



ITEM FOR ENVIRONMENTAL BOARD AGENDA

BOARD MEETING

DATE REQUESTED: May 18, 2011

NAME & NUMBER OF PROJECT: Southern Walnut Creek Hike and Bike Trail / SPC-2010-0367C

NAME OF APPLICANT OR ORGANIZATION: MWM Design Group
(Frank H. Del Castillo 453-0767)

LOCATION: 5200 ½ Bolm Road

PROJECT FILING DATE: December 17, 2010

WPDR/ENVIRONMENTAL STAFF: Brad Jackson, 974-3410
brad.jackson@ci.austin.tx.us

WPDR/ CASE MANAGER: Sue Welch, 974-3294
sue.welch@ci.austin.tx.us

WATERSHED: Boggy Creek, Fort Branch Creek and Tannehill Creek Watersheds, which are classified as Urban; and the Walnut Creek and Decker Creek Watersheds which are classified as Suburban. Desired Development Zone.

ORDINANCE: Comprehensive Watershed Ordinance (current Code)

REQUEST: Variance request is as follows:

1. To allow cut up to a maximum of 8 feet for bridge and box-culvert construction. (LDC Section 25-8-341).
2. To allow fill up to a maximum of 16 feet for bridge and box-culvert construction. (LDC Section 25-8-342).
3. Variance from LDC 25-8-392 – To allow construction in a Critical Water Quality Zone (CWQZ).

STAFF RECOMMENDATION: Recommended with conditions.

REASONS FOR RECOMMENDATION: Findings-of-fact have been met.



MEMORANDUM

TO: David Sullivan, Chairperson
Members of the Planning Commission

FROM: Brad Jackson, Environmental Review Specialist Senior
Planning and Development Review Department

DATE: May 18, 2011

SUBJECT: Southern Walnut Creek Hike-and-bike Trail / SPC-2010-0367C

Variance Requests: Variance from LDC 25-8-341 – To allow cut up to a maximum of 8 feet.
Variance from LDC 25-8-342 – To allow fill up to a maximum of 16 feet.
Variance from LDC 25-8-392 – To allow construction in a Critical Water Quality Zone (CWQZ).

Project Area Description

The proposed development will involve the construction of a 7.3 mile concrete hike-and-bike trail, 10 feet wide with 2 foot shoulders on each side. The project is located within 5 different watersheds- Boggy, Fort Branch, Tannehill Branch, Walnut, and Decker Creek Watersheds. Boggy, Fort Branch, and Tannehill Branch Watersheds are classified as Urban, whereas Walnut and Decker Creek Watersheds are classified as Suburban. The entire project is located in the Desired Development Zone.

The trail will be constructed to meet the American Association of State Highway and Transportation Officials (AASHTO) design criteria for a 20-mile per hour design speed for bicycles while accommodating existing site constraints like structures, roadways, bridges, railroads, fences, and creeks. The proposed alignment was walked numerous times by City of Austin Public Works and Parks and Recreation Department staff to determine the best route to avoid significant trees, riparian areas, and critical environmental features.

The majority of the trail will be on existing City of Austin property. The remaining sections will be located on the MoKAN right-of-way and Capital Metro right-of-way. The City will be purchasing one tract of land near Shelton Road for the trail. The trail will begin near the intersection of Johnny Morris Road and Daffan Lane. PARD

proposes to construct a 50 space parking lot at this trailhead. From the trailhead, the trail will follow Walnut Creek and the MoKAN right-of-way heading south to the Capital Metro rail near Delwau Lane, and then turn west to follow Boggy Creek. The trail will then terminate at Govalle Park, which is located at 5200 Bolm Road. Along this route, the trail will cross four roadways- Loyola Lane, FM 969, Ed Bluestein Boulevard, and Jain Lane. All of these road crossings will be under existing roadway bridges.

The majority of the trail is located on a public right-of-way and therefore does not have limits on impervious cover, and therefore does not need to have calculations for impervious cover. The parking lot constructed by PARD does require impervious cover calculations. The net site area for the parking lot is 0.22 acres (9,583.2 square feet). The parking lot impervious cover is proposed at 0.11 acres (4,791.6 square feet), or 50% of the tract's net site area.

Vegetation, CEFs, and Slopes

The site varies from long stretches of grassy prairies to heavily wooded, riparian areas. The majority of trees onsite are Cedar Elm, Burr Oak, Live Oak, Pecan, Hackberry, American Elm, Cedar, and Mesquite. Numerous invasive Chinaberry trees are also located along the trail. Soils in the vicinity of the trail are characteristic of Texas Blackland Prairie Group- Houston Black-Heiden-Wilson. These soils are described as "The Heiden series consists of soils that are well drained and very slowly permeable ..They are deep, weathered shale. These soils are on nearly level to moderately steep uplands. Slopes are mainly 3 to 8 percent but range from 0.5 to 20 percent." (<http://www2.ftw.nrcs.usda.gov/osd/dat/H/HEIDEN.html>)

There are 3 wetland Critical Environmental Features (CEFs) along the trail layout that have been reviewed by the Environmental Resource Management staff. They are called CEF 1, CEF 2, and CEF 3 in the plans, and are roughly 2,400 square feet, 35,200 square feet, and 18,000 square feet in size respectively. The first 2 CEF's are adjacent to the trail and will have impacts within their buffers by the trail construction. These impacts will be mitigated through wetland plantings adjacent to the CEFs. CEF 3 will be removed by the trail construction and mitigated in the Landscape Plans through enhanced wetland plantings in the remaining CEFs.

The majority of the trail will be on slopes of less than 15%. Slopes greater than 15% are encountered at all creek and tributary crossings. A large section of the trail will need to cross a continuous area of slopes greater than 25%. This area of the trail will be constructed as a boardwalk on piers.

Waterways

The trail is designed to follow the 2 major waterways of Walnut Creek and Boggy Creek. The trail will cross Walnut Creek, Fort Branch Creek, Tannehill Branch Creek, and numerous tributaries connecting to these creeks. About 80% of the trail follows Walnut Creek. The southern half of this distance is on the west side of the creek and the northern

half is on the east side of the creek. There will be one crossing of Walnut Creek itself with a bridge that will span the creek. Another span bridge will be built to cross Walnut Creek Tributary #3. The remaining roughly 20% of the trail will follow Boggy Creek and cross both Fort Branch Creek and Tannehill Branch Creek as the trail heads west to the trailhead at Govalle Park. Fort Branch Creek will be crossed with a new span bridge and Tannehill Branch Creek will be crossed by retrofitting an existing span bridge. Another existing bridge at Boggy Creek Tributary #1 will be rebuilt to accommodate the trail.

