

Chapter 10

# NATIVE PLANTS

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This chapter identifies protected native plants within the city, describes the process for requesting a Native Plant Permit when relocating, removing, or destroying these plants and presents guidance for salvaging and transplanting saguaros.



## DEPARTMENT RESOURCE INFORMATION

Aviation/Airport	15000 N. Airport Dr.	480-312-2321
Advance Planning Services	7506 E. Indian School Rd.	480-312-7990
Capital Project Management	7447 E. Indian School Rd., Suite 205	480-312-7250
Current Planning	7447 E. Indian School Rd., Suite 105	480-312-7000
Customer Service	7447 E. Indian School Rd., Suite 100	480-312-7800
Downtown Group	4248 N. Craftsman Ct.	480-312-7750
Facilities Management	9191 E. San Salvador Dr.	480-312-5999
Fire & Life Safety/ Inspections	8401 E. Indian School Rd.	480-312-1855
Fire Plan Review	7447 E. Indian School Rd., Suite 125	480-312-7080
Inspections & Land Survey	9191 E. San Salvador Dr.	480-312-5750
Parks Department	7340 Scottsdale Mall	480-312-2915
One Stop Shop/Permit Services	7447 E. Indian School Rd., Suite 100	480-312-2500
Plan Review	7447 E. Indian School Rd., Suite 125	480-312-7080
Records Division	7447 E. Indian School Rd., Suite 100	480-312-2356
Solid Wastewater Management	9191 E. San Salvador Dr.	480-312-5600
Stormwater Management	7447 E. Indian School Rd., Suite 205	480-312-7250
Street Operations	9191 E. San Salvador Dr.	480-312-5626
Transportation	7447 E. Indian School Rd., Suite 205	480-312-7696
Water Resources	9388 E. San Salvador Dr.	480-312-5685
City of Scottsdale	<a href="http://www.scottsdaleaz.gov">www.scottsdaleaz.gov</a>	

# NATIVE PLANTS

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## PROTECTED NATIVE PLANTS

Specific native plants are protected as described in the city's Native Plant Ordinance. Photos of indigenous plants, including the protected native plants listed below, are available at: [www.ScottsdaleAZ.gov/codes/nativeplant](http://www.ScottsdaleAZ.gov/codes/nativeplant).

### A. TREES

BOTANICAL NAME	COMMON NAME
<i>Acacia constricta</i>	Whitethorn Acacia
<i>Acacia greggii</i>	Catclaw Acacia
<i>Berberis haematocarpa</i>	Red Barberry
<i>Canotia holocantha</i>	Crucifixion Thorn
<i>Celtis pallida</i>	Desert Hackberry
<i>Cercidium floridum</i> ( <i>Parkinsonia florida</i> )	Blue Palo Verde
<i>Cercidium microphyllum</i> ( <i>Parkinsonia microphyllum</i> )	Foothills Palo Verde
<i>Chilopogon linearis</i>	Desert Willow
<i>Juniperus monosperma</i>	1-Seeded Juniper
<i>Olneya tesota</i>	Ironwood
<i>Populus fremontii</i>	Cottonwood
<i>Prosopis spp.</i>	Mesquite
<i>Quercus spp.</i>	Scrub Oak
<i>Rhus ovata</i>	Sugar Sumac
<i>Vauquelinea californica</i>	Arizona Rosewood

### B. CACTI

Botanical Name	Common Name
<i>Carnegia gigantea</i>	Saguaro
<i>Ferocactus spp.</i>	Barrel
<i>Fouquieria splendens</i>	Ocotillo
<i>Peniocereus greggii</i>	Desert Night-Blooming Cereus
<i>Yucca elata</i>	Soaptree Yucca

**10-1.200****NATIVE PLANT PERMITS**

No protected plant material as defined in [Section 10-1.100](#) may be relocated, removed, or destroyed without a native plant permit. No native plant permit shall be issued unless an application is submitted in conjunction with an existing or proposed development for approval. The submittal is separate from any other native plant submittal required for a Zoning Case, a Development Review Board case, or a Preliminary Plat Case. For a native plant permit to be issued, the following items (identified as A through I below) must be submitted to the City of Scottsdale One Stop Shop. If the applicant takes no action to complete a submittal, it will be purged from the system after six months and fees will not be refunded.

