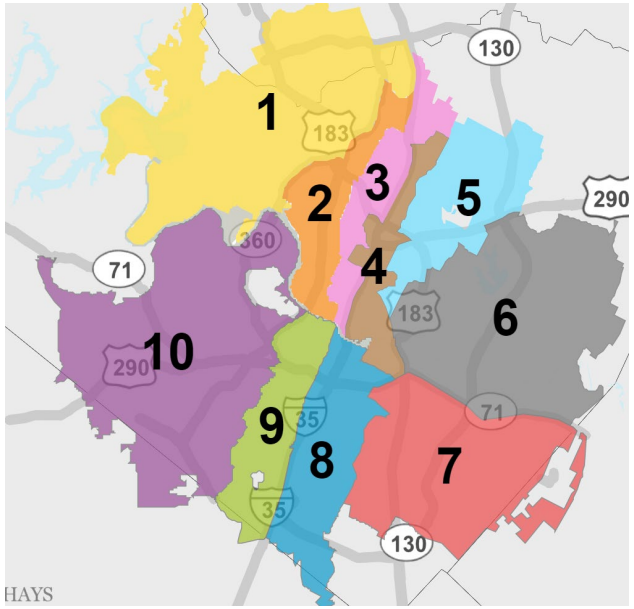
Environmental Inspections Division

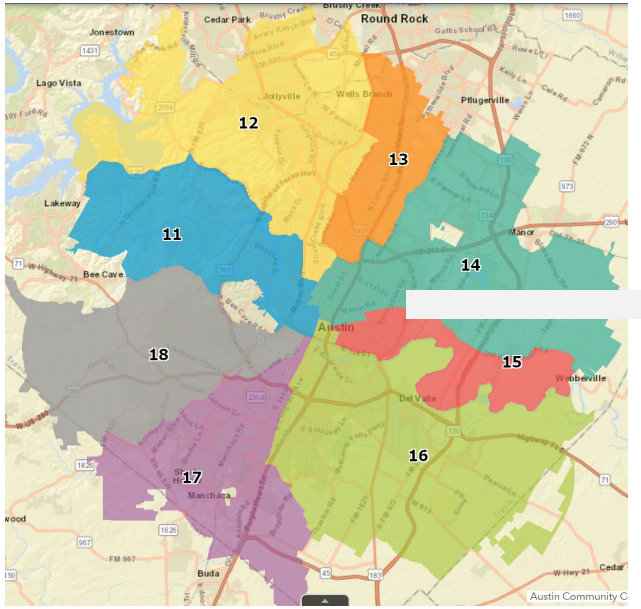
- Residential Tree & Environmental Inspections
- Commercial Tree & Environmental Inspections/ General Permit Inspections
- Environmental Enforcement
- Underground Storage Tanks (UST)
- Boat Docks

Inspection and Enforcement Territories

Commercial



Residential



CITY OF AUSTIN Development SERVICES DEPARTMENT

Services Provided

- Evaluate **best management practices** for **erosion/sedimentation control** and **tree preservation**
- Assess compliance with City of Austin ordinances
- Review **drainage** facilities and **other site improvements**

Services Provided

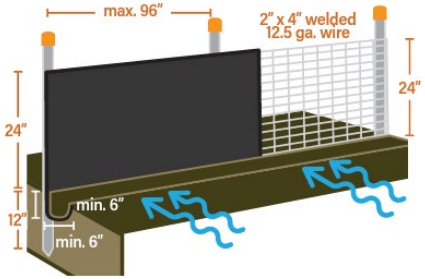
- **Identify** locations of **environmentally sensitive resources**
- **Provide technical assistance and education** to citizens, community/special interest groups, developers, etc. on environmental/engineering code requirements, ordinances, and regulations
- **Provide testimony** for enforcement cases in municipal court
- **Issue directives and initiate enforcement actions for non-compliance** with environmental and drainage regulations

