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	Engineering and Design FLOOD TOLERANT PLANT SPECIES	
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DEPARTMENT OF THE ARMY
Office of the Chief of Engineers
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Pamphlet
No. 1110-1-3

31 January 1980

Engineering and Design
FLOOD TOLERANT PLANT SPECIES

1. Purpose. The purpose of this Pamphlet is to provide guidance in the identification of plant species capable of tolerating periodic or occasional flooding.

2. Applicability. This is intended to provide preliminary guidance to district resource managers who are interested in revegetation or improvement of flooded habitats, such as reservoir shorelines.

3. Reference. Whitlow, Thomas H. and Harris, Richard W., "Flood Tolerance in Plants: A State-of-the Art Review", Technical Report ADA 075938 National Technical Information Center (NTIS) 5285 Port Royal Road, Springfield, Virginia 22161.

4. Discussion.

a. Shorelines of many Corps of Engineers reservoirs are stripped of vegetation by the cyclic flooding and drawdown that occur during normal reservoir operations. Such areas often are subject to rapid erosion, and are of minimal value as fish and wildlife habitat. The establishment of flood tolerant vegetation on reservoir shorelines may be accomplished by selective pre-impoundment clearing, although this is generally of minimal effectiveness, or through revegetation. Revegetation techniques are usually similar to planting practices developed for forestry, agriculture, or upland erosion control. The greatest impediment to reservoir shoreline revegetation is the identification of plant species which can tolerate the extraordinary wetting and drying conditions of an irregularly flooded site and the physiological impacts imposed by such conditions.

b. The stresses imposed on plants by flooding are, for the most part, related to depletion of oxygen in the soil. Other factors, such as siltation or wave damage, may also be important in preventing plant establishment and survival. Certain plant species exhibit anatomical or physiological adaptations which allow them to survive periodic flooding, and many of these species have been identified through ecological investigations of swamps, marshes, recently filled impoundments, and other flooded habitats.

c. The listed species in Appendix A are taken from the reference in paragraph 3 above and tabulated according to Corps of Engineer divisions. The listed species have been observed to have some flood tolerance in the

regions indicated. It must be recognized, however, that little experimental revegetation work has been done, and that the lists should be used only for general guidance rather than as strict prescriptions for shoreline revegetation. Further, a variety of factors other than flood tolerance should be taken into account in planning any revegetation effort. These include: depth, duration, and timing of flooding, soil types, shoreline gradient and exposure to wind and wave action, and wildlife and stabilization value of the species planted.

d. The reader will note that the tables in Appendix A vary considerably; that is, some divisions have long species lists including both woody and herbaceous, exotic and native species, while other divisions have only a few native woody species listed. Such inconsistencies and apparent omissions reflect the characteristics of the published scientific literature and the research interests of individual investigators. The absence of a particular species from the tables does not necessarily imply that it is intolerant of flooding, and the reader is advised to refer to the tables for adjacent divisions as well as their own. The reader should also be aware that weedy annual species are included in the tables, and that these may be highly inappropriate, or even deleterious, if introduced into certain environments (e.g., in the vicinity of grazing or agricultural land).

FOR THE CHIEF OF ENGINEERS:

1 Appendix
Plant Species List

Forrest T. Gay
FORREST T. GAY, III
Colonel, Corps of Engineers
Executive Director, Engineer Staff

Woody Species

<u>Common Name</u>	<u>Scientific Name</u>
Box elder	<u>Acer negundo</u>
Red maple	<u>A. rubrum</u>
Silver maple	<u>A. saccharinum</u>
Black alder	<u>Alnus rugosa</u>
Indigo bush	<u>Amorpha fruticosa</u>
Pepper vine	<u>Ampelopsis arborea</u>
Rattan vine	<u>Berchemia scandens</u>
River birch	<u>Betula nigra</u>
Florida vine	<u>Brunnichia cirrhosa</u>
Trumpet vine	<u>Campsis radicans</u>
Water hickory	<u>Carya aquatica</u>
Buttonbush	<u>Cephaelanthus occidentalis</u>
Southern white cedar	<u>Chamaecyparis thyoides</u>
Hawthorn	<u>Crataegus</u> sp.
Persimmon	<u>Diospyros virginiana</u>
Swamp privet	<u>Forestiera acuminata</u>
Green ash	<u>Fraxinus pennsylvanica</u> var. <u>lanceolata</u>
Honey locust	<u>Gleditsia triacanthos</u>
Deciduous holly	<u>Ilex decidua</u>
Sweet gum	<u>Liquidambar styraciflua</u>
Osage orange	<u>Maclura pomifera</u>

