



AGENDA

TOWN OF FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION REGULAR MEETING

February 6, 2018

**FLOWER MOUND TOWN HALL
2121 CROSS TIMBERS ROAD
FLOWER MOUND, TEXAS**

6:30 P.M.

AN AGENDA INFORMATION PACKET IS AVAILABLE ONLINE AT
[HTTPS://TX-FLOWER MOUND.CIVICPLUS.COM/AGENDACENTER](https://tx-flowermound.civicplus.com/agendacenter)

A. CALL REGULAR MEETING TO ORDER – 6:30 PM

B. INVOCATION AND PLEDGE OF ALLEGIANCE

C. CITIZENS/VISITORS COMMENTS

1. Please fill out an "Appearance Before Environmental Conservation Commission" form in order to address the Environmental Conservation Commission, and turn the form in prior to Citizens and Visitors Comments, or by 6:40 p.m. to the Town staff. Speakers are normally limited to three minutes. Time limits can be adjusted by the Chair as to accommodate more or fewer speakers.

D. STAFF REPORT

1. Update and status report related to environmental issues and events, regulatory activities, and projects.

E. PRESENTATIONS

1. Annual report presentation from Republic Services

F. CONSENT AGENDA - CONSENT ITEMS

This agenda consists of non-controversial or "housekeeping" items and may be approved with a single motion. A member of the Environmental Conservation Commission may request an item(s) be withdrawn from the consent agenda and moved to regular agenda for discussion by making such request prior to a motion and vote on the Consent Agenda.

Environmental Conservation Commission Meeting Agenda

February 6, 2018

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1. Consider approval of minutes from the regular meeting of the Environmental Conservation Commission held on January 2, 2018.

G. ADJOURNMENT- REGULAR SESSION

H. CALL WORK SESSION TO ORDER

I. WORK SESSION ITEMS

2. Review and discuss the Town's Open Space Plan.
3. Receive an update on the 2018 Annual Stormwater Report

J. COORDINATION OF FUTURE AGENDAS/MEETINGS

K. ADJOURNMENT- WORK SESSION



Matthew Woods
Director of Environmental Services

I do hereby certify that the Notice of Meeting was posted on the bulletin board in Town Hall of the Town of Flower Mound, Texas, a place convenient and readily accessible to the general public at all times and said Notice was posted on the following date and time: February 2, 2018, by 5:00 p.m., at least 72 hours prior to the schedule time of said meeting.



Emily Chapman
Administrative Assistant



ENVIRONMENTAL CONSERVATION COMMISSION AGENDA ITEM NO. 1

CONSENT ITEM

DATE: February 6, 2018

FROM: Emily Chapman, Administrative Assistant

ITEM: Consider approval of minutes from the regular meeting of the Environmental Conservation Commission held on January 2, 2018.

BACKGROUND INFORMATION: This agenda item is to consider approval of the minutes from the January 2, 2018, regular meeting of the Environmental Conservation Commission.

CITIZEN FEEDBACK: N/A

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

1. A copy of the draft minutes from the January 2, 2018, regular meeting of the Environmental Conservation Commission.

RECOMMENDATION: Move to approve the minutes from the January 2, 2018, regular meeting of the Environmental Conservation Commission.

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF JANUARY 2, 2018

THE FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING HELD ON THE 2ND DAY OF JANUARY 2018, IN THE FLOWER MOUND TOWN HALL, LOCATED AT 2121 CROSS TIMBERS ROAD IN THE TOWN OF FLOWER MOUND, COUNTY OF DENTON, TEXAS, AT 6:30 P.M.

The Environmental Conservation Commission met in regular session, with the following members present constituting a quorum:

Russell McNamer	Chair
James Naylor	Commission Member, Place 1
Michael Lamminen	Commission Member, Place 2
Marilyn Lawson	Commission Member, Place 4
James Gerber	Commission Member, Place 7
Elaine Takacs	Commission Member, Place 8
Shery Layne	Commission Member, Place 9
James Seastrom	Commission Member, Place 10

Constituting a quorum with the following members absent:

Thomas Bailey	Vice Chair
Alton Bowman	Commission Member, Place 5

Places 8, 9, and 10 of the Commission do not vote on items unless they sit in place of one of the regular members, Places 1-7.)