Temporary Erosion and Sediment Control

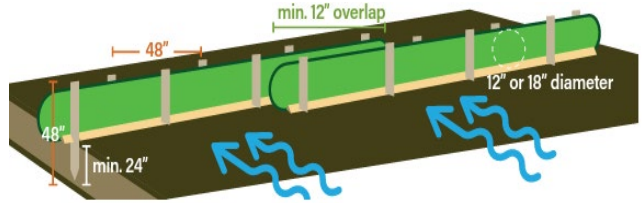
What is it?	How does it work?	Where is it installed?
The practice of preventing or reducing the movement of sediment from a site during construction	Through implementation of human-made structures, land management techniques, or natural processes	At the perimeter of the construction site

Types of ESC's

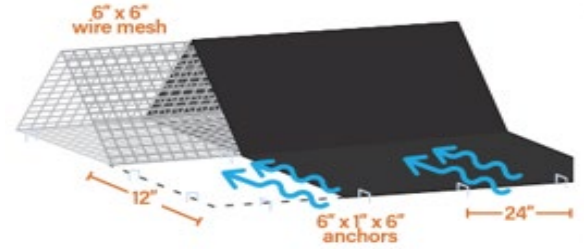
Silt Fencing:
Fabric filter support by welded wire and anchored by posts



Mulch Socks:
Mesh tubes filled with natural wood or mulch (no hay or straw)



Triangular Filter Dike:
Prefabricated "tri-dikes" that are easy to install



CITY OF AUSTIN Development SERVICES DEPARTMENT

Stabilized Construction Entrance

(Standard 641S)

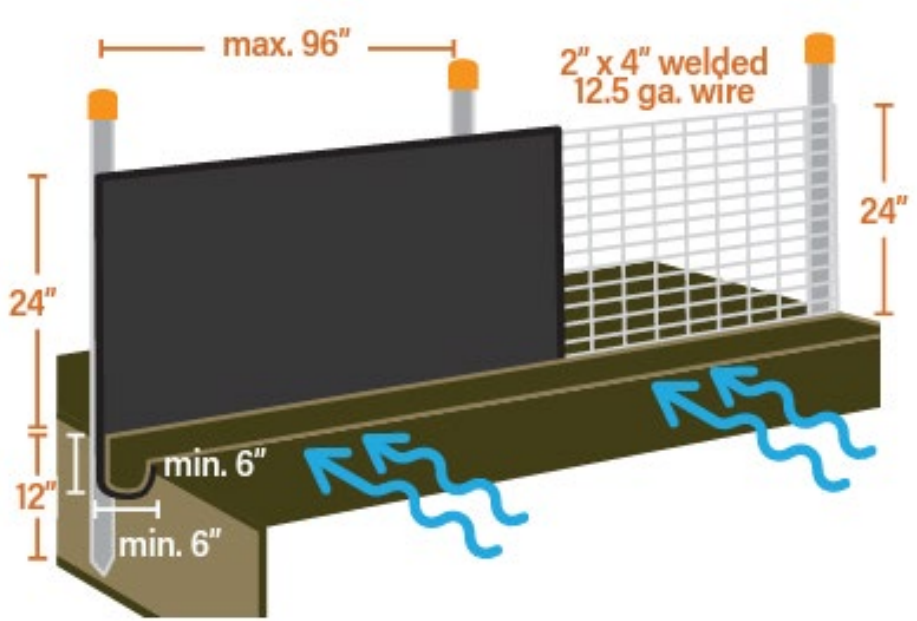
The purpose of a stabilized construction entrance is to reduce or eliminate the tracking or deposition of sediment onto public right-of-way, street, alley, sidewalk or parking area (Environmental Criteria Manual Section 1.4.2.N.4).

- All trees, brush, stumps, obstructions and other objectionable material shall be removed and disposed of in a manner that will not interfere with the excavation and construction of the entrance as indicated on the Drawings or as presented in Standard Details No. 641S-1. The entrance shall not drain onto the public right-of-way or shall not allow surface water runoff to exit the construction site.
- When necessary, vehicle wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When vehicle washing is required, it shall be done on an area stabilized with crushed stone, which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch or watercourse through use of sandbags, gravel, boards, silt fence (Standard Specification Item No 642S) or other methods approved by the Engineer or designated representative.
- The entrance shall be maintained in a condition that will prevent tracking or disposition of sediment onto public right-of-way. This restriction may require periodic top dressing with additional stone as conditions demand, as well as the repair and/or cleanout of any measures used to trap sediment. All sediment that is spilled, dropped, washed or tracked onto public right-of-way must be removed immediately.