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Red mulberry	<u>Morus rubra</u>
Tupelo gum	<u>Nyssa aquatica</u>
Loblolly pine	<u>Pinus taeda</u>
Sycamore	<u>Platanus occidentalis</u>
Cottonwood	<u>Populus deltoides</u>
Overcup oak	<u>Quercus lyrata</u>
Cow oak	<u>Q. michauxii</u>
Water oak	<u>Q. nigra</u>
Willow oak	<u>Q. phellos</u>
Swamp rose	<u>Rosa palustris</u>
Sandbar willow	<u>Salix interior</u>
Black willow	<u>S. nigra</u>
Greenbrier	<u>Smilax</u> sp.
Bald cypress	<u>Taxodium distichum</u>
Dogbane	<u>Trachelospermum difforme</u>
Winged elm	<u>Ulmus alata</u>
American elm	<u>U. americana</u>
Wild grape	<u>Vitis</u> sp.

Herbaceous Species

Alligator weed	<u>Alternanthera philoxeroides</u>
Purple ammannia	<u>Ammannia coccinea</u>
Broomsedge	<u>Andropogon virginicus</u>
Lake cress	<u>Armoracia aquatica</u>
Aster	<u>Aster</u> spp.
Hop sedge	<u>Carex lupulina</u>

Redroot flatsedge	<u>Cyperus erythrorhizos</u>
Swamp loosestrife	<u>Decodon verticillatus</u>
Water purslane	<u>Peplis diandra</u>
Crabgrass	<u>Digitaria sanguinalis</u>
Virginia buttonweed	<u>Diodia virginiana</u>
Barnyard grass	<u>Echinochloa crusgalli</u>
Burhead	<u>E. cordifolius</u>
Slender spikerush	<u>Eleocharis acicularis</u>
Blunt spikerush	<u>E. obtusa</u>
Squarestem spikerush	<u>E. quadrangulata</u>
Halberd-leaved rose mallow	<u>Hibiscus militaris</u>
Swamp rose mallow	<u>H. moscheutos</u>
Hydrolea	<u>Hydrolea quadrivalvis</u>
Soft rush	<u>Juncus effusus</u>
Water primrose	<u>Jussiaea repens</u>
Water willow	<u>Justicia americana</u>
Rice cutgrass	<u>Leersia oryzoides</u>
Winged loosestrife	<u>Lythrum alatum</u>
Water milfoil	<u>Myriophyllum pinnatum</u>
Yellow nelumbo	<u>Nelumbo lutea</u>
Sacred lotus	<u>N. nucifera</u>
Spatterdock	<u>Nuphar advena</u>
Panic grass	<u>Panicum agrostoides</u>
Mild smartweed	<u>Polygonum hydropiperoides</u>

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Pale smartweed	<u>P. lapathifolium</u>
Pennsylvania smartweed	<u>P. pensylvanicum</u>
Pondweed	<u>Potamogeton nodosus</u>
Curlyleaf pondweed	<u>P. crispus</u>
Mermaid weed	<u>Proserpinaca palustris</u>
Yellow water buttercup	<u>Ranunculus flabellaris</u>
Lizardtail	<u>Saururus cernuus</u>
Woolgrass bulrush	<u>Scirpus cyperinus</u>
American germander	<u>Teucrium canadense</u>
Common cattail	<u>Typha latifolia</u>

Woody Species

<u>Common Name</u>	<u>Scientific Name</u>
Box elder	<u>Acer negundo</u>
Red maple	<u>A. rubrum</u>
Silver maple	<u>A. saccharinum</u>
Alder	<u>Alnus</u> sp.
Japanese barberry	<u>Berberis thunbergii</u>
Buttonbush	<u>Cephalanthus occidentalis</u>
Cornelian cherry	<u>Cornus mas</u>
Gray-stem dogwood	<u>C. paniculata</u>
White ash	<u>Fraxinus americana</u>
Green ash	<u>F. pennsylvanica</u>
Pumpkin ash	<u>F. profunda</u>
Thornless honey locust	<u>Gleditsia triacanthos</u> var. <u>inermis</u>
Black alder	<u>Ilex verticillata</u>
Black walnut	<u>Juglans nigra</u>
Pfitzer juniper	<u>Juniperus chinensis</u> var. <u>pfitzeriana</u>
Red cedar	<u>J. virginiana</u>
Regel privet	<u>Ligustrum obtusifolium</u> var. <u>regelianum</u>
Dolgo crabapple	<u>Malus pumila</u> 'Dolgo'
White mulberry	<u>Morus alba</u>
Black gum	<u>Nyssa sylvatica</u>
American sycamore	<u>Platanus occidentalis</u>