And the following members of Town staff present:

Emily Chapman	Administrative Assistant
James Hoefert	Environmental Review Analyst
Matthew Green	Environmental Review Analyst

A. CALL TO ORDER - REGULAR SESSION: 6:30 P.M.

B. INVOCATION AND PLEDGE OF ALLEGIANCE

C. CITIZENS/VISITORS COMMENTS

D. STAFF REPORT

- 1. Update and status report related to environmental issues and events, regulatory activities, and projects.**

E. CONSENT AGENDA

- 1. Consider approval of minutes from the regular meeting of the Environmental Conservation Commission held on December 5, 2017.**

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF JANUARY 2, 2018

Commission Deliberation

Commission Member Lamminen made a motion to approve the December 5, 2017, minutes as presented. Commission Member Lawson seconded the motion.

VOTE ON THE MOTION

AYES: Gerber, Lawson, Takacs, Lamminen, Naylor, Seastrom
NAYS: None
ABSTAIN: None

The motion passed with a vote of 6-0-0

F. REGULAR ITEMS

2. Consider an application for a tree removal permit for one (1) specimen tree on the Glidewell Addition residential development. The specimen tree is located at 3551 Shady Trail.

Staff Presenter

James Hoefert, Environmental Review Analyst, gave a presentation with the following items included:

- Site Location
- Project Information Overview
- Lot Layout
- Tree Survey
- Photo of Tree Proposed for Removal

Randy Whitson, Noble Classic Homes, (PO Box 507, Argyle, TX) answered questions regarding the project.

Commission Deliberation

Commission Member Naylor made a motion to approve the application for a tree removal permit for one (1) specimen tree on the Glidewell Addition residential development. The specimen tree is located at 3551 Shady Trail. Commission Member Gerber seconded the motion.

VOTE ON THE MOTION

AYES: Gerber, Lawson, Takacs, Lamminen, Naylor, Seastrom
NAYS: None
ABSTAIN: None

The motion passed with a vote of 6-0-0

G. COORDINATION OF FUTURE AGENDAS/MEETINGS

H. ADJOURNMENT – REGULAR SESSION 6:42 P.M.

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF JANUARY 2, 2018

TOWN OF FLOWER MOUND, TEXAS



MATTHEW WOODS

DIRECTOR OF ENVIRONMENTAL SERVICES

ATTEST:



EMILY CHAPMAN

ADMINISTRATIVE ASSISTANT

DRAFT



ENVIRONMENTAL CONSERVATION COMMISSION AGENDA ITEM NO. 2

WORK SESSION ITEM

DATE: February 6, 2018
FROM: Matthew Woods, Environmental Services Director
ITEM: Review and discuss the Town's Open Space Plan.

BACKGROUND INFORMATION: This work session item provides the ECC the opportunity to review and discuss the Town's Open Space Plan. The Open Space Plan was adopted as part of the Town's 2001 Master Plan following the creation of the Open Space Advisory Committee in 1998. The Committee established objectives for the Open Space Plan which included recommended techniques and strategies for open space preservation within the Town.

The Open Space Plan provides background information and general objectives, defines the primary environmental features within the Town, and outlines potential methods for conservation and action steps. Open space preservation options have been discussed on multiple occasions following the initial adoption in 2001. The predominant method of open space preservation, primarily within the Cross Timbers Conservation Development District, has been accomplished by utilizing the conservation development model with third party land trusts. In addition to a review of the Open Space Plan, staff will discuss the various examples of conservation developments and cluster developments which have preserved open space within the Town.

ALTERNATIVES/OPTIONS:

N/A

ATTACHMENTS:

1. Town of Flower Mound Open Space Plan

RECOMMENDATION: This item is for discussion purposes; therefore, no formal action is required.

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6.0 OPEN SPACE PLAN

An Open Space Plan for Flower Mound

The vision for the Flower Mound Community Plan, adopted by the Town Council on September 27, 1999, included as one of the key goals of the plan to “preserve the country atmosphere and natural environment that makes Flower Mound a unique and desirable community.”

This portion of the vision statement was a direct reflection of the Town's intent when the Town Council adopted a resolution on December 17, 1998, establishing an Open Space Advisory Committee, and charging it with the responsibility of assisting the Town Council and its consultants in the development of an Open Space Plan for Flower Mound.

