 00 degrees 35 minutes 24 seconds East along an established possession fence line a distance of 1052.69 feet to an existing grader blade,

Thence North 89 degrees 37 minutes 56 seconds West along an established possession fence line a distance of 989.76 feet to an existing 1" pipe,

Thence South 00 degrees 35 minutes 48 seconds West along an established possession fence line a distance of 1318.66 feet to an existing grader blade on the South boundary of said Section 16,

Thence North 89 degrees 41 minutes 19 seconds West along the South boundary of said Section 16, also being the North boundary of Section 21, a distance of 335.89 feet to an existing 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS", said 5/8" rebar being South 89 degrees 41 minutes 19 seconds East a distance of 34.52 feet from a point at the Northeast corner of the West One-half of the Northwest Quarter of Section 21, Township 4 South, Range 3 West, said 5/8" rebar also being South 89 degrees 41 minutes 19 seconds East a distance of 1369.17 feet from an existing 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS" at the Northwest corner of said Section 21,

Thence South 00 degrees 32 minutes 00 seconds West along an established possession fence line a distance of 2665.16 feet to a set 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS", said 5/8" rebar being 16.95 feet south of the Southeast corner of the West One- half of the Northwest Quarter of said Section 21,

Thence South 89 degrees 48 minutes 25 seconds West along an established fence line a distance of 1333.41 feet to a set 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS" on the West boundary of said Section 21, said 5/8" rebar being North 00 degrees 14 minutes 03 seconds West a distance of 2623.38 feet from an existing railroad spike at the Southwest corner of said Section 21, said 5/8" rebar also being South 00 degrees 14 minutes 03 seconds East a distance of 2677.00 feet from an existing 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS" at the Northwest corner of Said Section 21, said 5/8" rebar also being 26.81 feet south of the Southwest corner of the West One-half of the Northwest Quarter of said Section 21,

Thence North 89 degrees 40 minutes 53 seconds West along an established possession fence line a distance of 1360.77 feet to a set 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS", said 5 / 8" rebar being 14.4 feet south of the South boundary of the Northeast Quarter of Section 20, Township 4 South, Range 3 West,

Thence North 80 degrees 59 minutes 44 seconds West a distance of 343.93 feet to a set 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS" in an established possession fence line, said point being 40.6 feet north of the South boundary of the Northeast Quarter of said Section 20,

Thence North 89 degrees 43 minutes 24 seconds West along an established possession fence line a distance of 950.00 feet to a set 5/8", rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS", said 5/8" rebar being 48.6 feet north and 9.6 feet east of the Southwest corner of the Northeast Quarter of said Section 20,

Thence North 00 degrees 00 minutes 29 seconds West along an established possession fence line a distance of 1238.85 feet to an existing 2" pipe,

Thence continue North 00 degrees 00 minutes 29 seconds West along an established possession fence line a distance of 1394.27 feet to a set 5/8" rebar with cap stamped, "Dunivant Engr. Co., CA-0044-LS" on the North boundary of said Section 20, said 5/8" rebar being North 89 degrees 31 minutes 11 seconds West a distance of 2639.95 feet from an existing 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS" at the Northeast corner of said Section 20, said 5/8" rebar also being South 89 degrees 31 minutes 11 seconds East a distance of 2664.29 feet from a railroad spike at the Northwest corner of said Section 20, said 5/8" rebar also being 12.17 feet east of the Northwest corner of the Northeast Quarter of said Section 20,

Thence North 00 degrees 00 minutes 29 seconds West along an established possession fence line a distance of 5340.67 feet to a set 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS" at the Northwest corner of the East One-half of Section 17, Township 4 South, Range 3 West, said 5/8" rebar being South 89 degrees 53 minutes 40 seconds East a distance of 2644.37 feet from an existing railroad spike at the Northwest corner of said Section 17,

Thence South 89 degrees 53 minutes 40 seconds East along the North boundary of said Section 17, also being along an existing fence line a distance of 2644.37 feet to an existing 1" pipe at the Northeast corner of said Section 17,

Thence South 89 degrees 33 minutes 28 seconds East a distance of 2677.61 feet to an existing 3/4" rebar, said 3/4" rebar being North 89 degrees 34 minutes 34 seconds West a

distance of 2668.86 feet from an existing railroad spike at the Southeast corner of Section 9, Township 4 South, Range 3 West, said 3/4" rebar also being 0.5 feet south and 4.4 feet east of the center of the South boundary of said Section 9,

Thence North 00 degrees 09 minutes 16 seconds West a distance of 2665.64 feet to an existing 5/8" rebar, said 5/8" rebar being 1.8 feet north and 23.8 feet east of the Southeast corner of the Northwest Quarter of said Section 9,

Thence North 89 degrees 25 minutes 32 seconds West a distance of 2675.28 feet to an existing 5/8" rebar, said 5/8" rebar being 21.5 feet north and 34.6 feet east of the Southwest corner of the Northwest Quarter of said Section 9,

Thence North 00 degrees 06 minutes 28 seconds West a distance of 1335.46 feet to an existing 5/8" rebar, said 5/8" rebar being 52.3 feet east of the West boundary of said Section 9,

Thence North 03 degrees 09 minutes 57 seconds West a distance of 1295.28 feet to an existing concrete monument at the Northwest corner of said Section 9,

Thence North 00 degrees 21 minutes 21 seconds East along the West boundary of Section 4, Township 4 South, Range 3 West, a distance of 2631.56 feet to a set 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS" at the Northwest corner of the Southwest Quarter of said Section 4, said 5/8" rebar also being South 00 degrees 21 minutes 21 seconds West a distance of 2631.56 feet from an existing 5/8" rebar at the Northwest corner of said Section 4,

Thence North 89 degrees 37 minutes 51 seconds East along the North boundary of the Southwest Quarter of said Section 4 a

distance of 2685.93 feet to a set 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS" at the Northeast corner of the Southwest Quarter of said Section 4,

Thence South 88 degrees 30 minutes 46 seconds East a distance of 856.60 feet to an existing 2" pipe,

Thence South 33 degrees 52 minutes 45 seconds West a distance of 1712.50 feet to an existing 2" pipe,

Thence South 56 degrees 07 minutes 15 seconds East a distance of 1498.32 feet to an existing 2" pipe,

Thence North 89 degrees 06 minutes 29 seconds East a distance of 1498.41 feet to an existing 2" pipe,

Thence South 00 degrees 12 minutes 11 seconds East a distance of 380.97 feet to a point on the South boundary of said Section 4, passing an existing 2" pipe at a distance of 360.94 feet,

Thence North 89 degrees 52 minutes 18 seconds East along the South boundary of said Section 4 a distance of 50.23 feet to an existing railroad spike at the Southeast corner of said Section 4,

Thence North 89 degrees 33 minutes 11 seconds East along the South boundary of Section 3, Township 4 South, Range 3 West, a distance of 49.74 feet to a point,

Thence North 00 degrees 12 minutes 11 seconds West a distance of 2643.39 feet to an existing 2" pipe in an established possession fence line, passing an existing 2" pipe at a distance of 20.63 feet, also passing a point on the North

right-of-way of Powell Road at a distance of 29.72 feet,

Thence North 89 degrees 06 minutes 38 seconds East along an established possession fence line a distance of 1950.49 feet to an existing concrete monument, said concrete monument being 2.8 feet north of the Northeast corner of the West One-half of the East One-half of the Southwest Quarter of said Section 3,