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Cottonwood	<u>Populus deltoides</u>
Pin oak	<u>Quercus palustris</u>
White willow	<u>Salix alba</u>
Pussy willow	<u>S. discolor</u>
Black willow	<u>S. nigra</u>
Spiraea	<u>Spiraea</u> spp.
European littleleaf linden	<u>Tilia cordata</u>
American elm	<u>Ulmus americana</u>
Highbush blueberry	<u>Vaccinium corymbosum</u>
Arrowwood	<u>Viburnum dentatum</u>
Sweet viburnum	<u>V. lentago</u>
American cranberry bush	<u>V. trilobum</u>

Herbaceous Species

Water plantain	<u>Alisma</u> sp.
Soft rush	<u>Juncus effusus</u>
Cutgrass	<u>Leersia</u> sp.
Bur reed	<u>Sparganium</u> sp.
Cattail	<u>Typha</u> spp.

Woody Species

<u>Common Name</u>	<u>Scientific Name</u>
Red maple	<u>Acer rubrum</u>
Silver maple	<u>A. saccharinum</u>
Black alder	<u>Alnus glutinosa</u>
Ironwood	<u>Carpinus caroliniana</u>
White ash	<u>Fraxinus americana</u>
Hop hornbeam	<u>Ostrya virginiana</u>
Bigtooth aspen	<u>Populus grandidentata</u>
Red oak	<u>Quercus rubra</u>
Black willow	<u>Salix nigra</u>
Basswood	<u>Tilia americana</u>
American elm	<u>Ulmus americana</u>

Woody Species

<u>Common Name</u>	<u>Scientific Name</u>
Box elder	<u>Acer negundo</u>
Red maple	<u>A. rubrum</u>
Silver maple	<u>A. saccharinum</u>
Pecan	<u>Carya illinoensis</u>
Sugarberry	<u>Celtis laevigata</u>
Hackberry	<u>C. occidentalis</u>
Buttonbush	<u>Cephalanthus occidentalis</u>
Redbud	<u>Cercis canadensis</u>
Green ash	<u>Fraxinus lanceolata</u>
Honey locust	<u>Gleditsia triacanthos</u>
Kentucky coffee tree	<u>Gymnocladus dioicus</u>
Black walnut	<u>Juglans nigra</u>
Tupelo	<u>Nyssa aquatica</u>
Sycamore	<u>Platanus occidentalis</u>
Cottonwood	<u>Populus deltoides</u>
Pin oak	<u>Quercus palustris</u>
Black willow	<u>Salix nigra</u>
Bald cypress	<u>Taxodium distichum</u>
American elm	<u>Ulmus americana</u>
Red elm	<u>U. rubra</u>

Swamp milkweed	<u>Asclepias incarnata</u>
Sticktight	<u>Bidens</u> sp.
Bluejoint grass	<u>Calamagrostis canadensis</u>
Chufa	<u>Cyperus</u> sp.
Walter's millet	<u>Echinochloa walteri</u>
Needle rush	<u>Eleocharis acicularis</u>
Fireweed	<u>Erechtites hieracifolia</u>
Boneset	<u>Eupatorium perfoliatum</u>
Rose mallow	<u>Hibiscus palustris</u>
Touch-me-not	<u>Impatiens</u> sp.
Rice cut-grass	<u>Leersia oryzoides</u>
Monkey flower	<u>Mimulus</u> sp.
Water lotus	<u>Nelumbo lutea</u>
Pale smartweed	<u>Polygonum lapathifolium</u>
Arrowhead	<u>Sagittaria latifolia</u>
Softstem bulrush	<u>Scirpus validus</u>
Sow thistle	<u>Sonchus</u> sp.
Bur-reed	<u>Sparganium eurycarpum</u>
Cattail	<u>Typha</u> sp.