In adopting the resolution, the Town Council cited the importance of open space in the town:

- Like other special places, Flower Mound is attracting the very forces of change and growth which have the potential to overwhelm its unique qualities;
- Flower Mound's open spaces - its open, productive agricultural, natural, and scenic lands - are foremost among its unique qualities and significantly contribute to the country atmosphere, quality-of-life, and lifestyle issues, which in turn, greatly influence economic development opportunities;
- Intrinsic community value and benefit are recognized to exist in Flower Mound's open spaces; and
- Open, productive agricultural, natural, and scenic lands reduce the need for major urban

infrastructure improvements, and the resulting expenditure of public funds for such improvements.

The Open Space Plan sets forth an agenda for the Town to pursue that will help realize this vision, by defining open space that is important to Flower Mound, identifying methods by which it can be conserved, and setting forth an action plan for the Town to support the conservation of open space.

This plan identifies an open space system consisting of a menu of open space protection strategies. It should be emphasized that this plan focuses on a variety of techniques to protect land. It is not designed as an inventory of lands with special characteristics and it does not identify specific properties that should be protected. It is important to identify the types of land that are important to protect, but inappropriate to identify specific lands or properties. Too often, such an exercise causes resistance from the landowning community. The focus of this effort has been on general techniques that can be utilized by the Town and landowners who have special lands to protect those values. In addition, this plan seeks to work cooperatively with landowners and keep land in private ownership and management. This is not a plan to acquire lands for public ownership and management.

The following are the objectives identified by the Open Space Committee for the Flower Mound Open Space Plan:

- Develop a package or menu of appropriate land protection techniques for protection of agricultural, natural and scenic open space in Flower Mound.
- Determine which techniques and funding strategies have the greatest potential for protecting open space in Flower Mound.
- Focus primarily on voluntary techniques and incentives that give landowners additional options to meet land protection, financial and family objectives.
- Inform and engage the residents of Flower Mound in a series of public discussions about creative options and alternatives in order to determine which techniques are most appropriate.
- Define the next steps necessary to implement the recommendations of the plan.

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What is Open Space?

The designation of land as open space can mean several things. Typically open space can consist of any land that is not used for development. These open, non-built areas can consist of agricultural lands, pristine environmental areas, golf courses, and public green spaces. The benefit of open space preservation can include advantaged property values, allowance for wildlife and other natural resources, and preservation of a community's visual character. By preserving a community's open space, future development practices can be guided in concert with environmental preservation agendas more effectively.

Open Space in Flower Mound is conserved land that is protected from urban development through landowner stewardship, conservation development approaches, and a combination of incentive and restrictive regulatory measures. The benefits of preserving open space in Flower Mound can be generalized into three main categories.

Environmental Protection – Natural resources that are defined as being unique to a community's identity can be preserved through proactive open space plans. Environmental elements that are candidates for open space protection include major tree stands, wetlands, flood plains, riparian areas, native or undisturbed prairie, wildlife habitat, and other unique natural systems. Through successful implementation, dedication of open space can enhance and protect these vital environmental elements.

Preservation of Community Character – Community character can be quantified by evaluating of an area's sense of place, scale, land uses, amount of urban development, and presence of unique environmental elements. Individual elements that create a place's character can be protected and celebrated by conservation of open space. By preserving conserved open space, the land use, scale, natural features, and amount of urban sprawl is controlled.

Economic Benefits – Open space can add to the value of individual properties, developments, and communities as a whole. By developing residential areas adjacent to conserved open space, property values and market demands increase.

An Open Space System for the Town of Flower Mound

Environmental qualities that promote the country atmosphere and natural environment of Flower Mound consist of four major groups:

Natural Areas

Streams and Flood Plains (Riparian Areas), Wetlands, Steep Slopes, Woodlands, and Wildlife Habitat

The Ancient Cross Timbers Ecological Region

The major natural resource areas found in Flower Mound are associated with the Cross Timbers ecological region. This ecological region reaches from the southern portion of Kansas to North Texas. The Cross Timbers ecological region is comprised of three major categories:

Tree associations – The major component of the Cross Timbers is the tree culture comprised of Post Oaks and Black Jack Oaks. These tree species generally are found where there are poor soil conditions coupled with severe slopes and low annual rainfall. These trees have been found to be up to 400 years old in some cases.