Thence South 00 degrees 19 minutes 34 seconds East a distance of 2658.43 feet to a set railroad spike at the Southeast corner of the West One-half of the East One- half of the Southwest Quarter of said Section 3, passing an existing buggy axle on the North right-of-way of Powell Road at a distance of 2622.84 feet, said railroad spike being 5.59 feet south of the centerline of said Powell Road,

Thence North 89 degrees 33 minutes 11 seconds East along the South boundary of said Section 3, also being along the North boundary of Section 10, Township 4 South, Range 3 West, a distance of 1986.38 feet to a set railroad spike, said railroad spike being South 89 degrees 33 minutes 11 seconds West a distance of 1356.64 feet from an existing nail and shiner at the Northeast corner of said Section 10, said railroad spike also being South 89 degrees 33 minutes 11 seconds West a distance of 19.43 feet from an existing railroad spike at the Northeast corner of the West One-half of the East One-half of said Section 10, said railroad spike also being 6.71 feet south of the center line of Powell Road,

Thence South 00 degrees 28 minutes 46 seconds East along an established possession fence line a distance of 5370.62 feet to a point on the South boundary of said Section 10, said point also being in Beaverdam Swamp, passing a set 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS"

on the South right-of-way of Powell Road at a distance of 23.29 feet, also passing a set 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS", being a witness corner, at a distance of 4321.72 feet, said witness corner being 130 feet north of the North edge of Beaverdam Swamp, said point in Beaverdam Swamp being South 89 degrees 48 minutes 13 seconds West a distance of 1459.75 feet from a point at the Southeast corner of said Section 10, said point also being South 89 degrees 48 minutes 13 seconds West a distance of 92.44 feet from a point at the Southeast corner of the West One-half of the East One-half of said Section 10,

Thence South 89 degrees 48 minutes 13 seconds West along the South boundary of said Section 10, also being along the North boundary of Section 15, Township 4 South, Range 3 West, a distance of 591.22 feet to a point at the Northeast corner of the West One-half of the West One-half of the Northeast Quarter of said Section 15, said point being in Beaverdam Swamp, said point also being North 89 degrees 48 minutes 13 seconds East a distance of 3418.28 feet from an existing railroad spike at the Northwest corner of said Section 15,

Thence South 00 degrees 30 minutes 32 seconds East along the East boundary of the West One-half of the West One- half of the Northeast Quarter of said Section 15 a distance of 2663.14 feet to a point at the Southeast corner of the West One-half of the West One-half of the Northeast Quarter of said Section 15, said point being in Beaverdam Swamp,

Thence South 89 degrees 38 minutes 07 seconds West along the South boundary of the North One-half of said Section 15 a distance of 3447.75 feet to a set rail road spike at the Southwest corner of the Northwest Quarter of said Section 15, passing a set 5/8" rebar with cap stamped "Dunivant

Engr. Co., CA-0044-LS" on the East right-of-way of Powell Road at a distance of 3411.62 feet, also passing a set 5/8" rebar with cap stamped "Dunivant Engr. Co., CA-0044-LS", being a witness corner on the west side of Beaverdam Swamp at a distance of 2600.00 feet, said railroad spike being 6.13 feet west of the centerline of Powell Road, said railroad spike also being South 00 degrees 07 minutes 26 seconds West a distance of 2673.27 feet from an existing railroad spike at the Northwest corner of said Section 15,

Thence South 00 degrees 07 minutes 26 seconds West along the West boundary of said Section 15, also being along the East boundary of Section 16, Township 4 South, Range 3 West, a distance of 2408.28 feet to the Point of True Beginning and containing 2698.56 acres, more or less.

LESS AND EXCEPT:

A tract of land containing 1.67 acres, more or less, situated in the Northwest Quarter of Section 10, Township 4 South, Range 3 West, Limestone County, Alabama, being more particularly described as follows,

Beginning at Northwest corner of Section 10, Township 4 South, Range 3 West, thence run South 89 degrees 52 minutes 31 seconds East along the North boundary of Section 10 for a distance of 1347.49 feet to a point, said point being the True Point of Beginning, thence continue South 89 degrees 52 minutes 31 seconds East along the North boundary of said Section 10 for a distance of 200.00 feet to a point, thence run South 00 degrees 00 minutes 00 seconds East for a distance of 363.60 feet to a point, thence run North 90 degrees 00 minutes 00 seconds West for a distance of 200.00 feet to a point, thence run North 00 degrees 00 minutes 00 seconds West for a distance of 364.04 feet to a point, and back to the True Point of

Beginning. Said tract of land being subject to any existing easements and rights of way.

Appendix C

Belle Mina Farm Ltd. Boundary Map
The "Enrolled Land"

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

RIPARIAN FOREST BUFFER
(Acre)
CODE 391

DEFINITION

An area of trees, shrubs and other vegetation located in areas adjacent to and upgradient from water bodies.

PURPOSE

The purpose of this practice is to:

* Reduce excess amounts of sediment, organic material, nutrients and pesticides and other pollutants in surface runoff and reduce excess nutrients and other chemicals in shallow ground water flow

* Create shade to lower water temperatures to improve habitat for fish and other aquatic organisms

* Provide a source of detritus and large woody debris for fish and other aquatic organisms and riparian habitat and corridors for wildlife

* Provide room for water courses to establish geomorphic stability.

* Create riparian habitat and corridors for wildlife.

The riparian buffer strip will be most effective when used as a component of a total resource management system including nutrient management, pest management, and erosion, runoff and sediment control practices.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to stable areas, which are adjacent to or immediately upgradient of: perennial or intermittent streams; rivers; lakes; ponds; sinkholes; wetlands types 1 (bottomland hardwood sites only) and types 6, 7, 8.

Where existing perennial vegetation is already established, directly adjacent to the water body, the forest riparian buffer will apply to the area directly upslope of the existing vegetation within the maximum buffer width allowable.

CRITERIA

General Criteria Applicable To All Purposes Listed Above:

The location, width, layout and woody plant density of the riparian forest buffer will accomplish the intended purpose and function. The design width shown for each criteria includes any existing natural woody vegetation. The buffer will consist of the following distinct zones:

Zone 1

Zone 1 will begin at the normal water line or at the upper edge of the active channel and extend a minimum distance of 35 feet, measured horizontally on a line perpendicular to the watercourse or water body.

Where equipment access corridors are necessary adjacent to stream channels, a strip no more than 40 feet in length adjacent to the stream may be maintained in low shrubs or herbaceous plants. If possible restrict access to one side only preferably the north or east bank. Wider channels may require access on both sides.

Zone 2

When appropriate or as desired by the landowner an additional strip or area of land (Zone 2) can be added to Zone 1, extending the buffer to meet the needs of the site and to accomplish the intended purpose of the buffer. Zone 2 will begin at the upslope edge of Zone 1 and extend a minimum distance to provide the designed function of the buffer.

ADDITIONAL CRITERIA TO REDUCE EXCESS AMOUNTS OF SEDIMENT, ORGANIC MATERIAL, NUTRIENTS, PESTICIDES, AND OTHER POLLUTANTS IN SURFACE RUNOFF AND REDUCE EXCESS NUTRIENTS AND OTHER CHEMICALS IN SHALLOW GROUND WATER FLOW.