Many pipe or box culvert crossings of the numerous tributaries of the above mentioned creeks will be required for this project. Thirteen of these crossings will require cut and/or fill over 4 feet. Three of these culverts will be in the CWQZ, culverts 4, 5, and 6. None of the major creeks along this project will have pipe or box culverts, but instead will be crossed with span bridges.

Water/Wastewater Report

No water or wastewater service is proposed with this site plan.

Variance Request

The variances being requested for this site plan are as follows:

Variance from LDC 25-8-341 to allow cut up to a maximum of 8 feet.

Variance from LDC 25-8-342 to allow fill up to a maximum of 16 feet.

Variance from LDC 25-8-392 to allow construction in a Critical Water Quality Zone (CWQZ).

Recommendations

The findings of fact have been met for these variance requests. Staff recommends approval of these variances with the following conditions:

1. Areas of cut and fill will be constructed with no greater than a 3:1 slope or be structurally contained.
2. All 3:1 slopes will be covered with erosion control matting approved by the Environmental Inspector.
3. Revegetate all disturbed areas within the CWQZ with COA specification 609S for seeding and planting.
4. Revegetate all areas of fill with slopes over 20% with COA specification 604S.

If you need further details, please feel free to contact me at 974-3410.

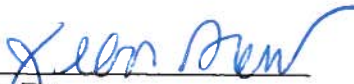


Brad Jackson, Environmental Review Specialist Senior
Planning and Development Review Department

Environmental Program Coordinator:


Ingrid McDonald

Environmental Officer:


Jean Drew

Similar Cases

Walnut Creek Bike Trail Improvements/ SPC-2007-0364C

Walnut Creek Watershed, which is classified as Suburban.
Desired Development Zone.

A portion of this project was located over the northern Edwards Aquifer Recharge Zone. The trail was constructed along Walnut Creek, a classified major waterway. There was critical water quality zone (CWQZ), water quality transition zone (WQTZ), 100 year floodplain, and critical environmental features (CEFs) located along the trail.

Variances from Land Development Code

The variances required by this project were to:

1. Encroach on CEF setbacks (LDC 25-8-281(C)(2)(b));
2. Fill up to 11 feet (LDC 25-8-342); and
3. Develop in the CWQZ (LDC 25-8-392)

Recommendations:

Staff recommended the variances with the following conditions:

1. Revegetate all disturbed areas within the CWQZ with COA specification 609S for seeding and planting.
2. Revegetate all areas with significant slopes with COA specification 604S.
3. Provide only native/drought tolerant plants from the COA's GrowGreen guide for all landscaping and mitigation trees.
4. Provide an overall mitigation rate of 35% for all trees proposed to be removed.

The Southern Walnut Creek Hike-and-bike Trail that is currently seeking variances is a major component of an overall trail system that will eventually connect this related case Walnut Creek Bike Trail Improvements site in north Austin with Govalle Park.



Planning & Development Review Department
Staff Recommendations Concerning Required Findings
Of Fact

Application Name:	Southern Walnut Creek Hike-and-bike Trail
Application Case No:	SPC-2010-0367C
Code Reference:	Land Development Code Section 25-8-341 Cut Requirements
Variance Request:	To allow cut up to 8 feet for the development of a hike-and-bike trail.

A. Land Use Commission variance determinations from Chapter 25-8, Subchapter A – Water Quality of the City Code:

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.
Yes. Considering the length of the site, and the requirement to cross numerous creeks and tributaries, the variance is necessary to develop the trail according to AASHTO design and safety constraints. Variances to change the topography are common in this area of the City of Austin.
2. The variance:
 - a) Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;
Yes. The development is not based on a condition caused by the method chosen by the applicant to develop the property. In order to develop the site with a linear hike-and-bike trail, the site topography must be adjusted to allow the trail to circumnavigate rugged terrain and remain on City of Austin property.
 - b) Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property;

Yes. The proposed cut is the minimum change necessary to construct the hike-and-bike trail. The route was closely scrutinized to avoid significant environmental features and slopes.

c) Does not create a significant probability of harmful environmental consequences; and

Yes. This variance does not create a significant probability of harmful environmental consequences. The trail will be constructed in phases so the area of disturbance is kept to a reasonable size at any one time. Erosion matting will be used in the areas of steep slopes.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes. The proposed project will result in water quality that is at least equal to the water quality achievable without the variance through the installation of erosion controls. The use of the trail will also involve only bike and foot traffic, which will have a minimal impact on the environment.

B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-393 (Water Quality Transition Zone), Section 25-8-423 (Water Quality Transition Zone), Section 25-8-453 (Water Quality Transition Zone), or Article 7, Division 1 (Critical Water Quality Zone Restrictions):

1. The above criteria for granting a variance are met;
Yes.

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and
Yes.

3. The variance is the minimum change necessary to allow a reasonable, economic use of the entire property.
Yes.

Reviewer Name: Brad Jackson

Reviewer Signature: _____



Date: May 9, 2011

Staff may recommend approval of a variance after answering all applicable determinations in the affirmative (YES).



Planning & Development Review Department
Staff Recommendations Concerning Required Findings
Of Fact

Application Name:	Southern Walnut Creek Hike-and-bike Trail
Application Case No:	SPC-2010-0367C
Code Reference:	Land Development Code Section 25-8-342 Fill Requirements
Variance Request:	To allow fill up to 16 feet for the development of a hike-and-bike trail.

A. Land Use Commission variance determinations from Chapter 25-8, Subchapter A – Water Quality of the City Code:

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.

Yes. Considering the length of the site, and the requirement to cross numerous creeks and tributaries, the variance is necessary to develop the trail according to AASHTO design and safety constraints. Variances to change the topography are common in this area of the City of Austin.

2. The variance:

- a) Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;

Yes. The development is not based on a condition caused by the method chosen by the applicant to develop the property. In order to develop the site with a linear hike-and-bike trail, the site topography must be adjusted to allow the trail to circumnavigate rugged terrain and remain on City of Austin property.