Savanna – Savanna is typically defined as being open grassland containing scattered trees and undergrowth. The definition of Savanna, as it relates to open space, is low-impacted grasslands surrounding the Post Oak and Blackjack Oak tree culture.

Glade – A glade is defined as being open grassland that is surrounded by large stands of trees. In terms

of open space, glades are described as low-impacted grasslands encompassed by Cross Timbers tree culture. The quality of glade in terms of open space is dependent upon the size and the amount of disturbance that has occurred.

Scenic Resources

Flower Mound has a certain visual appeal that is unique in North Texas. The charm of the rural landscape is a major driving factor in the desire of people to live and work in the town. The combination of agricultural land uses and the elements inherent to the Cross-Timber ecosystem provide a sense of country living and a safer place to live. The individual open space elements described above combine to form this country landscape. By identifying important scenic roads, corridors, features, and cultural landscapes, the process of open space preservation can enhance and preserve the visual quality of Flower Mound.

Scenic Roads – Scenic roads have unique aesthetic qualities reflecting the country atmosphere and natural environment, providing an amenity for all residents and visitors.

Scenic Corridors – Scenic corridors are areas along roadways, including areas outside the roadway right of way, that have quality foreground, mid ground, and background views.

Scenic Features – Scenic features are unique elements of the landscape that serve as focal points along the scenic sequence such as topographic features, streams and ponds, or man made features that reflect the town's character.

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Cultural Landscapes - Cultural landscapes consist of items deemed vital to a community's character and history. The "Flower Mound", on FM 3040, from which the Town's name was derived, is an excellent example of a cultural landscape.

Agricultural Lands

There are two principal types of agricultural lands in Flower Mound: pasture land and equestrian lands. Pasture lands may or may not be actively used for grazing. Equestrian lands range from larger horse ranches to equestrian stables and riding facilities, to horses kept on large lot residences.

The Open Space Plan for Flower Mound does not specifically include parks and trails. While there may be occasions when areas that are identified as important open space may also serve some recreational purpose, this is not the primary intent of the Open Space Plan. The Town's Parks and Trails Plan address these active use areas.

The primary intent of the Open Space Plan is to encourage and enable the private, voluntary conservation of open space in Flower Mound, as an alternative to converting it to urban development.

Open Space Conservation Methods

There are three broad approaches that are appropriate for the conservation of open space in Flower Mound:

- Landowner Voluntary Conservation,
- Conservation Development of Subdivisions, and
- To a limited extent, Purchase of Development Rights.

Each of these revolves around the way in which landowners deal with their legal right to develop their property. These rights to develop are known as Development Rights.

What are Development Rights? We may consider the ownership of land to be the possession of a "bundle of rights" associated with that land. These rights include the right to possess, use, modify, develop, lease, or sell the land. Mineral rights constitute one of the items in the bundle with which most people are aware. If the mineral rights have been separated from the remaining items in the bundle, the owner is prohibited from drilling for oil or from mining the land. The right to develop a piece of land for residential, commercial, or industrial purposes is also a right within the bundle. The purchase of development rights involves the sale of that right while leaving all the remaining rights as before.

How is the price of the development right determined? In most areas at the rural urban fringe, the current agricultural value associated with land is substantially lower than the value that land has for development. For example, consider a piece of land that

generates a net income of \$100 per acre per year in agriculture. This amount is typical of much farmland in the U.S. To obtain a fair market value for that parcel in agriculture, we simply divide that annual income flow by the interest rate, say 5%. This procedure, called income capitalization, yields a value of \$2,000 per acre in this example. Now suppose that this parcel comes under development pressure as a place to build housing or some type of retail establishment. A developer may be willing to pay \$5,000 an acre for it. In this case the development value of the parcel would be \$3,000 per acre, simply the difference between the overall market value and the agricultural value.

If a local agency in charge of operating a PDR program makes an offer to the landowner to buy the development rights for \$3,000 an acre, then that landowner has the opportunity to realize the economic benefits accrued from the development potential of the land, while having the ability to keep the land for all other uses except for development. At any time after selling the development rights, the landowner may sell the property itself, lease it, or pass it on to heirs with the deed restriction attached.

This is a significant change from the situation that landowners might face as being "cash poor - land rich," and feeling that they are limited to the option of selling the land for development versus owning a very valuable piece of property while realizing none of the financial benefits.