An additional strip or area of land, zone 2, will begin at the edge and up-gradient of zone 1 and extend a minimum distance of 65 feet, measured horizontally on a line perpendicular to the water course or water body. The minimum combined width of zones 1 and 2 will be

Appendix D

100 feet or 30 percent of the geomorphic floodplain whichever is less, but not less than 35 feet. Figure 1 illustrates examples of zone 1 and zone 2 widths for water courses and water bodies designed for this criteria.

ADDITIONAL CRITERIA TO IMPROVE AND ENHANCE SELECTED WILDLIFE SPECIES AND THEIR HABITATS

Widths below are considered the minimum desired width (zones 1 and 2 combined) to adequately provide resource protection including habitat enhancement for the listed species. The widths listed pertain to one or both sides of water courses or water bodies but shall not exceed to 100 year floodplain.

Species:	Width in Feet
Bald eagle, cavity nesting ducks, heron rookery, sandhill crane	600
Common Loon, Pileated woodpecker	450
Beaver, dabbling ducks, mink	300
Deer	200
Frog, salamander	100

ADDITIONAL CRITERIA TO PROVIDE MULTIPLE RESOURCE PROTECTION

To achieve multiple resource protection objectives, including potential flood damage reduction, water and air quality enhancement, watershed protection, bottomland hardwood forest restoration, and water course geomorphic stability riparian forest buffers located upslope and adjacent to rivers or perennial and intermittent streams can be expanded beyond the width requirements for wildlife. Natural resource planners can set the minimum combined width of zones 1 and 2 to include the entire riparian area, not to exceed the 100 year floodplain. The entire riparian area can be approximated by multiplying the width of the river or stream at the ordinary high water mark by 10 and adding 50 feet. The buffer width associated with this calculation will be adjusted downward not to exceed the 100 year floodplain. The width determination of this definition pertains to one side of the water course. To obtain the total riparian width associated with both sides of a water course multiply the area determined above by 2.

ADDITIONAL CRITERIA TO CREATE SHADE TO LOWER WATER TEMPERATURES TO IMPROVE HABITAT FOR FISH AND OTHER AQUATIC ORGANISMS.

A buffer for lowering warm-season water temperatures shall consist of at least zone 1 for: 1) water course reaches or water bodies less than or equal to 30 feet in width or; 2) water bodies greater than 30 feet in width but less than 1 acre.

Buffers shall be established or maintained on the south and west sides of the water courses to the greatest extent practical. The buffer canopy shall be established to achieve at least 50 percent crown cover with average canopy heights equal to or greater than the width of the water course or 30 feet for water bodies. See figure 2.

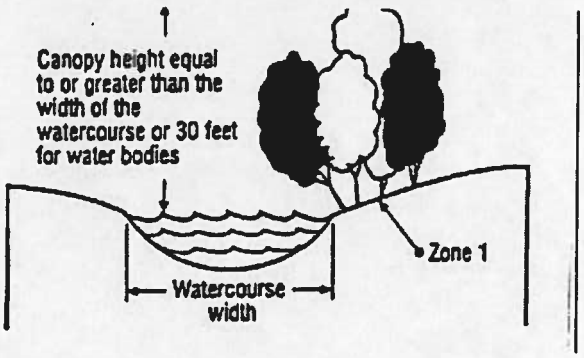
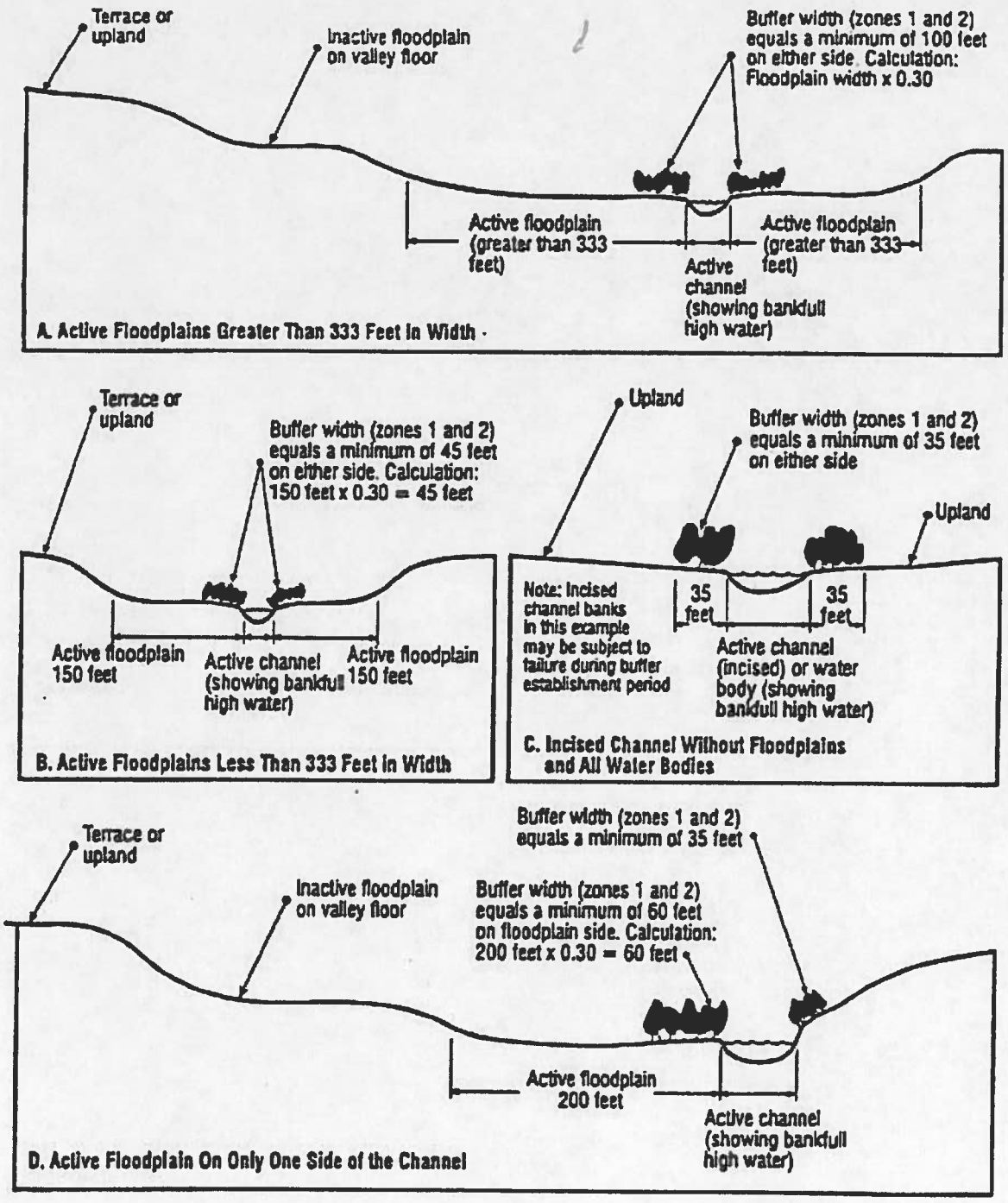


Figure 2 Canopy height for water temperature control.

Buffer species shall include those listed in Table 1 or other appropriate native species. Place drooping or wide-crowned trees and shrubs nearest the water course or body. Shoreline or channel relief and topographic shading will be taken into account in selecting species.

