SUBJECT: Plant Materials Salvage and Selection for Pima County Projects

DEPARTMENT(S) RESPONSIBLE: All Public Works, Facilities Management

PURPOSE

The purpose of this Administrative Procedure is to establish a consistent procedure for plant selection and salvage for projects constructed by Pima County and Pima County Regional Flood Control District (District) to ensure compliance with state and local requirements, and to provide a unified approach for use of native plants.

Pima County is characterized by unique biological and cultural resources that define its strong regional identity. The Sonoran Desert Conservation Plan and the Comprehensive Plan, Pima Prospers promote planning to preserve this identity. The Pima County Native Plant Nursery was established in 2003 to provide native plants to Pima County projects. The Arizona Native Plant Law restricts some activities affecting native plants, as do other state, federal and local authorities under which County departments may operate when plant materials are removed, salvaged, or planted.

The Native Plant Preservation Ordinance (Chapter 18.73 in the Pima County Code), enforced by Development Services and applied to private development, does not apply to County or District projects. The Environmentally Sensitive Roadway Design Guidelines applies only to Pima County Department of Transportation. Therefore, these new procedures will provide a consistent and unified approach to selection of plants across all County departments, including facilities or improvements constructed and operated by Pima County. All departments shall follow these procedures for new construction, whether or not there is any “landscaping” planned.

PLANT MATERIAL SALVAGE AND SELECTION

1. Site Design:

When planning for Pima County facilities and projects, practices to preserve-in-place native plants on the site shall be implemented to the maximum extent practicable through:
   a. avoidance and minimization of impacts by such practices as conserving natural areas,
   b. preservation or avoidance of natural drainage flow in site design, and
   c. minimization of disturbed areas.
Contact the Pima County Department of Transportation for guidance in applying the Environmentally Sensitive Roadway Design Guidelines on transportation projects.

2. Regulated Riparian Habitat:
Review limits of disturbance for your project to avoid Regulated Riparian Habitat. (These can be determined on PimaMaps.) If there are Regulated Riparian Habitats, contact RFCD for compliance requirements.

3. Compliance with other Jurisdictions:
If this a County- or District-managed project that is to be maintained, owned or operated by another jurisdiction, contact that jurisdiction regarding any requirements. If there are conflicting requirements between the jurisdiction and this procedure, contact Pima County Office of Sustainability and Conservation.

4. Prohibited Plants:
The Pima County Health Department prohibits the following vegetation: Texas mulberry and fruiting olive trees. These shall not be used under any circumstance.

5. Arizona Native Plant Law:
Regardless of jurisdiction, if there is potential for native plants to exist currently on site and there will be removal of the plants or plant parts from the site, compliance with the Arizona Native Plant law is required. Landowners must provide notice of any destruction or removal of protected native plants, as required by Arizona Department of Agriculture.

6. Plant Salvage:
If any native plants exist onsite, the Pima County Native Plant Nursery shall be contacted for potential plant salvage. Salvage of native plants to be transplanted on site, or relocated to the Pima County Native Plant Nursery or other location is encouraged.

7. Plant Selection:
When plant materials are to be specified as part of a new Pima County project or facility, the priority of plant specification shall be as follows:

- First Choice: Plants native to project site
- Second Choice: Sonoran Desert Plants
- Third Choice: Chihuahuan Desert Plants
- Fourth Choice: ADWR Tucson Active Management Area Category 1 and 2 plants

The use of plants not native to the Sonoran and Chihuahuan deserts may be unavoidable in some locations, due to a lack of native species with the required plant characteristics. Unless the elevation of the site is greater than 5000 feet or there is a need to maintain an historic landscape, consider species from outside the Sonoran desert only after consideration of native or Sonoran Desert plants. For historic landscapes, see the “Historical Plantings” list at Pima County Native Plants.

Contact the Pima County Native Plant Nursery in order to provide native plants to Pima County projects. While it may not be able to provide all the plants for Pima County facilities, particularly large size trees, it shall be the first source used. The Native Plant Nursery shall be consulted at the initial stages of landscape plan development in order to make recommendations regarding availability of plants, costs and sizes to specify, and to coordinate a schedule.

Regardless of the plant materials supplier, Sonoran Desert native plants shall be selected to the maximum extent practicable.
Some resources that can be used in plant selection are:

- **Pima County Native Plant Tool** can assist in selecting appropriate native plants for the site, even where the original plant community has been largely altered or removed. For the Pima County Native Plant Nursery, contact the manager at Natural Resources, Parks and Recreation Department, or phone 724-5000.