Silt Fence

Silt Fence: A non-woven fabric filter material supported by welded wire fabric (WWF, 2”x4”, 12.5 gauge wire) anchored by 4 ft. (48”) steel or wood posts.

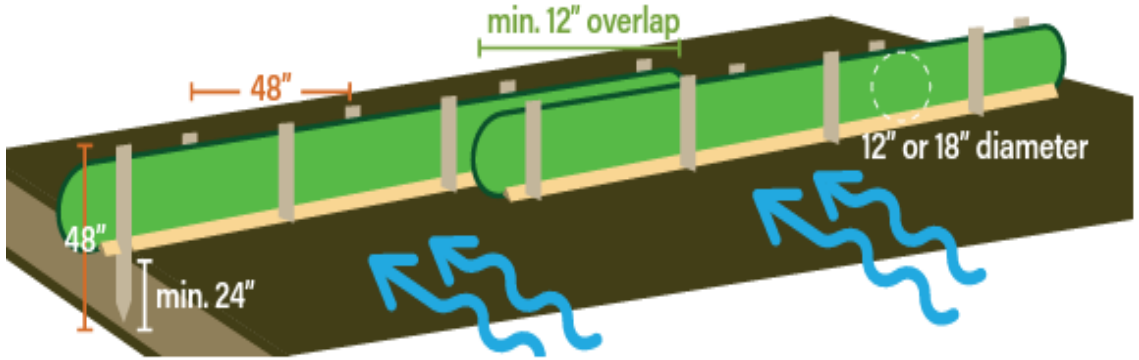
- Silt fence must be at least 24” high with fabric facing towards the anticipated flow
- Posts must be embedded at least 12” in the ground and no more than 8 ft. (96”) apart
- When installed on impervious cover, the bottom flap should be extended upstream
- Vertical joints should overlap at least 12”
- The end of the silt fence should turn back in a ‘hook’
- Long sections should incorporate J-hooks as needed to capture sediment uphill, especially on slopes



Mulch Socks

Mulch Socks: A mulch sock consists of material encased in a 12” or 18” diameter tube of mesh and provides an environmentally-sensitive alternative to silt fencing.

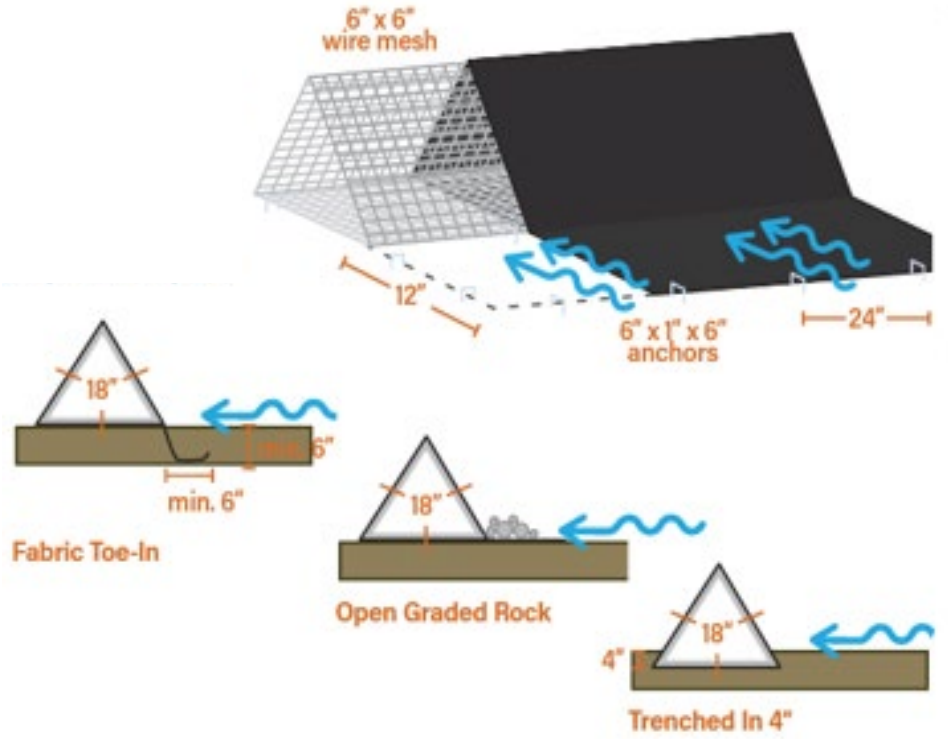
- Mulch material may consist of shredded bark, stump grindings and/or composted bark and should be produced from a 3” minus screening process. Do NOT use HAY/STRAW!
- Ends of adjacent socks should overlap a minimum of 12”
- Install using steel or wood posts (48” minimum) placed on 4 ft. (48”) centers driven at least 24” into the ground on alternating sides of the sock
- Mulch socks should not be used on slopes greater than 2:1 or in concentrated flow area