Figure 1: Examples of riparian buffer widths designed using the water quality criteria. The minimum width of zones 1 and 2 will be 100 feet or 30% of the geomorphic floodplain, whichever is less but not less than 35 feet.



ADDITIONAL CRITERIA TO PROVIDE A SOURCE OF DETRITUS AND LARGE WOODY DEBRIS FOR FISH AND OTHER AQUATIC ORGANISMS.

Within zone 1 as a minimum, establish, favor or manage species capable of producing stems and limbs of sufficient size to provide an eventual source of large woody debris for in-stream habitat for fish and other aquatic organisms.

Overland Flow

Runoff to be buffered or filtered by Zone 2 will be limited to shallow, overland sheet flow only. Shaping and grading of the area immediately upslope from the buffer and the buffer strip itself may be necessary to insure shallow, overland sheet flow. Concentrated flows must be converted to sheet flow prior to entering Zone 2. This includes converting water carried by waterways and ditches into sheet flow conditions.

Buffer Establishment

Dominant vegetation will consist of existing or planted trees and shrubs suited to the site and the intended purpose. Planted woody perennial vegetation will be composed of riparian trees and shrubs suitable to the site and soil. Emphasis will be placed on the use of locally native species. Plantings will consist of two or more species with individual plants suited to the seasonal variation of soil moisture at specific planting sites. Nitrogen fixing species should be discouraged where nitrogen removal or buffering is desired.

Natural Revegetation

Where frequent flooding makes tree planting impractical, revegetation can be accomplished by enhancing or allowing natural succession to occur. Where natural revegetation is allowed, an adequate stand will require at least 300 well spaced, trees and/or shrubs per acre at the end of the third growing season. If 300 stems per acre are not present a technical determination will be made to determine if additional planting is recommended based on the original stocking level of the site. If the existing stocking rate is less than 40% of the original stocking rate supplemental planting will be recommended. If the existing stocking rate in between 40% and 70% of the original stocking the recommendation to plant additional trees will be made on a site specific basis.

Planting

Planting densities for trees and shrubs will depend on the species and their potential height at 20 years of age. Heights may be estimated based on: 1) performance of the individual species (or comparable species) in nearby areas on similar sites, or 2) predetermined and documented heights using Section II-N of the FOTG, Windbreak Suitability Groups. Planting density recommendations are:

Plant Types/Heights	Plant-to-Plant Spacing in feet
* Shrubs less than 10 feet in height	3 to 6
* Shrubs and trees from 10 to 25 feet in height	5 to 10
* Trees greater than 25 feet in height	8 to 14

Refer to Table 1 for woody species commonly associated with and suited to riparian areas.

Refer to Standard 612, Tree Planting for additional information on the age, size, handling, storage and quality of planting stock.

Bared root stock plantings shall be completed as soon as practical in the spring when soil, site, and weather conditions are suitable. Containerized or potted stock plantings may be completed in the fall provided soil moisture is adequate.

Planting Site Preparation

Necessary site preparation shall be done at a time and manner to insure survival and growth of planted species. Only viable, high quality and adapted planting stock will be used. Planting sites shall be properly prepared based on the soil type and vegetative conditions listed below. For sites to be tilled leave a minimum 3 foot untreated strip at the edge of the bank or shoreline. Avoid sites that have had recent applications of pesticides harmful to woody species. If pesticides are used, apply only when needed and handle and dispose of properly and within federal, state, and local regulations. Follow label directions and precautions listed on containers.

Geo-textile fabric mulch and other appropriate mulch materials may be used for weed control and moisture conservation for new plantings on all sites.

Appropriate mulch materials must allow for water infiltration and air exchange.

Based on the site conditions and soils procedures to prepare sites include:

Sod and Alfalfa

Till (moldboard plow, disk plow, rototiller or similar equipment) in the fall before planting. Fall seeded temporary cover may be used where needed to control erosion.

Sod may be killed by non-selective herbicides. These herbicides are most effective when used in the year prior to planting with stock planted into the residue. On heavy soils, tillage is usually necessary to achieve a satisfactory planting when a tree planting machine is used.

Small Grain or Row Crop Sites

If the site is in row crop, till (moldboard plow, disk plow, rototiller or similar equipment) in the fall or in the spring prior to planting. If the site has a plow pan or hard pan in the subsoil perform a deep disking or ripping operation in the fall. Fall seeded cover crops may be used where needed to control erosion.

If the site is in small grain stubble, planting can be done in the spring without further preparation. If fabric mulch or other mulch materials are to be installed till in the spring before planting.

Tillage on steep slopes must be done on the contour or cross-slope. Cover crops between the rows may be established, where needed, to control erosion and sediment deposition on planted stock.

On sites where it is not practical or possible to operate equipment, where tillage of the site will cause excessive erosion or where tillage of the site is impractical the methods listed below may be used.

* Machine or hand scalp an area at least 36 inches in diameter and place planted stock in the center of the scalped area.

* Rototill a strip at least 36 inches wide the year prior to planting and plant stock in the center of the tilled area.

* Kill the vegetation in a 36 inch diameter or larger area with a non-selective herbicide. This is most effective when done the year prior to planting. Plant the stock in the center of the treated area.

Sites with undesirable brush will need initial treatments that physically removes and kills the brush species to facilitate planting of desired stock and prevents re-encroachment of the brush. Suitable methods include hand-cutting and removal, brush hogging, brush blading, or other equivalent procedure with repeated treatment or use of herbicides to control resprouting.

Temporary plantings or cover may be needed for streambank stabilization during the establishment period.

Livestock shall be controlled or excluded as necessary to achieve and maintain the intended purpose.

Harmful pests present on the site shall be controlled or eliminated as necessary.

CONSIDERATIONS

The severity of bank erosion and its influence on existing or potential riparian trees and shrubs should be assessed. Watershed-level treatment or bank stability activities may be needed before establishing a riparian forest buffer.

Complex ownership patterns of riparian areas may require group planning for proper buffer design, function and management.

Where ephemeral, concentrated flow erosion and sedimentation is a concern within zone 2 or in the area upslope of zone 2 consider the application of a vegetated strip consisting of grasses and forbes. Stiff stemmed grasses at the up-gradient edge of zone 2 will accelerate deposition of sediment (see figure 3). Criteria from standard 393, Filter Strip, will be used in designing this grass strip.

Favor tree and shrub species that are native and that have multiple values such as those suited for timber, biomass, nuts, fruit, nesting, and aesthetics. Also consider used of species that have a tolerance to locally used herbicides.

Consider the use of species that resprout or can be propagated by layering when establishing new rows nearest to water courses or bodies.

Joining of existing and new buffers increases the continuity of cover and will further moderate water temperatures. A mix of species with growth forms that are tall and wide-crowned or drooping will increase

moderation effects. For water courses, buffers established on both sides will enhance multiple values.

When concentrated flow erosion and sedimentation cannot be controlled vegetatively consider structural or mechanical treatments.