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Landowner Voluntary Conservation

Private landowners can preserve significant areas of open space through a variety of voluntary actions that can be very attractive both financially and personally. Voluntary land preservation can have the beneficial effect of helping landowners who do not wish to develop their property to be able to live on and use their land as they would like to. It can also benefit the broader community by preserving privately owned land as open space without the expenditure of public funds for buying land or for maintaining land once it has been purchased.

Individuals own land for a wide variety of reasons generally related to their lifestyle, investment, income, and/or conservation interests. These reasons determine how landowners use and manage their land, as well as plan for its future over the long-term. For many, the decision to buy land is made in order to enable a desired lifestyle – be it to have a home in the country, to live on and operate a ranch or farm, or to have a vacation home. Beyond lifestyle, land has been traditionally regarded as a sound financial investment – often a landowner's largest financial asset. Some landowners are primarily interested in the profit or income that can be derived from their investment in land. Others may realize satisfaction merely by owning land – particularly land with natural and scenic qualities – regardless of the lifestyle or investment opportunities it may afford.

Most landowners assume that in order to make money from their

investment in land they must sell some or all of it. More often than not, they do not realize the wide range of options available that can offer significant gains – both financial and personal – without selling or developing some or all of their land.

Numerous incentives exist to encourage a landowner to explore alternatives to the traditional market sale of his property – a process in developing communities that is typically followed by subdivision and conversion of rural land to conventional suburban development.

There are a number of tax benefits that can accrue to landowners that take advantage of alternatives to maintaining the status quo or alternatives to a conventional market sale of their property. Typically landowners are unaware of these benefits. Summarized briefly they include:

- Potential charitable gift deductions.
- Potential reduction in capital gains taxes.
- Potential reduction in personal income taxes.
- Potential reduction in estate taxes.
- Potential reduction in transfer taxes upon the sale of property.
- Potential reduction in property taxes.

The need for cash, or the lack of funds to maintain a property and pay property taxes, can force some landowners to sell their property. For many, this involves giving up one's principal residence – often the most difficult impact of the sale. However, there are a number of potential scenarios by which a

landowner could obtain some cash return on his property and still continue to live on the land. Depending upon the landowner this can be a very persuasive incentive for considering conservation options.

The range of options available to landowners can be broadly divided into two categories:

- Maintaining the status quo – retaining the property with the expectation that no changes will occur in the foreseeable future.
- Protecting all or part of the property in perpetuity – using one or more conservation techniques.

Each option has clear benefits and risks associated with it that must be weighed by the landowner.

Maintaining the Status Quo

A landowner experiences the least need to change his current situation when he feels that his objectives are being met now and will continue to be met in the foreseeable future. There is little incentive to change the status quo until such time as his circumstances change. The landowner retains the property until his death, at which time it passes to his heirs. If a spouse survives him, there are no federal estate taxes. However, heirs to the surviving spouse will be subject to estate taxes due and payable in cash within nine months of the death of the spouse. For some, the amount due precludes any option other than sale of the land for development, particularly if there is a significant capital gain on the property.

Conservation Options

Land conservation may be an attractive option for all or part of a property when landowners have a strong interest in conserving a property and when their objectives cannot be met entirely by maintaining the status quo or by a market sale. There are a number of conservation approaches that can be taken.

A conservation easement is a voluntary way for a landowner to preserve his land. The landowner designates all or a specific part of his property to remain either in its natural condition or to be used for limited purposes, such as agricultural production, nature preserve, or in some cases limited development. The terms of the easement are set forth in a legal agreement between the owner and a qualified non-profit organization. The easement is conveyed by the landowner to the receiving organization.

The easement document is recorded at the county courthouse and forever is a legally binding instrument that “runs with the land” regardless of whom owns it in the future. A conservation easement does not involve the transfer of title or ownership of the land, but does remove certain rights for use of the land, and provides for its protection, as specified by the landowner that creates the easement. The landowner and subsequent owners may retain, sell or lease land covered by a conservation easement at any time, subject to the provisions of the easement. Conservation easements do not necessarily permit public access.