Triangular Sediment Filter Dike

Triangular Sediment Filter Dike: Typically easier and faster to install that other ESCs, a Triangular Filter Dike (or Tri-Dike) is prefabricated from 6x6-D2.9xD2.9 welded wire mesh and 4.5 oz. non-woven polyester filter fabric fastened to welded wire mesh. It has a 12” skirt that is a continuous extension of the filter fabric on the upstream face.

- Dikes are placed in a row with ends tightly abutting the adjacent dike
- Each filter dike and skirt are anchored in place using 6” stables, 24” apart maximum
- The skirt may be trenched in:
  - with 6” minimum (see Fabric Toe-In illustration)
  - weighted down with a continuous layer of 3-5”open graded rock or with sand/gravel bags placed 18” on center (see Open Graded Rock illustration)
  - the entire structure can also be trenched in 4” (see Trenched in 4” illustration)



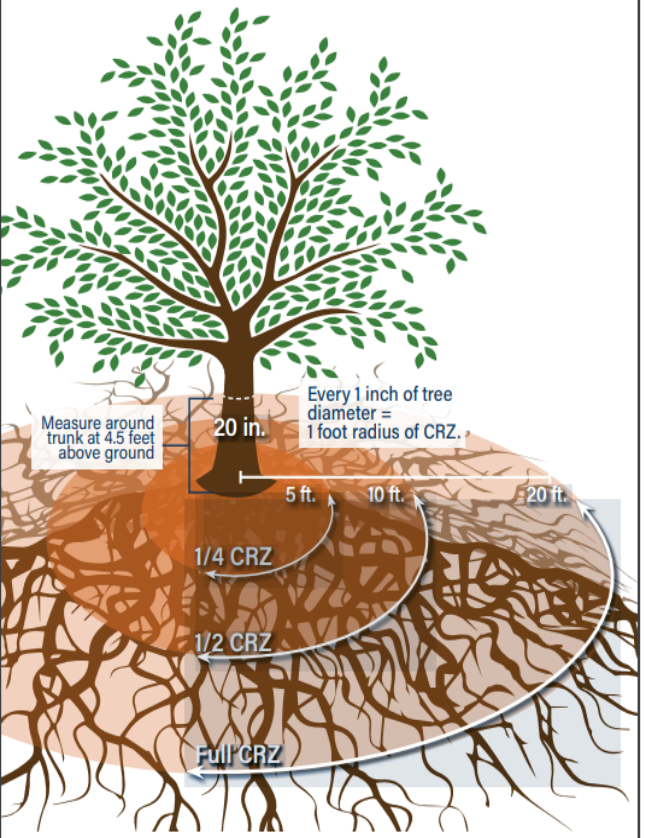
Water Quality Controls

- Stormwater can have significant impact on the water quality of Austin's creeks and the Colorado River.
- Goals (Environmental Criteria Manual Section 1.6.2B):
  1. Minimize non-point source pollutants in stormwater
  2. Enhance water quality
  3. Design for long-term maintenance. Controls are designed to improve water quality by removing suspended particulate matter and constituents such as bacteria, nutrients and metals.