- b) Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property;

Yes. The proposed cut is the minimum change necessary to construct the hike-and-bike trail. The route was closely scrutinized to avoid significant environmental features and slopes.

c) Does not create a significant probability of harmful environmental consequences; and

Yes. This variance does not create a significant probability of harmful environmental consequences. The trail will be constructed in phases so the area of disturbance is kept to a reasonable size at any one time. Erosion matting will be used in the areas of steep slopes.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes. The proposed project will result in water quality that is at least equal to the water quality achievable without the variance through the installation of erosion controls. The use of the trail will also involve only bike and foot traffic, which will have a minimal impact on the environment.

B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-393 (Water Quality Transition Zone), Section 25-8-423 (Water Quality Transition Zone), Section 25-8-453 (Water Quality Transition Zone), or Article 7, Division 1 (Critical Water Quality Zone Restrictions):

1. The above criteria for granting a variance are met;

Yes.

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and

Yes.

3. The variance is the minimum change necessary to allow a reasonable, economic use of the entire property.

Yes.

Reviewer Name: Brad Jackson

Reviewer Signature: _____



Date: May 9, 2011

Staff may recommend approval of a variance after answering all applicable determinations in the affirmative (YES).



Planning & Development Review Department
Staff Recommendations Concerning Required Findings
Of Fact

Application Name:	Southern Walnut Creek Hike-and-bike Trail
Application Case No:	SPC-2010-0367C
Code Reference:	Land Development Code Section 25-8-392 Critical Water Quality Zone.
Variance Request:	To allow construction in the Critical Water Quality Zone for the development of a hike-and-bike trail.

A. Land Use Commission variance determinations from Chapter 25-8, Subchapter A – Water Quality of the City Code:

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.

Yes. Numerous linear projects, like utility lines and trails, require variances to cross or run parallel to creeks within Critical Water Quality Zones (CWQZ).

2. The variance:

- a) Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;

Yes. The development is not based on a condition caused by the method chosen by the applicant to develop the property. Since the project is linear in nature, it is only feasible that the project follow existing creeks so it is not required to frequently cross private property and necessitate the acquisition of numerous and expensive easements.

- b) Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property;

Yes. The proposed construction in the CWQZ is the minimum change necessary to construct the hike-and-bike trail. The route of the trail was designed to avoid the CWQZ as much as possible.

c) Does not create a significant probability of harmful environmental consequences; and

Yes. This variance does not create a significant probability of harmful environmental consequences. The trail will be constructed in phases so the area of disturbance is kept to a reasonable size at any one time. The use of the trail will also involve only bike and foot traffic, which will have a minimal impact on the environment.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes. The proposed project will result in water quality that is at least equal to the water quality achievable without the variance through the installation of aggressive erosion controls. The use of the trail will also involve only bike and foot traffic, which will have a minimal impact on the environment. In addition, this project encourages the use of bicycles over automobile usage, which will result in superior water quality for the city overall.

B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-393 (Water Quality Transition Zone), Section 25-8-423 (Water Quality Transition Zone), Section 25-8-453 (Water Quality Transition Zone), or Article 7, Division 1 (Critical Water Quality Zone Restrictions):

1. The above criteria for granting a variance are met;

Yes.

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and


Yes.

3. The variance is the minimum change necessary to allow a reasonable, economic use of the entire property.

Yes.

Reviewer Name: Brad Jackson

Reviewer Signature: _____



Date: May 9, 2011

Staff may recommend approval of a variance after answering all applicable determinations in the affirmative (YES).



May 9, 2011

Chairperson Mary Gay Maxwell and Board Members
Environmental Board
City of Austin
P.O. Box 1088
Austin, Texas 78767

RE: Southern Walnut Creek Hike and Bike Trail
Environmental Board Agenda

Dear Chairperson Maxwell and Board Members:

Please accept this letter as our request to be placed on the May 18, 2011 agenda of the Environmental Board meeting for the three request variances. Below is a description of the Project.

Description

The Southern Walnut Creek Hike and Bike Trail is a new trail from Govalle Park north to Daffan Lane at Johnny Morris Road. The trail is approximately 7.3 miles in length and 10 feet wide with foot shoulders. The entire trail will be constructed of concrete. There will be five (5) bridges and 14 culvert crossings on the trail. Parking lots will be provided at both ends of the trail. New parking lots will be constructed at the north trailhead located on Daffan Lane near Johnny Morris Road and at the Austin Tennis Center located at 7800 Johnny Morris Road. The existing parking lot at Govalle Park will be utilized on the south end for trail users. Existing parking at Davis White Northeast Park may also be utilized by trail users.

This trail is a significant part of the overall master plan for the Walnut Creek Trail System. Ultimately, the Walnut Creek Trail System will be a 16-mile concrete trail from Balcones District Park in NW Austin to Govalle Park in East Austin. The majority of the funding for the trail comes from the U.S. Department of Transportation and is administered by the Texas Department of Transportation. The project is managed by the City of Austin Public Works Department and Parks and Recreation Department.



Variance Request

There are three (3) variances being requested.

1. Section 25-8-341 Cut Requirements
2. Section 25-8-342 Fill Requirements
3. Section 25-8-392 Construction within the Critical Water Quality Zone

Cut and Fill in excess of four (4) feet are proposed at the following locations.

1. Trail 1 South
 - a. Sta 46+80 to Sta 46+95 5.0 feet max Fill
 - b. Sta 55+55 to Sta 55+90 5.0 feet max Cut
 - c. Sta 74+50 to Sta 74+60 5.0 feet max Fill
 - d. Sta 95+25 to Sta 96+15 10.0 feet max Fill at Culvert
 - e. Sta 185+80 to Sta 185+90 7.0 feet max Cut
 - f. Sta 187+15 to Sta 187+90 6.0 feet max Fill at Culvert
2. Trail 1 North
 - a. Sta 5+05 to Sta 5+40 6.0 feet max Cut
 - b. Sta 50+80 to Sta 51+20 6.0 feet max Fill
 - c. Sta 75+25 to Sta 75+50 5.0 feet max Fill at Culvert
 - d. Sta 94+00 to Sta 94+45 16.0 feet max Fill at Culvert
 - e. Sta 103+55 to Sta 104+50 5.0 feet max Fill at Culvert
 - f. Sta 107+95 to Sta 108+40 13.0 feet max Fill at Culvert
 - g. Sta 125+55 to Sta 126+45 8.0 feet max Cut

Construction within the Critical Water Quality Zone includes multiple box culverts at Station 95+76.23, labeled as "Culvert 4". The culverts are 2 – 6' x 6' reinforced concrete box culverts approximately 33 feet long with concrete end treatments. These culverts are required in order to construct the trail across an unnamed tributary of Walnut Creek.