- The **Low-Impact Development Guidance Manual** has an excellent plant list for Pima County facilities.

- **Grow Native: Don’t Plant a Pest brochure** suggests plants to avoid and appropriate substitutes.

- For historic landscapes, see the **Pima County Native Plant Tool** for a list of historically appropriate plant material.

8. **Invasive Species Management:**
Management and control of invasive species, particularly buffelgrass, fountain grass, and Sahara mustard are of critical concern. These species are to be identified and managed per Public Works Standard Operating Procedure 2009-02 or its successor.

9. **Low Impact Design and Plant Irrigation**
Rather than relying solely on supplemental irrigation, County and District projects using plant materials shall be designed to incorporate water harvesting principles. For additional guidance consult the **Low-Impact Development Guidance Manual**.

**RESPONSIBILITIES**

Office of Sustainability and Conservation shall review the effectiveness of this procedure with its practitioners every two years, and serve as a clearing house for questions.
ADMINISTRATIVE PROCEDURES

SUBJECT: Plant Materials Salvage and Selection for Pima County Projects

DEPARTMENT(S) RESPONSIBLE: All Public Works, Facilities Management

PURPOSE

This Administrative Procedure establishes a consistent procedure for plant selection and salvage for projects constructed by Pima County and Pima County Regional Flood Control District (District) to ensure compliance with state and local requirements, and to provide a unified approach for use of native plants.

The Native Plant Preservation Ordinance (Chapter 18.73 in the Pima County Code), enforced by Development Services, applies to private development and special taxing districts. The Environmentally Sensitive Roadway Design Guidelines applies only to Pima County Department of Transportation. Therefore, these new procedures will provide a consistent approach to selection of plants across all County departments, including facilities or improvements constructed and operated by Pima County. All departments shall follow these procedures for new construction, whether or not there is any “landscaping” planned.

PLANT MATERIAL SALVAGE AND SELECTION

1. Avoidance and Minimization:

Pima County projects, to the maximum extent practicable, shall preserve-in-place native plants on the project site via the following practices:

a. conservation of natural areas,

b. preservation of natural drainage flow through site design, and

c. minimization of disturbed areas.

2. Determine if project is located within Regulated Riparian Habitat on PimaMaps and contact Regional Flood Control District for requirements if impacted.
3. Arizona Native Plant Law:
Landowners must provide notice of any destruction or removal of protected native plants, as required by Arizona Department of Agriculture. The Arizona Administrative Code (p.41-51) requires a Notice of Intent to Clear Land 60 days prior to clearings of an area over ¼ acre; exception for emergency repairs. The Plant Law applies to state, county, special district, and city land. The Arizona Native Plant Law does not apply to federal or tribal land.

4. Compliance with other Jurisdictions:
If this is a County- or District-managed project that is to be maintained, owned or operated by another jurisdiction, contact that jurisdiction regarding any requirements.

5. Plant Salvage:
If any native plants exist onsite, the Pima County Native Plant Nursery (NPN) shall be the first point of contact for potential plant salvage. Contact the NPN manager at Natural Resources, Parks and Recreation Department, or phone 724-5000.

6. Plant Selection:
When plant materials are to be specified as part of a new Pima County project or facility, the priority of plant specification shall be as follows:

- First Choice: Plants native to project site
- Second Choice: Sonoran Desert Plants
- Third Choice: Chihuauhuan Desert Plants
- Fourth Choice: ADWR Tucson Water Use Category 1 and 2 plants

The Pima County Native Plant Nursery (NPN) shall be your first point of contact for plant procurement on Pima County projects. NPN must be contacted as soon as a landscaping plan and tentative list have been developed for a project, to allow grow-out of plants to project specifications, to secure your preferred species for the project, and to reduce costs associated with plant procurement; ideally at least a year in advance. Substitutions may be required as installation date comes closer, and during installation. Close contact with NPN is imperative throughout the project, especially if projects are delayed. For the Pima County Native Plant Nursery, contact the manager at Natural Resources, Parks and Recreation Department, or phone 724-5000.

Regardless of the plant materials supplier, Sonoran Desert native plants shall be selected to the maximum extent practicable.

7. Prohibited Plants:
The Pima County Health Department prohibits the following vegetation: Texas mulberry and fruiting European olive trees. Plants listed as noxious weeds by the Arizona Department of Agriculture are also prohibited. These shall not be used under any circumstance.