**10-1.201****SUBMITTAL REQUIREMENTS****A. Native Plant Application Form**

A completed Native Plant Narrative and Application Form are required.

See [www.ScottsdaleAZ.gov/bldgresources/forms](http://www.ScottsdaleAZ.gov/bldgresources/forms) for these forms.

**B. Native Plant Program**

A complete Native Plant Program with the following information is required:

1. Submit three copies of a native plant plan on an aerial photograph with a project (or site plan) overlay. On the plan, show the location of all protected native plants (by tag number) within the construction boundaries, and an additional 50-foot buffer beyond the construction limits, or to the edge of the property.
  - a. The aerial site plan shall include the project name, a scale that is numeric and graphic (minimum scale is 1inch = 50 feet), a north arrow, a vicinity map, the adjacent street names, and the name of the company performing the inventory.
2. Submit an inventory list, minimum 8.5 inch x 11 inch sheet, identifying the tag number, species (list both common and botanical names), size, general condition, and salvage status (remain in place, relocate, or remove) of each protected plant within the area of disturbance plus a 50-foot buffer. If a plant is noted as non-salvageable, the reason or reasons for the assessment must also be noted. A protected native plant includes trees with a 4-inch caliper trunk or larger, and cactus that are 3 feet tall or taller.
  - a. Measurements are to occur prior to any pruning or branch removal operations, and must take into account the entire base of the tree.
  - b. In order to measure the trunk of a tree, it must first be determined whether the tree is single-trunk or a multi-trunk.
  - c. A single trunk tree is a tree with a single trunk protruding above grade, attached to a single root ball. The diameter of single-trunk trees is measured at a point 12 inches above grade. If the tree starts to branch before that point, the measurement is taken at the point where the branching begins.
  - d. A multi-trunk tree is a tree with more than one trunk (2 of which are 3 inches or greater in diameter) protruding above grade from a single root ball and being separated by any portion of each. Multi-trunk trees are measured by the following method:
    - i. Square the diameter of each trunk
    - ii. Add the squared diameters of all the trunks together
    - iii. The square root of the total above is the working diameter for that tree.
  - e. A cactus is measured from the base at grade to the highest vertical point of the plant. The height of all arms is also included in the total. Ocotillo and Yucca are also measured in this way, except that the flower stalk of the Yucca is not included.
3. A salvage contractor must have prior methodology approval by city staff. A native plant inventory will not be accepted from a contractor whose methodology has not received

prior approval. Approval includes demonstrating a thorough knowledge of the native plant ordinance and boxing techniques. If the cactus salvage contractor is different than the tree salvage contractor, both methodology will need to be reviewed and approved. If the salvage contractor is different than the party responsible for the inventory, the salvage contractor must provide a letter either accepting the assessment by the party responsible for the inventory or provide documentation for any proposed adjustments to the inventory. Please contact the Current Planning Department at 480-312-7000 for information on obtaining approval to be placed on the list of native plant salvage contractors.

- a. Due to the large number of Saguars that have expired after being transplanted, and the length of time for the decline of the plant to be identified, the city, in conjunction with the Desert Botanical Garden, has established baseline standards for Saguaro relocation, see [Section 10-1.300](#). Any deviation from an approved methodology or the Standards for Saguaro relocation requires prior city review and approval. Contact the Current Planning Department at 480-312-7000 for more information.
4. Submit a relocation program identifying the ultimate use and placement of salvaged plant material, including any proposals for plants to be removed from the project.
5. Submit a nursery location for the storage of salvaged plants.