Included as attachments are our Findings of Fact, a trail location map, an exhibit locating cuts and fills greater than 4-feet, and an exhibit showing the proposed construction within the Critical Water Quality Zone.

Should you have any questions, comments, or concerns about this project or the variances requested prior to the meeting, feel free to contact me.

Sincerely,

Frank H. Del Castillo, Jr.
Land Entitlement Project Manager

May 9, 2011
Page 2 of 2

FINDINGS OF FACT

Project: Southern Walnut Creek Hike and Bike Trail

Ordinance Standard: Section 25-8-341 Cut Requirements

JUSTIFICATION:

1. Are there special circumstances applicable to the property involved where strict application deprives such property owner of privileges or safety enjoyed by other similarly situated property with similarly timed development? **YES**

The City of Austin will not be allowed to construct a Hike and Bike Trail along the creek for all citizens to enjoy.

2. Does the project demonstrate minimum departures from the terms of the ordinance necessary to avoid such deprivation of privileges enjoyed by such other property and to facilitate a reasonable use, and which will not create significant probabilities of harmful environmental consequences? **YES**

The Trail was walked by City of Austin staff to assist in determining the location and minimum departure from the requirements.

3. The proposal does not provide special privileges not enjoyed by other similarly situated properties with similarly timed development, and is not based on a special or unique condition which was created as a result of the method by which a person voluntarily subdivided land. **YES**

No special privileges are being requested, just the construction of a trail along Walnut and Boggy Creeks.

4. Does the proposal demonstrate water quality equal to or better than would have resulted had development proceeded without the variance? **YES**

We are following recommendations by City of Austin staff.

5. For a variance from the requirements for development within the Critical Water Quality Zone and/or Water Quality Transition Zone: Does the application of restrictions leave the property owner without any reasonable, economic use of the entire property? **YES**

Because this is a trail along the creek, there is no other reasonable use available to the property.

A variance requires all above affirmative findings with explanations/reasons.

FINDINGS OF FACT

Project: Southern Walnut Creek Hike and Bike Trail

Ordinance Standard: Section 25-8-342 Fill Requirements

JUSTIFICATION:

1. Are there special circumstances applicable to the property involved where strict application deprives such property owner of privileges or safety enjoyed by other similarly situated property with similarly timed development? **YES**

The City of Austin will not be allowed to construct a Hike and Bike Trail along the creek for all citizens to enjoy.

2. Does the project demonstrate minimum departures from the terms of the ordinance necessary to avoid such deprivation of privileges enjoyed by such other property and to facilitate a reasonable use, and which will not create significant probabilities of harmful environmental consequences? **YES**

The Trail was walked by City of Austin staff to assist in determining the location and minimum departure from the requirements.

3. The proposal does not provide special privileges not enjoyed by other similarly situated properties with similarly timed development, and is not based on a special or unique condition which was created as a result of the method by which a person voluntarily subdivided land. **YES**

No special privileges are being requested, just the construction of a trail along Walnut and Boggy Creeks.

4. Does the proposal demonstrate water quality equal to or better than would have resulted had development proceeded without the variance? **YES**

We are following recommendations by City of Austin staff.

5. For a variance from the requirements for development within the Critical Water Quality Zone and/or Water Quality Transition Zone: Does the application of restrictions leave the property owner without any reasonable, economic use of the entire property? **YES**

Because this is a trail along the creek, there is no other reasonable use available to the property.

A variance requires all above affirmative findings with explanations/reasons.

FINDINGS OF FACT

Project: Southern Walnut Creek Hike and Bike Trail

Ordinance Standard: Section 25-8-392 Critical Water Quality Zone

JUSTIFICATION:

1. Are there special circumstances applicable to the property involved where strict application deprives such property owner of privileges or safety enjoyed by other similarly situated property with similarly timed development? **YES**

The City of Austin will not be allowed to construct a Hike and Bike Trail along the creek for all citizens to enjoy.

2. Does the project demonstrate minimum departures from the terms of the ordinance necessary to avoid such deprivation of privileges enjoyed by such other property and to facilitate a reasonable use, and which will not create significant probabilities of harmful environmental consequences? **YES**

The Trail was walked by City of Austin staff to assist in determining the location and minimum departure from the requirements.

3. The proposal does not provide special privileges not enjoyed by other similarly situated properties with similarly timed development, and is not based on a special or unique condition which was created as a result of the method by which a person voluntarily subdivided land. **YES**

No special privileges are being requested, just the construction of a trail along Walnut and Boggy Creeks.

4. Does the proposal demonstrate water quality equal to or better than would have resulted had development proceeded without the variance? **YES**

We are following recommendations by City of Austin staff.