8. Invasive Species Management:
Management and control of invasive species, particularly buffelgrass (Cenchrus ciliaris), fountain grass (Cenchrus setaceus), yellow bluestem (Bothriochola ischaemum), stinknet (Oncosiphon pilufer), and African Sumac (Searsia lancea) are of critical concern. At a minimum, buffelgrass is to be identified and managed per Public Works Standard Operating Procedure 2009-02 or its successor. Additional guidance is available in Standard Operating Procedure 201-01 or its successor. Control and eradication of invasive species from a site is typically a multi-year effort, and requires advance planning for chemical treatments, multiple years of follow-up treatments, and regular monitoring for continued spread of plants. Minimize impact to native grasses when
applying chemical treatments. Contact the Natural Resources, Parks and Recreation Invasive Species Program Coordinator at 724-5000 for clarification of Standard Operating Procedures 201-01 and 2009-02 and for assistance with resources for plant identification, inventory, mapping, and control of buffelgrass and other invasive species.

9. Low Impact Design and Plant Irrigation:
Rather than relying solely on supplemental irrigation, County and District projects using plant materials shall be designed to incorporate water-harvesting principles. For additional guidance, consult the Low-Impact Development Guidance Manual.

**Project Schedule**

**Site Analysis/ Planning and Design**
- Inventory Protected and significant native plants; maximize preservation in design.
- Map natural water flow paths, especially areas with dense vegetation; maximize preservation in design.
- Review Flood Control District’s Riparian Habitat Mitigation Ordinance. Mitigation is required when a third of an acre of regulated riparian habitat.
- Review sewer locations on PimaMaps; incorporate in design via Regional Wastewater Reclamation Department Engineering Design Standards. Vegetation may not hinder maintenance vehicle access to manholes. Deep-rooted plants may not be used near sewer pipelines.
- If the project is maintained or operated by another jurisdiction, contact that jurisdiction early to comply with requirements.
- Design using primarily native Sonoran Desert plants
- Contact Native Plant Nursery for available plant selection and scheduling of project plant grow-out.
- Map and manage buffelgrass and other invasive species.
- Schedule field visit with Native Plant Nursery to discuss salvage. Work salvaged plants into design, if possible.
- **CRITICAL: Notify Native Plant Nursery immediately if there are shifts in project schedule or selected plant list.**

**Construction**
- If clearing over ¼ acre, file Notice of Intent to clear land with Arizona Dept. of Ag. at least 60 days prior to construction; exceptions only for emergency repairs.
- Before project award, contact Native Plant Nursery to coordinate any changes in selected plant availability, construction timeline, or salvage considerations.

**RESPONSIBILITIES**

Office of Sustainability and Conservation shall review this procedure with relevant county departments every five years and revise as needed.
Purpose of original procedure

Brief history of original version (attachment)
Pima County is characterized by unique biological and cultural resources that define its strong regional identity. The Sonoran Desert Conservation Plan and the Comprehensive Plan, Pima Prospers promote planning to preserve this identity. The Pima County Native Plant Nursery was established in 2003 to provide native plants to Pima County projects. The Arizona Native Plant Law restricts some activities affecting native plants, as do other state, federal and local authorities under which County departments may operate when plant materials are removed, salvaged, or planted.

Mention new needs with so much employee turnover
There is only 1 landscape architect in the county right now, so more need for standardization of the planning and design process. Other jurisdictions are unclear on requirements, especially regarding vegetation, so early inclusion is important and specs should be more readily available and accessible.

ANPL findings
We found that for state agencies, county departments included, the Arizona Native Plant Law requires a Notice of Intent to Clear Land for areas greater than ¼ acre. This must be filed with the department of agriculture at least 60 days before clearing and the area must be cleared within one year of the projected construction date, or a new notice must be filed. (Arizona Native Plant Law Title 3, Chapter 7, Article 3-905). This applies to land owned by the state or an entity of the state, including; county, special district, and city lands. This does not apply to federal or tribal lands. The department also claims to post copies of these notices for salvage opportunities, but it is unclear if they are posting these and where.

Within this form, the state agency must notify the ADA and propose method of disposal including: sold at public auction, relocated on same property or other state property (don’t need permit), donated to nonprofit, donated to other state or political subdivision with no permit, or may be harvested by general public or commercial dealer if they have a permit, if highly safeguarded native plant will go to those with scientific or noncommercial permits first.