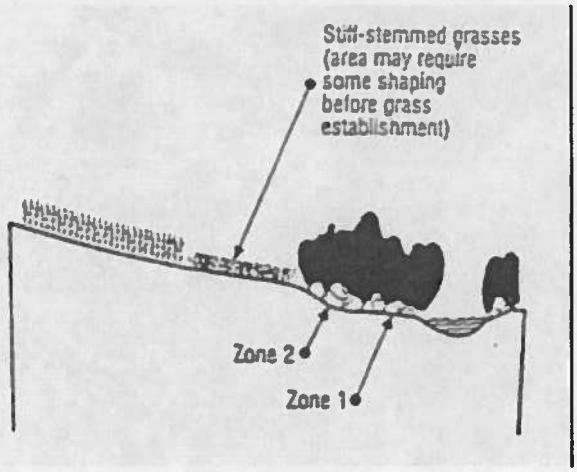


Figure 3. Control of concentrated flow erosion

Avoid tree and shrub species which may be alternate hosts to undesirable pests or that may be considered noxious or undesirable. Species diversity should be considered to avoid loss of function due to species specific pests.

The location, layout and density of the buffer should complement natural features. Avoid designs or locations that would concentrate flood flows or return flows. Flexible-stemmed shrubs will minimize obstruction of local flood flows. Avoid establishing buffers in windthrow prone locations.

Woody species which obtain water by the penetration of their roots into the water table (phreatophytes) and hydrophytes that can potentially deplete ground water should be used with caution in water-deficit areas.

Consider the positive and negative impacts beaver, muskrat, deer, rabbits and other wildlife species may have on establishment of woody plants. Temporary and local population control methods of these kinds of wildlife should only be used within state and local regulations.

Consider the type of human use and the aesthetic, social and safety aspects of the area when determining the vegetation selection, arrangement and management. For example, avoiding shrubs that block views near recreation trails. Species selection to improve aesthetics include seasonal foliage color, showy flowers, and fruit, foliage texture, form and branching habit.

Consider the additional benefits and values of expanding the buffer beyond the minimum width. In cases where the expanded buffer exceeds the 100 year flood plain refer to Standard 612, Tree Planting for information on tree establishment.

PLANS AND SPECIFICATIONS

Plans and specifications for establishment and maintenance of this practice shall be prepared for each site. Plans and specifications shall be recorded using approved specification sheets, job sheets, narrative statements in the conservation plan or other acceptable documents. These documents are to specify the requirements for installing the practice, such as the kind, amount or quality of materials to be used, or the timing or sequence of installation activities. Requirements for operation and maintenance of the practice shall be incorporated into site specifications.

OPERATION AND MAINTENANCE

The following actions shall be carried out to insure that this practice functions as intended throughout its expected life. These actions include normal repetitive activities in the application and use of the practice and repair and upkeep of the practice.

The riparian forest buffers will be inspected periodically, protected and restored as needed from adverse impacts such as excessive traffic, pest infestations, pesticide use on adjacent lands, livestock use and fire.

As applicable control of concentrated flow erosion shall be continued in the area up-gradient of zone 2 to maintain buffer function. Following severe storms check for evidence of sediment deposit, erosion or concentrated flow channels. Prompt corrective action needs to be taken to stop erosion and restore sheet flow.

Replacement of dead trees or shrubs and control of undesirable vegetative competition will be continued until the buffer is in a fully functional condition.

The following should be avoided within the buffer strips: excess use of fertilizers, pesticides, or other chemicals and removal or disturbance of vegetation and

litter inconsistent with erosion control and buffering objectives.

Zone 1 vegetation should remain undisturbed except for removal of individual trees that could present an usual hazard, such as potentially blocking culverts or creating dangerous hydraulic obstructions.

As Zone 1 approaches 40 years of age, it will begin to produce large stable debris. Large debris, such as logs, create small dams which trap and hold detritus for processing by aquatic insects thus adding energy to the stream ecosystem, strengthening for food chain and improving aquatic habitat. Wherever possible, stable debris should be conserved.

Where debris dams must be removed, try to retain useful, stable portions which provide detritus storage. Remove unstable and smaller debris which will contribute to unwanted debris jams. Deposit removed material a sufficient distance from the stream so that it will not be refloated by high water.

Management of Zone 1 will be limited to bank stabilization and removal of problem vegetation. Zone 2 vegetation, undergrowth, forest floor, duff layer and leaf litter shall remain undisturbed except for: the periodic cutting of trees to remove sequestered nutrients; or for spot site preparation for regeneration purposes. Logging and other overland equipment traffic shall be excluded except for streamcrossing and stream stabilization work.

Additional operation and maintenance requirements shall be developed on a site-specific basis to assure performance of the practice as intended.

REFERENCES

American Fisheries Society, 1991. Influences of Forest and Rangeland Management on Salmonid Fishes and their Habitats. Special Publication 19. Bethesda, MD.

MN Environmental Initiative, 1995. At the Water's Edge: The Science of Riparian Forestry. University of MN BU-6637-S. St. Paul, MN.

Olson, Rich and W.A. Hubert, 1994. Beaver Water Resources and Riparian Habitat Manager. University of Wyoming, Laramie, WY.

Schultz, R.C., J.P. Colletti, T.M. Isenhart, W.W. Simpkins, 1995. Design and Placement of a Multi-Species Riparian Buffer Strip. Agroforestry Systems 29:201-225.

USDA, Forest Service, Northeastern Area State and Private Forestry, 1991. Riparian Forest Buffers. NA-PR-07-91. Prepared by David Welch. Radnor, PA.

USDA, NRCS, Riparian Forest Buffers: NRCS Standard, The Research Basis and Interpretation Required for Implementation, 1997. Presented at the 1997 ASEA Annual Meeting, Minneapolis, MN. Paper No. 975017 ASAE 2950 Niles Rd., St. Joseph, MI

US-Environmental Protection Agency, 1991. Water Quality Functions of Riparian Forest Buffer Systems in the Chesapeake Bay Watershed. EPA 903-R-95-004. Prepared by the Nutrient Subcommittee of the Chesapeake Bay Program. Annapolis, MD.

TABLE 1: Woody Species Recommendations for Establishing Forest Riparian Buffers

Species:		Flooding Tolerance	Large Debris	Shade Value	Wildlife Merit	Potential Height
American cranberry	Viburnum trilbum	H-M	L	L	H	16
American plum	Prunus americana	L-M	L	L	H	10
Arrowwood	Viburnum dentatum	H	L	L	H	8
Ash, green	Fraxinus pennsylvanica	M	M	H	M	60
white	Fraxinus americana	M	M	H	M	80
black	Fraxinus nigra	H-M	M	M	M	70
Birch, white	Betula papyrifera	M-H	M	M	H	70
river	Betula nigra	M-H	M	M	M	70
yellow	Betula alleghaniensis	M-H	H	M	H	60
Basswood	Tilia americana	L-M	H	H	L	100
Cedar, Red	Juniperus virginiana	M	M	H	H	40
White	Thuja occidentlis	H-M	M	H	H	50
Chokecherry	Prunus virginiana	L-M	L	L	H	30
Cottonwood	Populus deltoides	H-V	H	H-V	M	100
Dogwood, red-osier	Cornus stolonifera	H	L	L	M	10
silky	Cornus stolonifera	H	L	L	M	10
gray	Cornus racemosa	M	L	L	M	10
Fir, Balsam	Abies balsamea	M-H	M	M	H	60
Hackberry	Celtis occidentalis	M	M-H	H	H	100
Hawthorne	Crataegus crusgalli	M	L	L	H	25
Hazelnut	Corylus americana	M	L	L	H	25
Honeylocust	Gleditsia triacanthoa	L	L	L	L	75
Maple, silver	Acer saccharinum	H	H	H	M	95
red	Acer rubrum	M-H	H	H	M-H	70
Nannyberry	Viburnum lentago	M	L	L	H	14
Ninebark	Physocarpus opulifulius	L	L	L	H-M	10
Oak, bur	Quercus macrocarpa	H-M	H	H	H	80
pin	Quercus ellipsoidalis	M-L	H	H	H	75
red	Quercus rubrum	L	H	H	H	80
swamp white	Quercus bicolor	H	M	H	H	70
Pine, jack	Pinus banksiana	L	L	M	L	80
red	Pinus rubrum	M	H	M	M	80
white	Pinus stobus	M	H	H	H	100
Spruce, black	Picea mariana	H-V	M	M	M-H	70
white	Picea abies	M-L	H	M-H	H	80
Serviceberry	Amelanchier alnifolia	M-L	L	L	H	12
Tamarack	Larix jaricina	H-M	H	M	M	75
Walnut, black	Juglans nigra	L	M	M	H	60
white	Juglans cinerea	L	M	M	H	60
Willow, black	Salix nigra	H	M	H	M	60
sandbar	Salix exigua	H-V	L	L	L	8
peachleaf	Salix amygdaloides	H	L	L	L	25