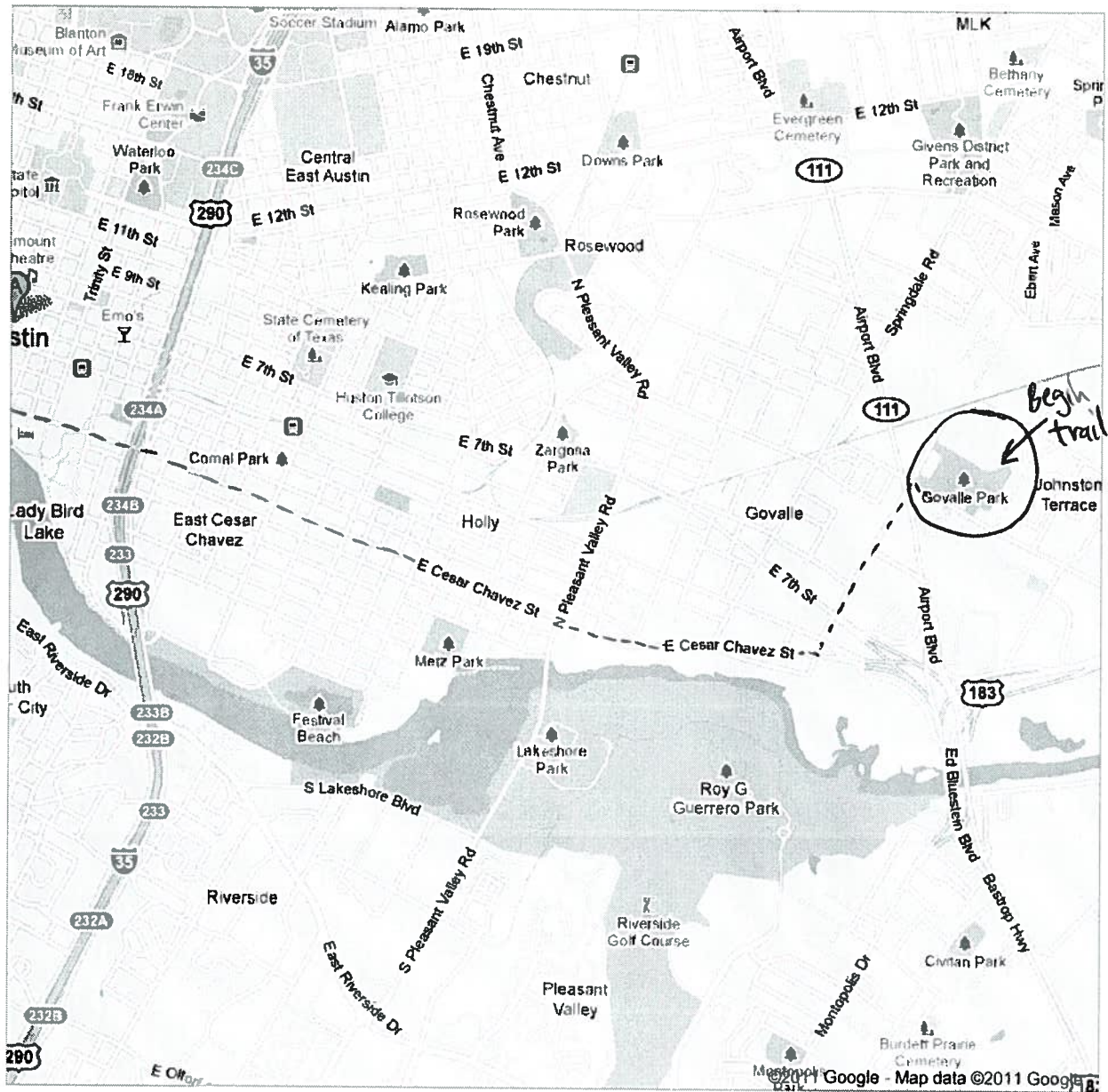
5. For a variance from the requirements for development within the Critical Water Quality Zone and/or Water Quality Transition Zone: Does the application of restrictions leave the property owner without any reasonable, economic use of the entire property? **YES**

Because this is a trail along the creek, there is no other reasonable use available to the property.

A variance requires all above affirmative findings with explanations/reasons.

Google maps

Address Austin, TX

Notes Directions to Govalle Park from
OTC.

Driving Directions to Southern Walnut Creek Hike-and-Bike Trail SPC-2010-0367C

From One Texas Center, take 1st Street North to Cesar Chavez and turn right. Head east and turn left on Shady Lane. Continue North to Bolm Road and turn right, Govalle Park is on your left at the intersection of Shady Lane and Bolm Road.

The trail heads north for 7.2 miles from Govalle Park. Areas of the trail can be accessed from the street crossings of 183, FM 969, the YMCA at 183 and 51st, Loyola Lane, and Old Manor Road where the trail ends. Please see attached overall trail exhibit for scope of project.



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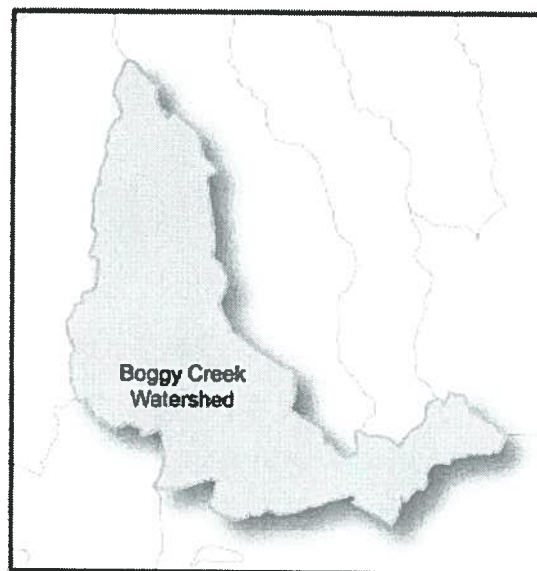
Flood

Erosion

Master Plan

Water Quality

Austin's Watersheds



Fast Facts

Environmental Creek

Assessments

Photo Gallery

Fast Facts

Population	2000: 23,372	
	2030: 35,728	
Creek Length	8 miles	
Drainage Area	6 square miles	
Drains To	Colorado River below Town Lake	
Well Known Sites	Oakwood Cemetery, Zaragoza Park, Johnston High School, Garza High School, Kealing Middle School	
Land Use	Residential	34%
	Business	15%
	Civic	7%
	Parks	4%
	Roadways	26%
	Undeveloped	14%

Watershed Facts

- Several miles of Boggy Creek have been channelized with cement, changing the character of the creek from narrow and winding to wide, straight and shallow.
- Areas that have not been channelized have extremely eroded banks with debris and trash in the creek channels.
- In response to citizen complains, City investigators find an average of 78 pollution problems each year in Boggy Creek. Sewage is the most common problem, followed by petroleum and then trash.
- In 1994, residents in the Boggy Creek watershed won a major environmental victory, shutting down polluting tank farms in their neighborhoods.
- A major project by the U.S. Army Corps of Engineers provided 100-year floodplain protection to 1700 homes in 1984
- Fecal coliform levels were above the recreational state limit in 2000

Return to Top

Creek Assessments

Environmental

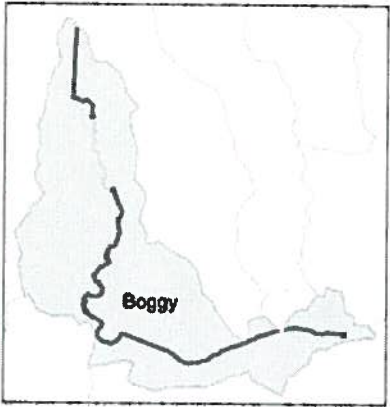
Index	Score	Category	Notes
Overall Score	58	Fair	Boggy ranks 31 out of 46 watersheds in overall quality
Water Chemistry	57	Fair	Water quality is average
Sediment Quality	88	Excellent	PAHs are very low, herbicides/pesticides are very low, metals are very low
Recreation	63	Good	During dry weather conditions, bacteria is usually not a threat
Aesthetics	63	Good	Lots of litter present, slight offensive odors, algae covers 10-20% of creek, some of the creek bed is dry
Habitat	49	Marginal	Increased sediment deposition, cover is insufficient, major channel alteration, buffer zone is small
Aquatic Life	30	Poor	Benthic macroinvertebrate community is poor; diatom community is poor

- Aquatic life impacted by habitat loss from channel alteration, erosion and sedimentation.
- Austin Clean Water Program is working on rehabilitation of wastewater lines that may be the cause of periodically elevated bacteria.
- Channel modifications may have resulted in impacts downstream of U.S. 183.