Woody Species

<u>Common Name</u>	<u>Scientific Name</u>
Box alder	<u>Acer negundo</u>
Red maple	<u>A. rubrum</u>
Silver maple	<u>A. saccharinum</u>
Hazel alder	<u>Alnus rugosa</u>
River birch	<u>Betula nigra</u>
Water hickory	<u>Carya aquatica</u>
Pecan	<u>C. illinoensis</u>
Sugarberry	<u>Celtis laevigata</u>
Hackberry	<u>C. occidentalis</u>
Buttonbush	<u>Cephalanthus occidentalis</u>
Hawthorn	<u>Crataegus mollis</u>
Persimmon	<u>Diospyros virginiana</u>
White ash	<u>Fraxinus americana</u>
Green ash	<u>F. pennsylvanica</u>
Swamp privet	<u>Forestiera acuminata</u>
Water locust	<u>Gleditsia aquatica</u>
Honey locust	<u>G. triacanthos</u>
Deciduous holly	<u>Ilex decidua</u>
American holly	<u>I. opaca</u>
Sweetgum	<u>Liquidambar styraciflua</u>
Water tupelo	<u>Nyssa aquatica</u>

Black gum	<u>N. sylvatica</u>
Water elm	<u>Planera aquatica</u>
Sycamore	<u>Platanus occidentalis</u>
Cottonwood	<u>Populus deltoides</u>
Swamp white oak	<u>Quercus bicolor</u>
Spanish oak	<u>Q. falcata</u>
Shingle oak	<u>Q. imbricaria</u>
Overcup oak	<u>Q. lyrata</u>
Bur oak	<u>Q. macrocarpa</u>
Water oak	<u>Q. nigra</u>
Nuttall's oak	<u>Q. nuttallii</u>
Pin oak	<u>Q. palustris</u>
Willow oak	<u>Q. phellos</u>
Black willow	<u>Salix nigra</u>
Bald cypress	<u>Taxodium distichum</u>
Winged elm	<u>Ulmus alata</u>
American elm	<u>U. americana</u>
Red elm	<u>U. rubra</u>

Woody Species

<u>Common Name</u>	<u>Scientific Name</u>
Box elder	<u>Acer negundo</u>
Red maple	<u>A. rubrum</u>
Silver maple	<u>A. saccharinum</u>
Hazel alder	<u>Alnus serrulata</u>
False indigo	<u>Amorpha fruticosa</u>
River birch	<u>Betula nigra</u>
Pecan	<u>Carya illinoensis</u>
Blackberry	<u>Celtis occidentalis</u>
Buttonbush	<u>Cephalanthus occidentalis</u>
Persimmon	<u>Diospyros virginiana</u>
Green ash	<u>Fraxinus pennsylvanica</u>
Sweet gum	<u>Liquidambar styraciflua</u>
Black gum	<u>Nyssa sylvatica</u>
Sycamore	<u>Platanus occidentalis</u>
Plains cottonwood	<u>Populus sargentii</u>
Overcup oak	<u>Quercus lyrata</u>
Peachleaf willow	<u>Salix amygdaloides</u>
Ditchbank willow	<u>S. interior</u>
Black willow	<u>S. nigra</u>
French Tamarisk	<u>Tamarix gallica</u>
American elm	<u>Ulmus americana</u>

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Herbaceous Species

Big bluestem	<u>Andropogon gerardii</u>
Bluestem	<u>A. ischaemum</u>
Silver bluestem	<u>A. saccharoides</u>
Little bluestem	<u>A. scoparius</u>
Euffalo grass	<u>Buchloe dactyloides</u>
Water sedge	<u>Carex aquatilis</u>
Bermuda grass	<u>Cynodon dactylon</u>
Rusty sedge	<u>Cyperus ferrugineus</u>
Barnyard grass	<u>Echinochloa crusgalli</u>
Spike rush	<u>Eleocharis macrostachya</u>
Virginia wild rye	<u>Elymus virginicus</u>
Weeping lovegrass	<u>Eragrostis curvula</u>
Tall fescue	<u>Festuca arundinacea</u>
Water purslane	<u>Ludwigia palustris</u>
Panic grass	<u>Panicum agrostoides</u>
Beaked panicum	<u>P. anceps</u>
Switch grass	<u>P. virgatum</u>
Johnson grass	<u>Sorghum halepense</u>
Purpletop	<u>Tridens flavus</u>