* - This is not an all inclusive list of species to plant or a list of only those species eligible for establishment with cost share. All native species which are locally adapted may be recommended for establishment. Additional references you may want to consult for species recommendations include: "Trees and Large Shrubs: Species Native to Minnesota's Ecological Regions" by MN/DNR Division of Forestry and "Minnesota Tree Handbook" by MASWCD

* - Refer to Windbreak Suitability groups in Section II of the FOTG for additional information on suitability of trees and shrubs for specific soils

Relative ranking values: V = Very high; H = High; M = Medium; L = Low

Flooding Tolerance describes the relative capacity of the species to survive standing water or anaerobic soil conditions. Species shown with a "V" ranking have the ability to survive deep, prolonged flooding; "H" the ability to survive flooding for one growing season, with significant mortality occurring if flooding is repeated the following year; "M" the ability to survive flooding or saturated soils for 30 consecutive days during the growing season; "L" relatively unable to survive more than a few days of flooding during the growing season without significant mortality.

Large Debris describes the relative potential for the species to produce woody debris larger than ten inches in diameter before senescence. "H" indicates that large debris is likely within the species life span; "M" indicates that large debris is possible within the species life span; "L" indicates that large debris is unlikely.

Shade Value describes the density or degree of shade provided by the species' crown canopy in leaf out condition. "H" indicates that the species has a large crown canopy capable of providing full shade; "M" indicates that the species has a medium or narrower crown and/or an open grown canopy that provides partial shade; "L" indicates that the species is open grown, has a small canopy, or is too short to provide anything except minimal shade.

Wildlife Merit describes the relative potential for the species to be valuable for wildlife including providing useful cavity sites, quality nesting cover, or quality fruit and food production. "H" indicates excellent large cavity potential, nesting cover or fruit production; "M" indicates moderate cavity potential, nesting cover or fruit production; "L" indicates low cavity potential, nesting cover, or fruit production.

Potential Height indicates the species' potential height at maturity.

Appendix E


Spring head
Protected Area
N
Google
© 2010 Google
Pointer 34°41'52.01" N 86°50'06.07" W elev 175 m Streaming 100%
Eye alt 1.52 km

Department of the Interior
U.S. Fish and Wildlife Service

Expires Nov. 30, 2010
OMB No. 1018-0094

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service (USFWS)

Type of Activity: Native Endangered and Threatened Species –

Enhancement of Survival Permits Associated with Safe Harbor Agreements & Candidate Conservation Agreements with Assurances

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address

B. Complete if applying on behalf of a business, corporation, public agency or institution

1.a. Name of business, agency, or institution	1.b. Doing business as (dba)
Belle Mina Farm Ltd.	Belle Mina Farm Ltd.

2. Tax identification no.	3. Description of business, agency, or institution
63-1235968	farm

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix
Sewell	John	Banks	III

5. Principal officer title	6. Primary contact
President	J. Banks Sewell III

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address
205-581-0760	205-936-1783	205-380-9160	bsewell@lfwlaw.com

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
6185 Mooresville Road

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Belle Mina	AL	35615	Limestone	USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
J. Banks Sewell - Lightfoot, Franklin & White - 400 20th Street North

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country
Birmingham	AL	35203	Jefferson	USA

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount indicated on page 2.** Federal, tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
   Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____
   No ☒

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

J. Banks Sewell III — 5-14-10

Signature (in blue ink) of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

**** See page 13 for additional instructions on completing the above form. See page 14 for information on the Paperwork Reduction Act, Privacy Act, and Freedom of Information Act aspects of this application form.**

Section E. **ALL APPLICANTS COMPLETE SECTION E.** Provide the information outlined in Section E. on the following pages. Be as complete and descriptive as possible. Please do not send pages that are over 8.5"X 11", videotapes, or DVDs.

ENHANCEMENT OF SURVIVAL PERMITS ASSOCIATED WITH SAFE HARBOR AGREEMENTS AND CANDIDATE CONSERVATION AGREEMENTS WITH ASSURANCES

What type of agreement are you requesting?

- ☐ Safe Harbor Agreement

OR

- ☒ Candidate Conservation Agreement with Assurances

Have you obtained all required State, Federal or foreign government approval to conduct the activity you propose? Please be aware that there may be other requirements necessary to conduct this activity such as an import permit, collection permit, permission to work on Federal lands, Federal bird banding permit, Corps of Engineers permits, Environmental Protection Agency NPDES permits, State, county or local permits, etc.

☐ Yes. Provide a copy of the approval(s). List the State, Federal or foreign countries involved and type of document required. Include a copy of these documents with the application.

☐ I have applied. List the State, Federal or foreign countries involved and type of documents required. Provide the reasons why the permits have not been issued _____.

☒ Not required. The proposed activity is not regulated.

Application Processing Fees
The application processing fee for a new Enhancement of Survival permit, or to renew/re-issue an existing valid permit, is $50. If permit amendment is required at a time other than renewal/re-issuance, the processing fee is $25.

Check the appropriate box below and enclose check or money order payable to the *U.S. Fish and Wildlife Service* in the amount of

☒ $50 for a **new** permit

OR

☐ $50 to **renew/re-issue** my existing valid permit (with only *minor changes* such as updating my name and address) using my current application package on file.

OR

$ 25 to make a **substantive amendment** (with *major changes*) to my existing valid permit [50 CFR 13.11(d)(2)].

If the information in your current application package on file has changed in a manner that triggers a major amendment or a change not otherwise specified in the permit or the Safe Harbor Agreement/Candidate Conservation Agreement with Assurances, then you must apply for an amendment to your valid permit. For example, such major changes may include changes in location, activity, amount or type of take, or species to be covered by the permit. Please contact our Ecological Services Field Office located closest to your proposed activity for technical assistance in making this determination. The contact information for our Ecological Services Field Offices can be found on the U.S. Fish & Wildlife Service's office directory web page at http://www.fws.gov/offices/directory/listofficemap.html

Please check the **type of amendment** you are requesting --

☐ add species (specify) _____

☐ add a geographic area ☐ change in personnel

☐ other (specify) _____

If this application includes **transfer or succession** of a valid Enhancement of Survival permit, please check the box below:

□ Transfer or succession of a valid Enhancement of Survival permit associated with a Safe Harbor Agreement or Candidate Conservation Agreement with Assurances using the current application package on file. No application fee is required.