We have found that project managers have not been filing these NOIs for land clearing and most of them believed that the contractors were filing these. In speaking to environmental subcontractors that are used by many departments, we found that they are not Filing NOIs for land clearing either. This is likely something that should be delegated to contractors.

Interview findings

Overall, we found that there seems to be lack of communication between jurisdictions on projects. We did include this in the Native Plant Procedure, but as we know, many project managers were not previously aware of the procedure. We will try to remedy this with training sessions once the procedure has been finalized. Another solution to the jurisdiction issue would
be making specs more readily available to other jurisdictions and consultants. The most beneficial solution is early contact between relevant jurisdictions.

The Regional Flood Control District maximizes preserve in place and always calls the Native Plant Nursery for salvages after the subcontractor has surveyed the area. They have riparian and biological staff members that are included as part of the design team who are able to endure compliance to the Riparian Habitat Mitigation Ordinance. The district also requires contractors to contact the Native Plant Nursery two weeks before the designated pick-up date to provide a schedule, as they often need to be picked up in batches. The district influences park projects due to jurisdictional overlap. They also influence plant selection in Regional Wastewater Reclamation Department projects as these affect RFCD land.

The Regional Wastewater Reclamation Department is very involved with the Native Plant Nursery, specifically the salvage program. This department is regulated by the EPA, which requires many permits for each project. They also use wastewater and other LID processes. One jurisdictional conflict is sewer easement. Planting within a sewer easement requires special permission. If permission is granted, these regulations must be followed: No trees should be planted within 10 feet of an easement and plants selected should not hinder visual or vehicle access to manholes, plants selected should have shallow roots as to not disturb sewer system; the department has a list of prohibited plants.

From interviewing environmental subcontractors, we found that they had question about seed mixes and the releve process. The releve process is time consuming, and often most species surveyed are not available in seed mixes, so they were wondering if there are pre-approved seed mixes for certain habitat types or who they should be having approve these mixes. Environmental subcontractors inventory native plants and submit native plant plans and mitigation to the county. They are not contracted to submit environmental documents. They do submit land clearing documents for regulated riparian habitat but have not been submitting the NOIs for land clearing on other projects. Primary contractors are usually the engineering firms and are chosen through a bid process. They then select the environmental subcontractor.

The Department of Transportation informed us that for federally funded projects, Native Plant Nursery provided plants are not refundable because the project did not go out for bidding, and therefor was not considered competitive. The department has their own environmental regulations that other jurisdictions are required to follow. Many specifications within the native plant policy, including LID and use of native plants, are covered in this.

The Facilities department does not use a lot of vegetation in their projects, but when they do they only use the Native Plant Nursery about half of the time. Regarding LID processes, they implement micro basins to deter water from buildings. Use of the Native Plant Nursery should be improved with project manager education on the Native Plant Procedure and Native Plant Nursery use.
Regarding contacting the Native Plant Nursery, we have found that plants are specified during the design process. There are two lists as to what is needed: owner-provided vs. contractor-provided. The engineering firm is usually primary contractor and they select an environmental subcontractor. The subcontractor has the landscape architect that does last minute communication with Amy before pick-up. Amy receives the two lists during the design process then usually has no communication with the project manager or contractor until right before pickup when they provide a different list. A few days prior to the scheduled pick up the landscape architect will send Amy a list of plants needed, but this list almost always differs from the original list provided during design. This is likely due to changes in the project design and there should be a way to close this gap as this is not enough time to prepare new plants. Ideally, we can develop a way to close the communication gap between the PM and Amy.

There is not a comprehensive list of prohibited plants
There are a few categories of prohibited plants based on permits/tags needed

Educational ideas

- Some sort of document (maybe with photos) of protected plants because contractors probably don’t know
- Newsletters to have new procedure and/or education published in:
  - The scoop newsletter
  - RWRD “the pipeline” newsletter
- Trainings
  - Teams training for PMs
- Info to include:
  - filing NOI info for contractors and PMs delegating this to the contractors
  - how to inventory for native plants
    - what vendors can be used
    - list of native plants
  - remind designers how long plants take to grow
  - Contacting other jurisdictions early to acquire specs
- On NPN:
  - Who can the nursery provide to
    - County departments, other municipalities, non-profits, anyone purchasing plants for public spaces (e.g. HOA)
  - Processes to be described (new software being put into place in next year or so):
    - salvage
    - contract grow
    - Non-contract purchase