Missouri River Division

Woody Species

<u>Common Name</u>	<u>Scientific Name</u>
Box elder	<u>Acer negundo</u>
Silver maple	<u>A. saccharinum</u>
Pecan	<u>Carya illinoensis</u>
Hawthorn	<u>Crataegus spp.</u>
Green ash	<u>Fraxinus pennsylvanica</u>
Honey locust	<u>Gleditsia triacanthos</u>
Sycamore	<u>Platanus occidentalis</u>
Cottonwood	<u>Populus deltoides</u>
Swamp white oak	<u>Quercus bicolor</u>
Bur oak	<u>Q. macrocarpa</u>
Pin oak	<u>Q. palustris</u>
Willow	<u>Salix spp.</u>
Bald cypress	<u>Taxodium distichum</u>
American elm	<u>Ulmus americana</u>

Herbaceous Species

Quackgrass	<u>Agropyron repens</u>
Western wheatgrass	<u>A. smithii</u>
Garrison creeping foxtail	<u>Alopecurus arundinaceus</u>
Saltgrass	<u>Distichlis spicata</u>
Foxtail barley	<u>Hordeum jubatum</u>
Reed canary grass	<u>Phalaris arundinacea</u>

Common reed	<u>Phragmites australis</u>
Kentucky bluegrass	<u>Poa pratensis</u>
Bulrush	<u>Scirpus validus</u>
Cattail	<u>Typha latifolia</u>

North Central Division

Woody Species

<u>Common Name</u>	<u>Scientific Name</u>
Box elder	<u>Acer negundo</u>
Silver maple	<u>A. saccharinum</u>
Alder	<u>Alnus spp.</u>
River birch	<u>Betula nigra</u>
Bitternut hickory	<u>Carya cordiformis</u>
Shagbark hickory	<u>C. ovata</u>
Mockernut hickory	<u>C. tomentosa</u>
Hackberry	<u>Celtis occidentalis</u>
Buttonbush	<u>Cephalanthus occidentalis</u>
Red bud	<u>Cercis canadensis</u>
Grey dogwood	<u>Cornus racemosa</u>
Red stem dogwood	<u>C. stolonifera</u>
Red haw	<u>Crataegus mollis</u>
Persimmon	<u>Diospyros virginiana</u>
Wahoo	<u>Euonymus atropurpureus</u>
Swamp privet	<u>Forestiera acuminata</u>
White ash	<u>Fraxinus americana</u>
Green ash	<u>F. pennsylvanica</u>
Honey locust	<u>Gleditsia triacanthos</u>
Deciduous holly	<u>Ilex decidua</u>
Black walnut	<u>Juglans nigra</u>

White mulberry	<u>Morus alba</u>
Virginia creeper	<u>Parthenocissus quinquefolia</u>
Sycamore	<u>Platanus occidentalis</u>
Eastern cottonwood	<u>Populus deltoides</u>
Swamp white oak	<u>Quercus bicolor</u>
Shingle oak	<u>Q. imbricaria</u>
Bur oak	<u>Q. macrocarpa</u>
Pin oak	<u>Q. palustris</u>
Missouri gooseberry	<u>Ribes missouriense</u>
Black willow	<u>Salix nigra</u>
Common elder	<u>Sambucus canadensis</u>
Bristly greenbrier	<u>Smilax hispida</u>
Bladdernut	<u>Staphylea trifolia</u>
Coralberry	<u>Symporicarpos orbiculatus</u>
American elm	<u>Ulmus americana</u>
Slippery elm	<u>U. rubra</u>
River bank grape	<u>Vitis riparia</u>

Herbaceous Species

Giant ragweed	<u>Ambrosia trifida</u>
Beggarticks	<u>Bidens spp.</u>
Sedge	<u>Carex atherodes</u>
Gray's sedge	<u>C. grayii</u>
Sedge	<u>C. lacustris</u>
Sedge	<u>C. pseudo-cyperus</u>
Enchanter's nightshade	<u>Circaeа latifolia</u>