Application Processing Time

To expedite a final decision on your application, you are urged to coordinate with us as soon as possible for guidance in assembling a complete application package, and to send us your complete permit application package at least three months prior to the start of your proposed activities. If you are renewing or amending a valid permit, your complete application package must be received at least 30 days prior to the expiration of the valid permit. These time periods begin when we receive a complete permit application package and does not include any time required for requesting clarification or additional information about your application.

The information provided in your permit application will be used to evaluate your application for compliance with the Endangered Species Act, its implementing regulations (which may require a 30 day public comment period), and with U.S. Fish and Wildlife Service policy. Receipt and possession of a permit under the Endangered Species Act should be regarded as a privilege, as we must balance permit issuance with our duties to protect and recover listed species.

Up-to-date annual reports and any other required reports under your valid permit(s) must be on file before a permit will be considered for renewal, re-issuance or amendment.

If your activities may affect species under the authority of the National Marine Fisheries Service (NMFS/NOAA Fisheries), then you may need to obtain a separate permit from that agency. In addition we share jurisdiction with NMFS/NOAA Fisheries for sea turtles (e.g., we evaluate applications for permits to conduct activities impacting sea turtles on land, and NMFS/NOAA Fisheries evaluates applications for permits to conduct activities impacting sea turtles in the marine environment). To apply for a permit to conduct activities with sea turtles in the marine environment or other species under NMFS/NOAA Fisheries jurisdiction, please contact them via their permit web page at http://www.nmfs.noaa.gov/pr/permits/

Our general permit regulations at 50 CFR 13.12(a)(9) allow us to collect such other information as we determine that is relevant to the processing of a permit application. Before you submit an application for an Enhancement of Survival permit, we may require that you conduct biological surveys to determine which species and/or habitat would be impacted by the activities sought to be covered under the permit. Biological surveys provide information necessary to develop an adequate Safe Harbor Agreement or Candidate Conservation Agreement with Assurances, and to assess the biological impacts of the proposed activities. In addition, the information provided in a biological survey can reduce the applicant's risk of take under Section 9 of the Endangered Species Act by ensuring that affected species and/or habitat are identified and appropriately covered under the permit.

You are required to obtain a Scientific Purposes, Enhancement of Propagation or Survival permit (commonly called a Recovery permit) from us before engaging in any biological survey activities that would take listed species. Contact our Ecological Services Field Office closest to the location of your activity to obtain technical assistance in determining the need for both a biological survey and a Recovery permit for your survey activity. The contact information for our Ecological Services Field Offices can be found on the U.S. Fish & Wildlife Service's office directory web page at http://www.fws.gov/offices/directory/listofficemap.html

If a biological survey is required, you will need to send us your complete Recovery permit application package at least 3 months prior to commencement of survey activities to facilitate processing of your Recovery permit application. The Recovery permit application is designated as U.S. Fish & Wildlife Service form # 3-200-55 and can be found on our Endangered Species permit web page at http://www.fws.gov/forms/3-200-55.pdf.

We maintain a list of Recovery permittees (such as biological consultants) who have authorized the release of their contact information to third parties for conducting biological surveys on a contract basis. This list is provided to the public at the discretion of each U.S. Fish and Wildlife Service Regional Office as time and workload allow. Please be aware that this list does not represent an endorsement by us of any particular permittee.

****

If you are not applying as an individual but as a business, corporation, institution, or non-Federal public agency (block B. on page 1 of the application), the person to whom the permit will be issued (e.g., the landowner, president, director, executive director, or executive officer) is legally responsible for implementing the permit. Although other people under the direct control of the permittee (e.g., employees, contractors, consultants) receive third party take authorization in their capacity as designees of the permittee, the individual named as the permittee ultimately is legally responsible for the permit and any activities carried out under the permit except as otherwise limited in the case of permits issued to State or local government entities under 50 CFR 13.25(e).

****

If you wish to coordinate the processing of this permit application through an **authorized agent**, and to have that agent represent you as the primary contact with us, check the box below. Sign (in blue ink) and date the authorization statement, and provide contact information for your authorized agent.

☐ I hereby authorize the following person to act as an authorized agent on my behalf in the processing of this permit application and to furnish, upon request, supplemental information in support of this permit application.

_____ _____

signature (in blue ink) date

_____

please print name legibly

Your Authorized Agent's Contact Information (please print legibly)

Name: _____

Address: _____

_____

City: _____ State: _____ Zip Code: _____

Telephone: _____

Fax: _____

E-Mail: _____

ENHANCEMENT OF SURVIVAL PERMIT APPLICATION INSTRUCTIONS

You have 4 options for providing the required information for an Enhancement of Survival permit application. Choose only one option.

Enhancement of Survival Permit Application: Option I. Renewal of a Valid Enhancement of Survival Permit.

Up-to-date annual reports and any other required reports under your valid permit(s) must be on file before a permit will be considered for renewal.

Sign the following statement if you are applying to renew an existing valid Enhancement of Survival permit. If you are proposing major changes to your Enhancement of Survival permit, you must use Option II.

The individual signing box D. on page 1 of the application must also sign (in blue ink) the following statement. This certification language is required under 50 CFR 13.22(a).

> I certify that the statements and information submitted in support of my original application for a U.S. Fish and Wildlife Service Enhancement of Survival permit # _____ are still current and correct and hereby request renewal of that permit.
>
> _____ _____
> signature (in blue ink) date
>
> _____
> please print name legibly
>
> * Please note: If you have signed the above statement, then your renewal request is complete. Please submit completed pages 1 through 5 of this application to our Regional Office (see attached list) covering the location of your proposed activity. Requests for renewals must be received no later than 30 days prior to permit expiration to ensure that your current permit remains in effect while we process your renewal request.

Enhancement of Survival Permit Application: Option II. Amended Enhancement of Survival Permit (with *major changes*)

Up-to-date annual reports and any other required reports under your valid permit(s) must be on file before a permit will be considered for amendment.

Sign the following statement if you are proposing to amend a valid Enhancement of Survival permit by making major changes. Such major changes may include changes in location, activity, amount or type of take, or species to be covered by the permit.

The individual signing box D. on page 1 of the application must also sign (in blue ink) the following statement. This certification language is required under 50 CFR 13.22(a).

> I certify that the statements and information submitted in support of my original application for a U.S. Fish and Wildlife Service Enhancement of Survival permit # _____ are still current and correct, except for the changes listed below, and hereby request amendment of that permit.

_____ _____

signature (in blue ink) date

_____

please print name legibly

Provide a brief description of the changes to your valid permit (answer the appropriate questions for these changes under Enhancement of Survival Permit Application Option III. below). Please submit completed pages 1 through 6 of this application form (along with the changed information relative to Option III. below) to our Regional Office (see attached list) covering the location of your proposed activity.

Enhancement of Survival Permit Application: Option III. New Enhancement of Survival Permit & Supplementary Information for Amendment of a Valid Permit (with *major changes*).