- Erosion downstream of extensive channelization reducing bank stability and causing sedimentation.

[Learn More](#)

[How to Help](#)



Environmental scores are based on a full range of chemical, biological, and physical assessments.

Water Quality	
● Monitoring Sites	■ Marginal
■ Excellent	■ Poor
■ Very Good	■ Bad
■ Good	■ Very Bad
■ Fair	■ No Score

[Return to Top](#)

Photo Gallery



Boggy Creek at Delwau Lane



Boggy Creek at Delwau Lane



Boggy Creek at Delwau Lane



Boggy Creek at Delwau Lane



Boggy Creek at Airport Road



Boggy Creek at Nile Street

[Return to Top](#)

[Home](#) :: [Flood](#) :: [Erosion](#) :: [Master Plan](#) :: [Water Quality](#)



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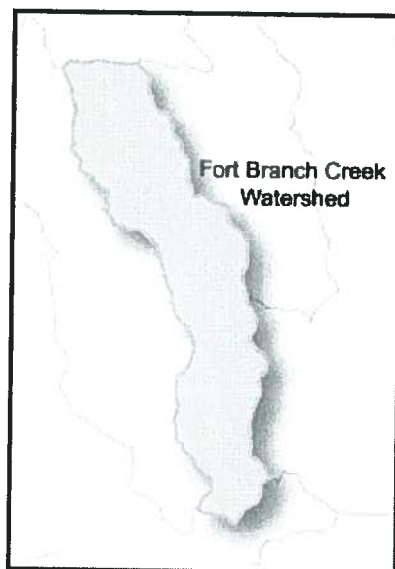
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Austin's Watersheds

[Fast Facts](#)[Environmental Creek Assessments](#)[Photo Gallery](#)

Fast Facts

Population

2000: 16,796

2030: 19,659

Creek Length

6 miles

Drainage Area

3 square miles

Drains To

Colorado River below Town Lake through Boggy Creek

Well Known Sites

Springdale Park, Pecan Springs Park, Reagan High School

Blanton, Harris, Pecan Springs and Norman Elementary Schools

Land Use

Residential	46%
Business	10%
Civic	6%
Parks	2%
Roadways	19%
Undeveloped	18%

Watershed Facts

- Fort Branch was named after Fort Colorado, an old U.S. Army post that was built near this branch of Boggy Creek
- Fort Branch winds five miles through East Austin before flowing into Boggy Creek near Johnson High School.
- It has the lowest impervious cover (paved or built surfaces) percentage of Austin's urban creeks.
- In response to citizen complaints, investigators find an average of 24 pollution problems each year in Fort Branch. Sewage is the most common problem, followed by petroleum and trash.
- Overall, water quality is fair to good.

[Return to Top](#)

Creek Assessments

Environmental

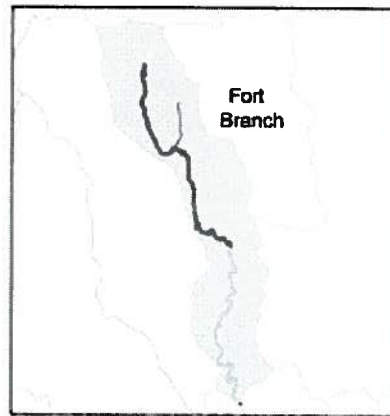
Index	Score	Category	Notes
Overall Score	55	Fair	Fort Branch ranks 38 out of 46 watersheds in overall quality
Water Chemistry	51	Fair	Water quality is average, suspended solids are high
Sediment Quality	78	Very Good	PAHs are low, herbicides/pesticides are very low, metals are very low
Recreation	63	Good	During dry weather conditions, bacteria is usually not a threat
Aesthetics	71	Good	Lots of litter present, slight offensive odors, some of the creek bed is dry
Habitat	44	Marginal	Increased sediment deposition, cover is insufficient, some channel alteration, bank stability is marginal, bank vegetation is marginal, buffer zone is too small
Aquatic Life	20	Bad	Benthic macroinvertebrate community is bad; diatom community is bad

- Development near creek banks and with limited controls resulted in poorer channel and riparian conditions than later regulated development.
- Large sections of creek completely channelized.
- Preliminary Engineering for flood, erosion, stream restoration, and water quality retrofits completed recently and several Capital Improvement
- Projects were recommended in the mid-reach of the watershed.

- Unstable, sandy substrate limit aquatic life habitat.

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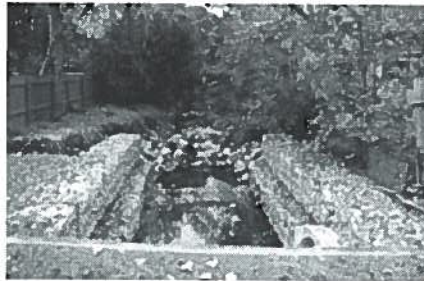


Environmental scores are based on a full range of chemical, biological, and physical assessments.