Tree Protection

CRITICAL ROOT ZONE (CRZ)

For Residential Trees 19-inch Diameter & Greater



CITY OF AUSTIN Development SERVICES DEPARTMENT | Community Tree Preservation Division

HOW TO PROTECT THE CRITICAL ROOT ZONE

Protecting a tree's Critical Root Zone is the best way to ensure the tree survives construction. All trees with a diameter of 19 inches or greater are regulated regardless of condition or species. Smaller trees on public property or on commercial projects may also be regulated.

✓ Planning and Review

No disturbance of the Critical Root Zone (CRZ) should occur unless the City Arborist reviews and approves the proposed work. Disturbances of the CRZ are called impacts. Review ensures that impacts near a regulated tree will not lead to the death of the tree. The criteria used for evaluating proposed work can be found in Section 3 of the Environmental Criteria Manual (ECM).

Preservation requirements limit:

- How close to the tree impacts can occur
- Total area of the Critical Root Zone that can be impacted
- How much above-ground live growth can be removed

✓ During Construction

Tree protection is required at all times during construction. Any part of the CRZ not approved for impacts must be protected. Protection requirements can be found in Section 3 of the ECM.

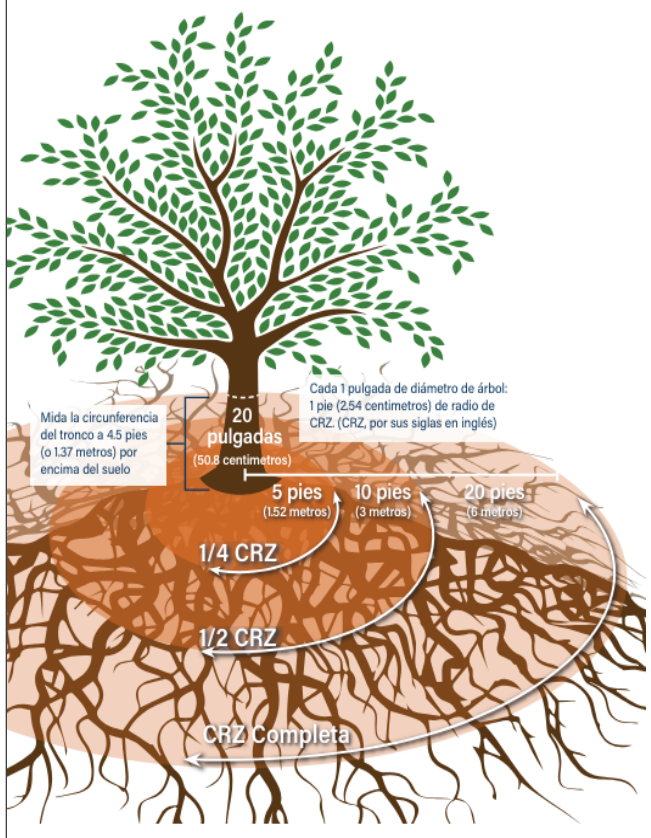
Requirements include:

- Isolate the protected CRZ from work areas with chain link fencing at least 5' high. This is the primary form of tree protection.
- If approved in advance, mulch 8-12" deep may provide alternative protection when some of the protected CRZ must be left unfenced to provide access to the work area.
- In the Half CRZ (see illustration) use decking to protect mulch being used as alternative protection Examples include plywood or breathable rubber mats.
- Wrap the trunk with dimensional lumber when protective fencing is located 5' from the trunk or closer.