General permit regulations for the U.S. Fish and Wildlife Service can be found at 50 CFR 13. Regulations for an Enhancement of Survival permit associated with a Safe Harbor Agreement under the Endangered Species Act can be found at 50 CFR 17.22(c)(1) for endangered wildlife species and 50 CFR 17.32(c)(1) for threatened wildlife species. Regulations for an Enhancement of Survival permit associated with a Candidate Conservation Agreement with Assurances under the Endangered Species Act can be found at 50 CFR 17.22(d)(1) for endangered wildlife species and 50 CFR 17.32(d)(1) for threatened wildlife species.

Each landowner who wishes to be covered under a new or amended Enhancement of Survival permit associated with a Safe Harbor Agreement or Candidate Conservation Agreement with Assurances must also sign (in blue ink) and date the Enhancement of Survival Permit Application Certification Notice at the end of this application, unless the landowner will be covered under this U.S. Fish and Wildlife Service Enhancement of Survival permit via another vehicle, such as a certificate of inclusion (50 CFR 13.25(d)). Any change in the language of the Certification Notice must be reviewed by the Department of Interior, Office of the Solicitor and approved by the U.S. Fish & Wildlife Service. The same person who signs in box D. on page 1 of the application should sign the certification.

If the information in items A. - B. below is already provided in your final Safe Harbor Agreement or final Candidate Conservation Agreement with Assurances, then you do not have to provide it here. Instead, check the box below and use the spaces provided in items A. - B. to indicate the page numbers in your Agreement that provide the requested information.

☒ I am not providing the following information for items A. - B. as part of my Enhancement of Survival permit application, because it is already provided in my final Safe Harbor Agreement or final Candidate Conservation Agreement with Assurances (copy attached or already submitted).

If the requested information in items A. - B. is not provided in your final Safe Harbor Agreement or final Candidate Conservation Agreement with Assurances, or you are using Option II. to amend your existing valid Enhancement of Survival permit, then attach separate pages for the missing information. In order to assist us in processing your request, please provide the item number (A. 1.a., etc.) of the required information before each of your responses. Thank you.

Please ensure that your final Safe Harbor Agreement or Candidate Conservation Agreement with Assurances is attached if it has not been previously submitted.

If you have previously submitted a final draft Safe Harbor Agreement or Candidate Conservation Agreement with Assurances, please indicate the document's date.

Date of final draft Safe Harbor Agreement _____

Date of final draft Candidate Conservation Agreement with Assurances _____

Applications for an Enhancement of Survival permit associated with a Safe Harbor Agreement or Candidate Conservation Agreement with Assurances must provide the following specific information (relevant to the activity) under items A.- B. below in addition to the general information on page 1 of this application.

A. Identify species and activity:

1. For a new Enhancement of Survival permit:

   a. Provide the common and scientific names of the species being requested for coverage in the permit and their status (endangered (E), threatened (T), proposed endangered (PE), proposed threatened (PT), candidate for listing (C), or species likely to become a candidate (LC)).

   b. Provide the number, age and sex of such species to the extent known.

   c. Quantify the anticipated effects to their habitat.

   d. Describe the land use or water management activity sought to be authorized for each species.

e. If you are applying for an Enhancement of Survival permit under a Safe Harbor Agreement, please provide a brief description of the baseline population and habitat conditions for each listed species proposed for coverage under the Safe Harbor Agreement. (Note: Baseline conditions should be summarized in a manner appropriate for each covered species, generally in terms of numbers of individuals present or amount of suitable habitat.)

2. For an amended Enhancement of Survival permit:

a. Identify the species to be added to your valid permit (provide both the scientific, to the most specific taxonomic level, and common names), as well as the species' status (see 1.a. above).

b. Provide the number, age and sex of such species to the extent known.

c. If any activities requested in this application differ from those authorized in your valid permit, then for each species state the currently authorized activity, the requested new activity, and how the new activity will impact each species.

d. Identify each activity associated with your project that would result in the incidental take of each species.

e. Quantify any anticipated effects to the habitat of each added species.

f. Identify species to be deleted from your valid permit and the reason(s) for the deletion.

Page(s) & source document : CCAA Pages 1-14

B. Identify location of the proposed activity:

1. Provide the name of the State, county, and specific location of the proposed activity site(s). Include a formal legal description, section/township/range information, county tax parcel number, local address, or any other identifying property designation that will precisely place the location of the proposed activity site(s).

2. Provide the total number of acres covered by the Agreement _____

Is this the total acreage of the parcel? (circle one) yes no

3. Provide the approximate number of acres to be impacted _____

4. Provide the approximate number of acres to be protected _____

5. Provide a complete description, including timeframes, for implementation of proposed voluntary management activities to enhance, restore, or maintain habitat benefiting federally listed, proposed or candidate species, or other species likely to become candidates.

Page(s) & source document: CCAA Pages 1-14

Enhancement of Survival Permit Application: Option IV. Permit Transfer or Succession of a Permit

Complete the following if you are applying for transfer of a valid Enhancement of Survival permit to you or obtaining rights of succession of a valid Enhancement of Survival permit. In addition, you and the current permit holder may also need to sign an Assumption Agreement. Please contact our Ecological Services Field Office nearest your activity to determine whether you and the current permit holder need to execute an Assumption Agreement. The contact information for our Ecological Services Field Offices can be found on the U.S. Fish & Wildlife Service's office directory web page at http://www.fws.gov/offices/directory/listofficemap.html

Please indicate the name of the Safe Harbor Agreement or Candidate Conservation Agreement with Assurances to be transferred or succeeded and the document's date.

Name of Safe Harbor Agreement _____

Date _____

Name of Candidate Conservation Agreement with Assurances Candidate Conservation Agreement with Assurances for the Spring Pygmy Sunfish between Belle Mina Farm Ltd and the US Fish and Wildlife Service

Date _____

An Assumption Agreement

is **is not** (FWS Ecological Services Field Office to circle one)

required as part of the transfer or succession permit application for the Safe Harbor Agreement or Candidate Conservation Agreement with Assurances.

Enhancement of Survival Permit Application

Certification Notice

The same person who signs in box D. on page 1 of the application should sign (in blue ink) the following certification.

By submitting this application and receiving an Enhancement of Survival permit pursuant to Section 10(a)(1)(A) of the Endangered Species Act, I

BELLE MINA FARM Ltd. (print name (s)) attest that I/we own the lands indicated in this application, or have sufficient authority or rights over these lands to implement the measures of the Safe Harbor Agreement and/or Candidate Conservation Agreement with Assurances covered by the Enhancement of Survival permit. Further, upon receipt of the Enhancement of Survival permit, I/we agree to conduct the activities as specified in the Safe Harbor Agreement and/or Candidate Conservation Agreement with Assurances according to the terms and conditions of the Enhancement of Survival permit and its supporting documents.

J. Banks Sewell III — 9-14-10

signature (in blue ink) — date

J. BANKS SEWELL III

please print name legibly

signature (in blue ink) — date

please print name legibly

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The public reporting burden for completing this application for an Enhancement of Survival permit is estimated to be 3 hours, including time for reviewing instructions, gathering and maintaining application data, and completing and reviewing the forms. Comments regarding the burden estimate or any other aspect of the reporting requirement(s) should be directed to the Service Information Collection Clearance Officer, MS 222 ARLSQ, Fish and Wildlife Service, Washington, DC 20240.

An agency may not conduct and a person is not required to respond to a collection of information unless a currently valid OMB control number is displayed.

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