### **C. Letter of Authorization**

Submit a letter of authorization from the property owner or authorized agent identifying a salvage contractor whose methodology has been previously approved by the city. For single-family home submittals, the name of the salvage contractor will be noted on the native plant portion of the planning submittal. Because the salvage contractor is listed on the native plant permit issued through the One Stop Shop; a different salvage contractor may not be employed once the native plant permit has been issued. If the owner wishes to employ a different salvage contractor, approvals must be granted and a revised permit will need to be issued. The name of the new contractor must appear on the native plant permit before salvage work commences.

### **D. Notice of Intent to Clear Land**

Submit a copy of the stamped Arizona Department of Agriculture "Notice of Intent to Clear Land" form. To obtain the form contact the Native Plant Section of the Arizona Department of Agriculture at 602-364-0935, or visit their website at [www.azda.gov/ESD/nativeplants.htm](http://www.azda.gov/ESD/nativeplants.htm).

### **E. Notice of Tagging of Plants in the Field**

Submit notice that all protected plants have been tagged in the field in conformance with Section 46-116 of the Scottsdale Revised Code.:

- White tag for plants remaining in place.
- Red tag for plants being relocated/removed.
- Blue tag for plants that are non salvageable.

The independently hired native plant salvage contractor will be responsible for tagging each plant accordingly. Plants with white tags or no tags will be protected for the duration of the project regardless of salvage status. Tags will be numbered to correspond to the inventory numbering. In addition, construction boundaries, NAOS (Natural Area Open Space), and other undisturbed areas need to be clearly staked in the field with plastic fencing, yellow nylon rope, or other means approved by a City Inspector. The City Inspector can be contacted by calling Inspection and Land Survey Services at 480-312-5750.

### **F. Natural Area Open Space exhibit for site**

Submit a copy of the NAOS exhibit for the site, showing locations of both natural and revegetated areas to be dedicated. All NAOS easements must be staked and roped in the field

at the time of the native plant field walk. The native plant field walk is done before any site disturbance and is conducted with the Planning Inspector.

#### **G. Review Fee**

An initial fee is charged for the first hour in plan review. Additional review time will be charged per hour at the time the permit is issued. For single-family homes, this fee is included as part of the planning site plan review fee. City of Scottsdale fee information is available on-line at [www.ScottsdaleAZ.gov/bldgresources/counterresources](http://www.ScottsdaleAZ.gov/bldgresources/counterresources).

#### **H. Prior Approvals**

If a project requires approval from the Development Review Board, the City Council, and/or the Board of Adjustment, the native plant permit will not be issued until the above mentioned approvals have been finalized. This prior-approval requirement includes single-family homes. The native plant permit for all single-family custom homes will be issued concurrent with the building permit. Please note that no native plant permit can be issued unless there is an approved development plan for the site.

#### **I. Permit Fee**

At the time a permit is issued a fee will be due to the city. Fees vary by project, and consist of a base fee plus a per-plant charge for each native plant to be removed, relocated, or destroyed. An administrative fee will also be added to the cost of each permit.

**10-1.202**

### **REVIEW CRITERIA**

In conformance with Section 7.503 of the Scottsdale Zoning Ordinance, native plant program approval is based on demonstration of the following items.

#### **A. Density / Intensity of Development**

The density/intensity of development for the approved land use is an important element in determining plant retention and salvage. The proposed Relocation Program needs to provide reasonable plant salvage, protection, and storage; and ensure consistency with existing neighborhood character.

#### **B. On-Site Natural Amenities**

The site plans are designed to protect and incorporate significant on-site natural amenities (such as aesthetic, unique, and historic, etc.). These relationships promote and enhance the character of the native environment rather than contrast with or domesticate it.

#### **C. Plant Inventory**

A vegetation inventory and analysis of all protected plants provides a clear comprehensive overview and listing of plant materials, their conditions, and their physical relationships on-site to aid the site planning and determination of plant salvageability.

#### **D. Revegetation and Natural Density**

A conceptual analysis and design of the site revegetation and/or landscaping ensures the character of the project is consistent with the natural density, distribution, and maturity of the vegetation on the adjacent properties.