AustinTexas.gov/CityArborist
cityarborist@austintexas.gov or call 3-1-1

LA ZONA CRÍTICA DE LA RAÍZ

Para árboles de 19 pulgadas (o 48.25 centímetros) y más de diámetro en residencias



CITY OF AUSTIN Development SERVICES DEPARTMENT | División de Conservación de Árboles de la Comunidad

CÓMO PROTEGER LA ZONA CRÍTICA DE LA RAÍZ

Proteger la zona crítica de la raíz de un árbol es la mejor manera de asegurarse de que el árbol sobreviva a una construcción. Todos los árboles que tengan un diámetro de 19 pulgadas o más están regulados independientemente de su condición o especie. También es posible que los árboles más pequeños en propiedad pública o en proyectos comerciales estén regulados.

✓ Planificación y revisión

No debe producirse ninguna alteración de la zona crítica de raíces (CRZ, por sus siglas en inglés) a menos que el arbolista de la Ciudad revise y apruebe las obras propuestas. Las alteraciones de la CRZ se denominan "impacto". La revisión garantiza de que el impacto cerca de un árbol regulado no ocasione la muerte del árbol. Los criterios empleados para evaluar las obras propuestas se pueden consultar en la Sección 3 del Manual de criterios medioambientales (Environmental Criteria Manual, ECM).

Los requisitos de conservación limitan:

- Cuán cerca del árbol puede ocurrir el impacto
- El área total de la zona crítica de raíces que puede verse impactada
- Cuánto crecimiento vivo por encima del suelo puede eliminarse

✓ Durante la construcción

Se requiere protección de los árboles en todo momento durante la construcción. Cualquier parte de la CRZ donde no se haya aprobado impacto debe protegerse. Los requisitos de protección se pueden consultar en la Sección 3 del ECM.

Los requisitos incluyen:

- Aislar la CRZ protegida de las zonas de trabajo con vallado de tela metálica de al menos 5 pies de altura. Esta es la forma principal de protección de árboles.
- Si se aprueba con antelación, un mantillo de 8-12 pulgadas de profundidad puede proporcionar una protección alternativa cuando parte de la CRZ protegida debe dejarse sin vallado para proporcionar acceso a la zona de trabajo.
- En la mitad de la CRZ (ver la ilustración) use cubiertas para proteger el mantillo que se esté utilizando como protección alternativa, por ejemplo: madera contrachapada o alfombras de goma transpirables.
- Envuelva el tronco con madera dimensional cuando el vallado de protección esté situado a 5 pies del tronco o más cerca.

AustinTexas.gov/CityArborist
cityarborist@austintexas.gov o llame al 3-1-1

Inspection & Enforcement

- **Routine Inspections FY ‘23**
  - Average 1,390 Residential Inspections Monthly
  - Average 1,486 Commercial Inspections Monthly
- **Called Inspections FY ‘23**
  - Average 878 Residential Inspections Monthly
  - Average 272 Commercial Inspections Monthly
- **Enforcement of Non-Compliance**
  - 311 Complaints (2020 total FY ‘ 23)