Spring beauty	<u>Claytonia virginica</u>
Honewort	<u>Cryptotaenia canadensis</u>
Three way sedge	<u>Dulichium arundinaceum</u>
Needle spike rush	<u>Eleocharis acicularis</u>
Spikerush	<u>E. palustris</u>
Cleavers	<u>Galium aparine</u>
Bedstraw	<u>G. concinnum</u>
Avens	<u>Geum vernum</u>
Pale touch-me-not	<u>Impatiens pallida</u>
Wood nettle	<u>Laportea canadensis</u>
Rice cutgrass	<u>Leersia oryzoides</u>
Loosestrife	<u>Lysimachia ciliata</u>
Moneywort	<u>L. nummularia</u>
Phlox	<u>Phlox divaricata</u>
Richweed	<u>Pilea pumila</u>
Climbing false buckwheat	<u>Polygonum scandens</u>
Smartweed	<u>P. virginianum</u>
Pickerelweed	<u>Pontederia cordata</u>
Kidneyleaf buttercup	<u>Ranunculus abortivus</u>
Swamp buttercup	<u>R. septentrionalis</u>
Sanicle	<u>Sanicula canadensis</u>
Hardstem bulrush	<u>Scirpus acutus</u>
Woolgrass	<u>S. cyperinus</u>
Great bulrush	<u>S. validus</u>
Greenbrier	<u>Smilax ecirrhata</u>
Greenbrier	<u>S. lasioneuron</u>
Bur reed	<u>Sparganium chlorocarpum</u>

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Common cattail

Typha latifolia

Nettle

Urtica gracilis

Wild rice

Zizania aquatica

North Pacific Division

Woody Species

<u>Common Name</u>	<u>Scientific Name</u>
Box elder	<u>Acer negundo</u>
Riverbank mugwort	<u>Artemesia lindleyana</u>
Nuttall's dogwood	<u>Cornus nuttallii</u>
Red-osier dogwood	<u>C. stolonifera</u>
Walnut	<u>Juglans spp.</u>
Bog laurel	<u>Kalmia polifolia</u>
Labrador tea	<u>Ledum groenlandicum</u>
Apple	<u>Malus spp.</u>
Sitka spruce	<u>Picea sitchensis</u>
Lodgepole pine	<u>Pinus contorta</u>
Ponderosa pine	<u>P. ponderosa</u>
Cottonwood	<u>Populus trichocarpa</u>
Smooth sumac	<u>Rhus glabra</u>
Narrow leaf willow	<u>Salix exigua</u>
Hooker willow	<u>S. hookeriana</u>
Pacific willow	<u>S. lasiandra</u>
Elder	<u>Sambucus callicarpa</u>
Hardhack	<u>Spirea douglasii</u>
Western red cedar	<u>Thuja plicata</u>
Western hemlock	<u>Tsuga heterophylla</u>
Blueberry	<u>Vaccinium uliginosum</u>

Herbaceous Species

<u>Common Name</u>	<u>Scientific Name</u>
Bedge	<u>Carex praegracilis</u>
Beaked sedge	<u>C. rostrata</u>
Salt grass	<u>Distichlis stricta</u>
Beardless wildrye	<u>Elymus triticoides</u>
Dwarf hesperochiron	<u>Hesperochiron pumilus</u>
Foxtail barley	<u>Hordeum jubatum</u>
Baltic rush	<u>Juncus balticus</u>
Nevada bluegrass	<u>Poa nevadensis</u>
Slender cinquefoil	<u>Potentilla gracilis</u>

Woody Species

<u>Common Name</u>	<u>Scientific Name</u>
Green wattle	<u>Acacia decurrens</u>
Silver maple	<u>Acer saccharinum</u>
Pecan	<u>Carya illinoensis</u>
Buttonbush	<u>Cephalanthus occidentalis</u>
Red gum	<u>Eucalyptus camaldulensis</u>
Green ash	<u>Fraxinus pennsylvanica</u> var. <u>lanceolata</u>
Thornless honey locust	<u>Gleditsia triacanthos</u> var. <u>inermis</u>
London plane tree	<u>Platanus acerifolia</u>
American sycamore	<u>P. occidentalis</u>
Balm of Gilead	<u>Populus candicans</u>
Fremont poplar	<u>P. fremontii</u>
Carolina poplar	<u>P. Canadensis</u>
Valley oak	<u>Quercus lobata</u>
Golden weeping willow	<u>Salix alba</u> 'Tristis'
Willow	<u>S. goodingii</u>
Corkscrew willow	<u>S. matsudana</u>
Dune willow	<u>S. piperi</u>
Bald cypress	<u>Taxodium distichum</u>
Mexican fan palm	<u>Washingtonia robusta</u>

Herbaceous Species

Western wheatgrass	<u>Agropyron smithii</u>
Tiff green hybrid bermudagrass	<u>Cynodon dactylon "Tiff Green"</u>
Desert saltgrass	<u>Distichlis stricta</u>
Lady's thumb	<u>Polygonum persicaria</u>
Alkali sacaton	<u>Sporobolus airoides</u>