#### **E. Excess Plants**

Salvaged plants are required to be stored on-site and replanted within landscaped and/or revegetated areas. If conceptual design analysis reveals an excess supply of salvageable

plants, the Relocation Program may propose alternative projects within the city where the salvaged plants may be relocated.

## **F. Incorporation of Plants in a Project**

Incorporation of plant material into site design takes into consideration the following:

### **1. Conditions where protected plants remain in place:**

- a. Along natural washes where exposed roots, erosive soils, and steep slopes often make relocating plants difficult.
- b. Where dense massing of plant materials provides an aesthetic setting, but individual plants may be unsalvageable.
- c. In boulder outcroppings where digging out the root ball would be impractical.
- d. Where unstable soils decrease the ability of the root ball to hold together.
- e. When large specimen material does not lend itself to relocation.
- f. When seasonal conditions reduce the salvageability rate to the point of making relocation undesirable.
- g. When plants occur in a unique grouping or form.
- h. When plants are located within designated scenic and vista corridors.
- i. Within land use buffers such as scenic corridor or NAOS easements.

### **2. Conditions where protected plants may be salvaged:**

- a. When retention of protected plant material is impractical due to reasonable construction, physical conditions are good, and plant material falls within the construction boundaries.

### **3. Conditions where protected plants may be removed from the site:**

- a. When the allowable site density is high and there are minimal areas for replacing plant material .
- b. When conditions yield more plant materials than can be relocated on the project.

In these cases it is anticipated that part of the native plant program will include making excess plant material available to other projects, preferably non-profit, within the city. For more information on potential benefactors, contact Current Planning at 480-312-7000. To remove any protected plant from a site, the persons removing the protected plants must submit, to the City Manager or their designee, a plan demonstrating that one or more of the conditions noted above exists, and that all State of Arizona requirements have been met.

### **4. Protected plant materials may be destroyed:**

- a. When the physical condition of a protected plant is poor due to disease, infestation, mutilation, age, or poor natural conditions; and is located within the construction boundaries.
- b. If a protected plant is involved in a safety issue and cannot be relocated, removed, or protected in place.

## **G. Additional Information**

In addition to the above criteria, other items that may be requested to ensure compliance with the Scottsdale Zoning Ordinance:

1. Topographic map with contours at a minimum of 5-foot intervals to show steep slopes.
2. Identification of natural features such as bedrock and boulder outcroppings.
3. General information on the soil types that exist on the site.
4. Drainage patterns of all washes carrying 50 cfs or greater.
5. Zoning of all adjacent properties.

6. Location of all dedications and easements both on the property and adjacent to it, including but not limited to NAOS easements, drainage easements, rights-of-way dedications, utility easements, etc.
7. Proposed site plan as it relates to all of the above, and including but not limited to the following:
  - a. Street alignments.
  - b. Driveways locations.
  - c. Areas to be revegetated.
  - d. Parking areas

#### **H. Native Plants Not Protected by Ordinance**

Scottsdale strongly encourages the salvage and reuse of plants that are not on the protected list, including small cactus and shrubs. Although this effort is voluntary, the city maintains a list of non-profit organizations and private companies who are interested in salvaging small, unprotected plants either for re-use on the same site or for purchase or donation for use in other landscape or restoration projects. Contact Current Planning at 480-312-7000 for a copy of this list. In most cases, the salvage of existing plant material is more cost effective, drought and animal resistant, and achieves a natural appearance in a shorter period of time.

### **10-1.203**

## **INSPECTIONS**

City staff will conduct the following inspections during the permit review process and the construction of the project.

### **A. Field Walk**

The field walk is part of the first review of the Native Plant Program for commercial developments, plats, and miscellaneous projects. For single-family homes, the field walk is part of the Preliminary Site Inspection. The purpose of the field walk is to verify the accuracy of the native plant inventory and to identify other items that may allow for the greatest preservation of protected plant material.