CITY OF AUSTIN Development SERVICES DEPARTMENT

Enforcement of Non-Compliance

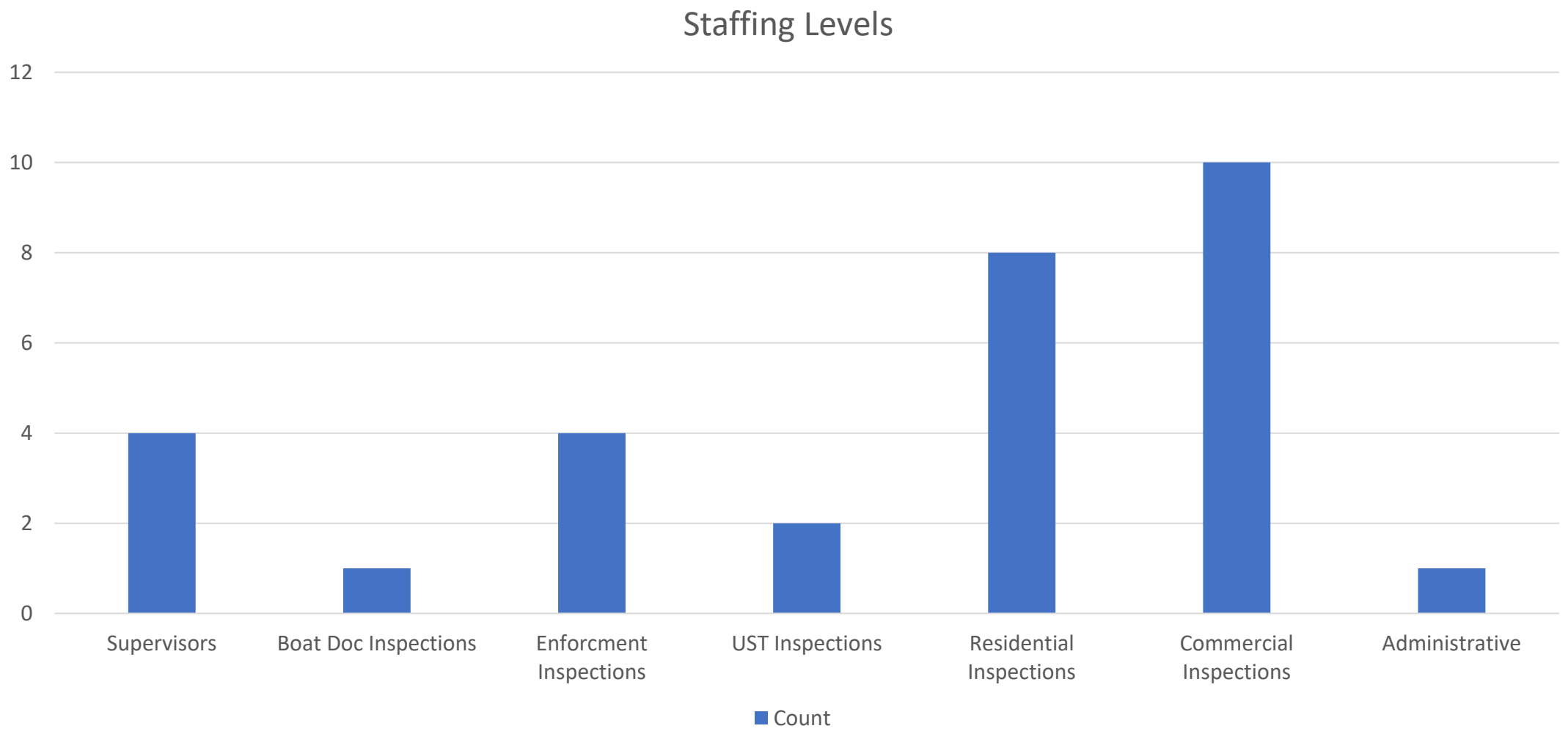
Per MuniCode Section 25-1-441, city inspector is responsible for environmental regulations and can take enforcement action for non-compliance with erosion and sedimentation requirements or tree protections on a project site.

Type of Enforcement	Description	Count FY22	Count FY23
Verbal:	Issued when projects with routine inspections reveal inadequacies in the controls or tree protections.	1738	2038
Written:	Issued 24 hours from the verbal warning if deficiencies are not corrected.	712	950
Stop Work Order:	Issued 24 hours from the written warning if deficiencies are not corrected; remains in effect until deficiencies are corrected.	154	200
Citations & Affidavit:	Egregious violations or continued non-compliance.	254	203