Water Quality	
● Monitoring Sites	■ Marginal
■ Excellent	■ Poor
■ Very Good	■ Bad
■ Good	■ Very Bad
■ Fair	■ No Score

[Return to Top](#)

Photo Gallery



Fort Branch Creek at Glen Crest Drive



Fort Branch Creek at Glen Crest Drive



Fort Branch Creek at
North Boggy Creek



Fort Branch Creek at
Single Shot Drive

[Return to Top](#)



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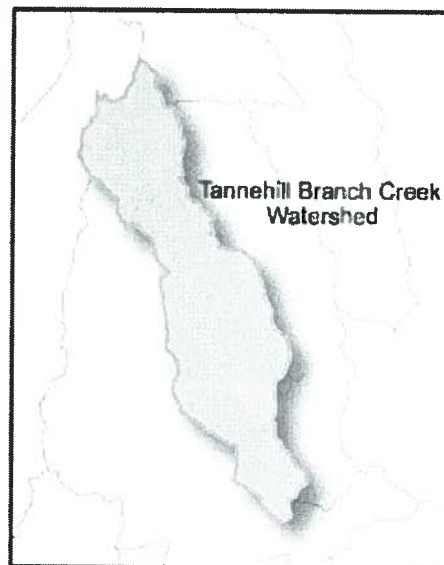
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Austin's Watersheds

[Fast Facts](#)[Environmental Creek Assessments](#)[Photo Gallery](#)

Fast Facts

Population	2000: 13,976	
	2030: 24,742	
Creek Length	7 miles	
Drainage Area	4 square miles	
Drains To	Colorado River below Town Lake through Boggy Creek	
Well Known Sites	Morris Williams Golf Course, Bartholomew Park, Highland Mall, Robert Mueller Airport	
Land Use	Residential	23%
	Business	17%
	Civic	3%
	Parks	11%
	Roadways	38%
	Undeveloped	10%

Watershed Facts

- Like the larger Boggy Creek, Tannehill Branch has had serious flooding and erosion problems.
- In response to citizen complaints, investigators find an average of 37 pollution problems each year in Tannehill Branch. Sewage is the most common problem, followed by petroleum then trash.
- Elevated nutrient and bacteria levels in 2000*(2001 Water Watchdogs EII Phase 1 Watersheds Report (monitoring conducted in 2000))
- Trash and debris are a consistent problem
- The monitoring site at Highland Mall has the worst water quality in the creek; but water quality improves further downstream*.(2001 Water Watchdogs EII Phase 1 Watersheds Report (monitoring conducted in 2000))
- Tannehill maintains more baseflow than other streams in the transitional zone from the Edwards Plateau to the Blackland Prairie ecoregions.

Return to Top

Creek Assessments

Environmental

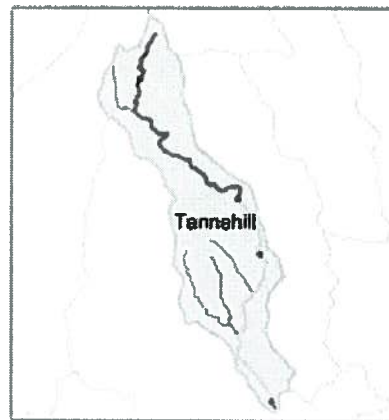
Index	Score	Category	Notes
Overall Score	62	Fair	Tannehill Branch ranks 24 out of 46 watersheds in overall quality
Water Chemistry	65	Good	Water quality is above average
Sediment Quality	75	Good	PAHs are high, herbicides/pesticides are very low, metals are very low
Recreation	76	Very Good	During dry weather conditions, bacteria is not a threat
Aesthetics	65	Good	Litter is very bad, no odor, some of the creek bed is dry
Habitat	50	Marginal	Increased sediment deposition, major channel alteration, bank stability is marginal, bank vegetation is marginal, buffer zone is small
Aquatic Life	39	Marginal	Benthic macroinvertebrate community is poor; diatom community is marginal

- Austin Clean Water Program is working on rehabilitation of wastewater lines that may be the cause of phosphorous and odor.
- Channel restoration and erosion control project in Bartholomew Park may benefit watershed habitat.
- Robert Mueller Airport Redevelopment may impact water quality and hydrology.

- Water quality scores improved in Tannehill more than other watersheds in the City.

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Environmental scores are based on a full range of chemical, biological, and physical assessments.

Water Quality	
Monitoring Sites	Marginal
Excellent	Poor
Very Good	Bad
Good	Very Bad
Fair	No Score

[Return to Top](#)

Photo Gallery



Tannehill Creek at Bartholomew Park



Tannehill Creek upstream
of Boggy Creek



Tannehill Creek at Desirable Drive



Tannehill Creek at Lovell Drive

[Return to Top](#)



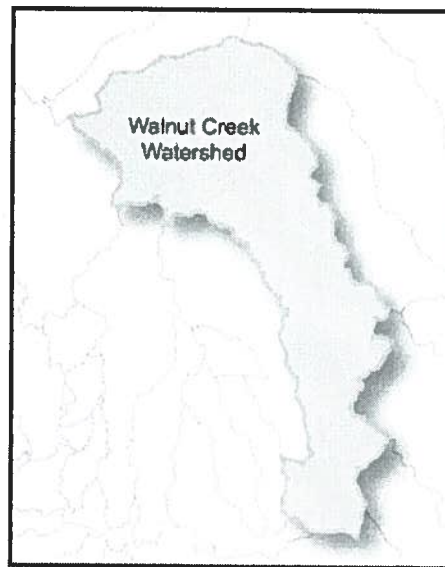
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Austin's Watersheds

[Fast Facts](#)[Environmental Creek Assessments](#)[Photo Gallery](#)

Fast Facts

Population2000: 93,934
2030: 133,387**Creek Length**

22.34 miles

Drainage Area

43.53 square miles

Drains To

Colorado River below Town Lake

Well Known Sites

Jourdan Bachman Pioneer Farm, ACC Northridge Campus, LBJ, McNeil, and Connally high Schools, Motorola, Walnut Creek Park, Scofield Farms, North Austin Medical Center, Seton Northwest

Land Use

Residential	25%
Business	13%
Civic	3%
Parks	4%

Roadways	15%
Undeveloped	40%

Watershed Facts

- This beautiful creek has five seeps and springs and thirteen caves, and is home to the golden-cheeked warbler and black -capped vireo
- The watershed crosses over from the Northern Edwards Aquifer and flows east to the rich soils of the Blackland Prairie region.
- The Walnut Creek greenbelt connects six major corporations, a college campus, and 12 neighborhoods along a 14.3 mile route
- In response to citizen complaints, investigators find an average of 72 pollution problems per year. Petroleum is the most common problem, followed by sediment.
- Walnut is the largest developed watershed in Austin and is characteristic of the transitional zone between Edwards Plateau and Blackland Prairie ecoregions

[Return to Top](#)