### **B. Preliminary Site Inspection**

A Preliminary Site Inspection (#42 Pre-Site Inspection) occurs once a Native Plant Permit is issued, but prior to any salvage activities. At the time of this inspection, the applicant must present the copy of the approved Native Plant Program stamped "Inspectors Copy," and a copy of the permit. A permit inspection card, also issued with the permit, is required to be posted on the site at all times.

### **C. Nursery Inspection**

The nursery/maintenance inspection is done to assess the results of the native plant relocation process. It takes place approximately 3 months after the last of the salvageable plants have been placed in the nursery and before the issuance of the Certificate of Occupancy for the project. The plant identification number from the inventory list needs to be clearly marked on the box or plant. To schedule an inspection, call 480-312-5750.

### **D. Native Plant Tracking Form**

The Native Plant Tracking Form tracks the overall success rates of salvaged protected plants. These numbers are quantified as part of the City of Scottsdale's Sustainability Indicators Project. The tracking form is submitted to the City Inspector. Any project that requires a native plant permit needs to submit a tracking form. The tracking form must be submitted within three months from the commencement of salvage operations or prior to the issuance of the Certificate of Occupancy for single family residential. The Native Plant Tracking Form is available online at [www.ScottsdaleAZ.gov/bldgresources/forms](http://www.ScottsdaleAZ.gov/bldgresources/forms).

**E. Final Inspection**

The final inspection is to verify the ultimate location of relocated plant material, and should be done in conjunction with City Inspection. To receive the Certificate of Occupancy, call 480-312-5750, or call the automated scheduling system, at 480-312-5796 and provide the corresponding permit number.

**ACTION ON APPLICATIONS****10-1.204**

After a Native Plant Permit application has been submitted, city staff may take one of three courses of action:

1. The application may be approved and the permit issued.
2. The application may be approved with conditions, and the permit issued.
3. The application may be denied, with conditions for approval.

Action taken on an application may be appealed to the Development Review Board in conformance with the procedures in Section 7.500 of the Scottsdale Zoning Ordinance. Submittals that are not acted upon within 6 months will be purged from the system and any fees paid are not refundable.

**SAGUARO SALVAGE & TRANSPLANTATION****10-1.300**

1. Dig around saguaro leaving a minimum of 2 feet of root out from the base and deep enough to allow for removal of a reasonable portion of the root ball.
2. Prune any shredded or damaged roots and dust with sulfur and streptomycin.
3. Planting hole should have 1 foot of loose native soil and be large enough to accommodate the larger lateral roots.
4. Saguaro should be re-planted at the same depth or no more than 6 inches deeper than its original position.
5. Mark original north orientation so saguaro may be re-planted in the same direction to reduce risk of sunburn.
6. Pack thoroughly, using a mixture of native soil and sandy soil to promote root growth and better drainage.
7. After transplant, allow 2-3 weeks for damaged roots to heal before first water.
8. Water, by drip irrigation, every 2 weeks during the first year and once a month during the second year after transplant. If planted alone or within a nursery, place four 1-gallon per hour emitters, evenly spaced 2 to 3 feet from base, and allow water to run for 8-15 hours per session.
9. If planted as a final location within landscaped areas, planting saguaro at least 4 feet from small shrubs or a tree is ideal.
10. If a moat system is approved by the city, a circular swale should be dug that is approximately 1 foot wide by 4 inches to 6 inches deep at center, and at a distance 3 to 4 feet out from the saguaro trunk. Water slowly and thoroughly twice a month for no less than 2 years.
11. Developer will ensure that maintenance shall be provided for a minimum of 2 years from the time of placement at its final location.
12. Saguaro is established once it responds to rainfall by expanding.
13. Variations from the above process will require approval from a City Inspector.

**10-1.400****NON-PROTECTED PLANTS AND TREES**

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Plants and trees which are not protected by the Scottsdale Revised Code native plant provisions, but which are necessary for on-site revegetation, are suitable for transplanting, or are necessarily uprooted for road building or similar construction, as determined by city staff, shall be stockpiled during construction and shall be replanted in on-site landscape areas by the developer before the final site inspection.