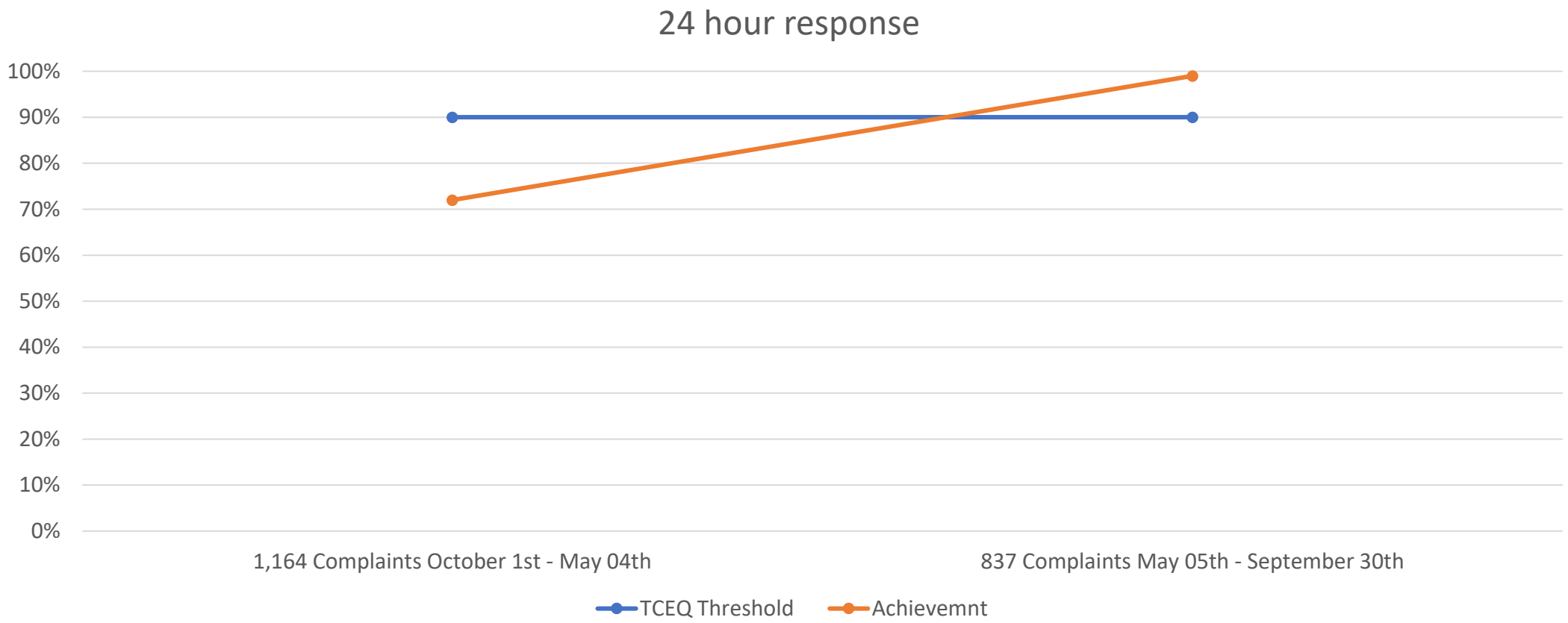
Community Engagement

- Conduct monthly Lunch and Learns on enforcement inspections, residential inspections, commercial inspections and boat dock inspections
- Provide both digital and physical literature to all stakeholders
- Currently planning evening courses to be held quarterly for HOA's within the City of Austin

Environmental Inspections Division



CITY OF AUSTIN Development SERVICES DEPARTMENT



- **Overall, DSD-Enforcement investigated 82% of 311 CSR's within 24 hours**
- **311 enhancements were implemented on May 05th, 2023 which improved the response time**
- **September 30th 2022-May 04,2023 72% of 311 CSR's were investigated within 24 hours**
- **May 05, 2023 – September 30th, 2023 99% of 311 CSR's were investigated within 24 hours**

CITY OF AUSTIN Development SERVICES DEPARTMENT

References & Resources

Regulatory References:

- City Code Title 6 (Environmental Control and Conservation)
- City Code Chapter 25-8 (Subchapter B- Tree and Natural Area Protection; Endangered Species)
- Environmental Criteria Manual (1.4.0 – Erosion and Sedimentation Control Criteria)
- Environmental Criteria Manual (Appendix P-1 – Erosion Control Notes)
- Environmental Criteria Manual (Appendix P-8 – Inspection Report)

Web Resources:

- Tree Protection and Erosion/Sedimentation Controls Flowchart
- Tree Ordinance Review Process
- Water Quality & Drainage Review
- Environmental Inspections
- Watershed Protection
- Community Tree Preservation
- Map View - Stream Flow and Weather (lcra.org)


CITY OF AUSTIN
Development
SERVICES DEPARTMENT
Thank you!