Creek Assessments

Environmental

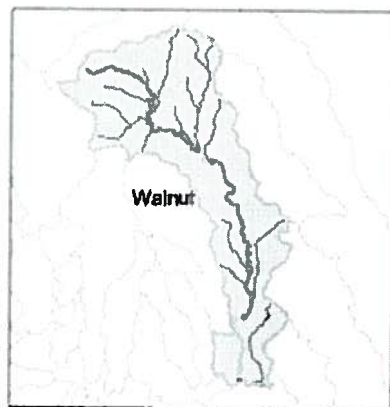
Index	Score	Category	Notes
Overall Score	71	Good	Walnut ranks 10 out of 46 watersheds in overall quality
Water Chemistry	61	Fair	Water quality is average
Sediment Quality	75	Good	PAHs are high, herbicides/pesticides are very low, metals are very low
Recreation	77	Very Good	During dry weather conditions, bacteria is not a threat
Aesthetics	76	Very Good	Some litter is present, no odor, water is slightly cloudy
Habitat	65	Good	Some embeddedness, some channel alteration, bank vegetation is marginal
Aquatic Life	69	Good	Benthic macroinvertebrate community is very good; diatom community is fair

- Contact recreation scores improved in Walnut more than other watersheds in the City.
- Healthy aquatic life communities supported by perennial flow.
- Portions of Walnut are listed on the State Water Quality Inventory as being of concern for bacteria and nutrient enrichment.

- Sediment deposition may result from increasing development in combination with native soil characteristics.

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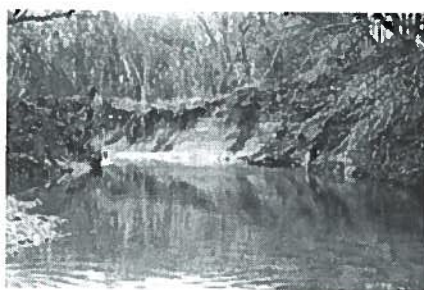


Environmental scores are based on a full range of chemical, biological, and physical assessments.

Water Quality	
Monitoring Sites	Marginal
Excellent	Poor
Very Good	Bad
Good	Very Bad
Fair	No Score

[Return to Top](#)

Photo Gallery



Walnut Creek at the
SP Railroad Bridge



Walnut Creek at Lamar Boulevard

[Click here for more information about Walnut Creek History](#) (City of Austin is not responsible for any content on the linked page)

[Return to Top](#)

[Home](#) :: [Flood](#) :: [Erosion](#) :: [Master Plan](#) :: [Water Quality](#)



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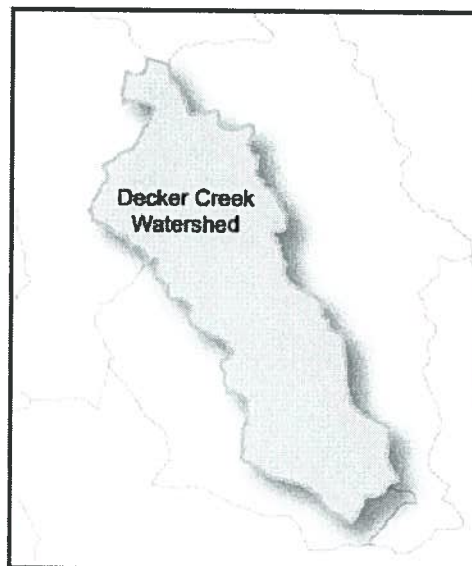
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Austin's Watersheds

[Fast Facts](#)[Environmental Creek Assessments](#)[Photo Gallery](#)

Fast Facts

Population

2000: 3,156

2030: 12,341

Creek Length

12 miles

Drainage Area

17 square miles

Drains To

Colorado River east of Town Lake

Well Known Sites

Travis County Expo Center, Bluebonnet Hill Golf Course,
Blueberry Elementary school, Hornsby-Duniap Elementary
School, Lake Walter E. Long Metropolitan Park (Decker
Lake)

Land Use

Residential	16%
Business	3%
Civic	1%
Parks	20%

Roadways	5%
Undeveloped	44%

Watershed Facts

- As a reward for James Gilleland's army service, he received a bounty certificate for land, which he later sold to his neighbor, Isaac Decker.
- Decker Creek begins a mile east of Austin in eastern Travis County and runs southeast for ten miles to its mouth on Gilleland Creek.
- The creek was dammed in 1967 to form Decker Lake; the reservoir was renamed the Walter E. Long Lake in 1978; it is currently used primarily to cool the generators at the Long Power Plant.
- In response to citizen complaints, investigators find an average of five pollution spills each year in Decker Creek; the most common spill type is sewage, followed by petroleum and sediment.
- Indian grass prairie preserve is located along Decker Lake maintained by City of Austin preserves system.
- Decker Creek is a typical Blackland Prairie stream.

[Return to Top](#)

Creek Assessments

Environmental

Index	Score	Category	Notes
Overall Score	65	Good	Decker ranks 18 out of 46 watersheds in overall quality
Water Chemistry	62	Fair	Water quality is average, ammonia is high, suspended solids are high
Sediment Quality	93	Excellent	PAHs are very low, herbicides/pesticides are very low, metals are very low
Recreation	93	Excellent	During dry weather conditions, bacteria is not a threat
Aesthetics	67	Good	Lots of litter present, no odor, water is very cloudy
Habitat	56	Fair	Increased sediment deposition, cover is insufficient, some channel alteration
Aquatic Life	21	Bad	Benthic macroinvertebrate community is fair, diatom community is poor

- Poor aquatic life scores result from habitat alteration, presence of pollution-intolerant diatom species suggest healthy community.
- Water pumped from Colorado River used to fill Decker Lake, and the









downstream dam alters the hydrology of the lower portion of Decker creating marsh like conditions.

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Environmental scores are based on a full range of chemical, biological, and physical assessments.

Water Quality			
	Monitoring Sites		Marginal
	Excellent		Poor
	Very Good		Bad
	Good		Very Bad
	Fair		No Score

[Return to Top](#)

Photo Gallery



Decker Creek at Lindell Lane



Decker Creek at Lindell Lane

[Return to Top](#)

[Home](#) :: [Flood](#) :: [Erosion](#) :: [Master Plan](#) :: [Water Quality](#)



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EXHIBITS

Southern Walnut Creek Hike and Bike Trail / SPC-2010-0367C

Please find attached exhibits:

1. Cut and Fill Exhibit
2. Overall Aerial Exhibit
3. Sheets 150 – 152 from plans showing Drainage Areas and CWQZs.