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Several tax benefits may be available to the landowner that grants an easement. In many instances the landowner may deduct the value of an easement as a charitable contribution. The value of the charitable contribution is determined through an appraisal process. It is equal to the amount by which the easement reduces the market value of the property. The IRS Code allows an itemized deduction of up to 30 percent of an individual's adjusted gross income for such contributions. The amount in excess of the 30 percent limitation may be carried over and deducted during the next five years. In most instances, the easement may also reduce the value of the property if it is included in the landowner's estate, thereby reducing inheritance taxes.

Donation of land in fee simple is a straightforward way for a landowner to give land away for conservation purposes. The recipient of the gift must be an organization with a demonstrated record in land management and conservation.

Donation may take several forms:

Outright Donation. The land is conveyed to a qualified non-profit organization or government agency.

Bargain Sale. The land is conveyed at a price below fair market value. This is part gift and part sale, and has the benefit of providing the landowner with some cash return. The sale price is determined jointly by the landowner and the recipient. For federal income tax purposes, it results in both a taxable sale and a charitable contribution deduction.

Donation with a Reserved Life Estate. The landowner gives the property to a qualified organization but retains the right to live on his property during his lifetime. An income tax deduction is allowed for the value of a charitable contribution. The IRS takes into account the number of years that the landowner is likely to enjoy the use of the property in valuing the easement.

Bequest. A bequest is a donation of land in an owner's will. While this does not generate tax savings to the owner during his lifetime, the value of the bequest is deductible in determining the donor's taxable estate.

The ability to take advantage of any or all of these tax saving options depends upon the specific circumstances of the owner and his family. Variables that will determine the potential tax savings and the desirability of certain options include such things as the age and health of the owner, when and for how much the property was acquired, the present value of the property, the owner's estate planning needs, the owner's income and income needs, the owner's conservation interests, and the needs and desires of the owner's heirs.

Conservation Development of Subdivisions and Rural Development

Conservation development of residential subdivisions is an alternative to conventional residential subdivision. Conservation development offers communities – such as the Town of Flower Mound – a means to accommodate growth while at the same time protecting natural resources, preserving rural character, and accomplishing the community's open space goals. Similarly, conservation development benefits landowners and developers by offering a means to develop their property – and to achieve a reasonable return on their investment in land – more efficiently and with fewer adverse impacts on the environment and rural community character.

In conventional residential developments roads and house lots are generally laid out to maximize the number of lots that can be obtained under existing zoning and subdivision regulations. The driving assumption is that the greater the number of lots the greater the return on the investment in land. When this type of conventional development occurs, most of the land is cleared, graded, built upon, paved, or converted to lawn and ornamental plantings. There is often little left of the natural landscape.

Through conservation development an open space system can be created as land development occurs. Each new development that is proposed has the option to utilize conservation development techniques including preservation of specific open space components identified in the open space plan.

As adjoining lands are converted from rural land to residential development areas, components of the open space system are preserved and a network of natural and recreational lands begins to emerge.

Conservation Development for Subdivisions

A successful method in building open space conservation into the land development process is through a technique referred to as "conservation development" for subdivisions.

Simply stated, a subdivision that reflects the principles of conservation development is one in which a portion of the buildable land area is set aside as undivided, permanently conserved open space. This is generally accomplished in what is called a "density-neutral" manner – without a reduction in the number of units allowed. The developer is permitted to construct the total number of units allowed under existing zoning and subdivision regulations. However, the average lot size is smaller, thereby leaving a portion of the site undeveloped as open space.

As an example, a developer owning a 100-acre parcel zoned for two-acre lots could theoretically (not allowing for streets) build 50 units on two-acre lots. Utilizing conservation development, the same tract could be subdivided to allow 50 units on one-acre lots with the remaining 50 acres permanently set-aside as open space. While the same number of units could be built, the original site's natural resource areas and other open spaces of value, such as mature woodlands, buffers

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around water bodies and wetlands, wildlife habitat, scenic vistas, and cultural resources can be retained. The open space is permanently protected from further future development by legally giving up the development rights of the open space area. This is accomplished through conveyance of a conservation easement on the open space to a qualified non-profit conservation organization.

Benefits of Conservation Development

The conservation development alternative to conventional site design offers landowners and developers an opportunity to take advantage of a number of potential economic benefits:

- Conservation development projects often proceed more quickly through the development review process. Many potential conflicts related to preservation of sensitive resources and the impacts of proposed development on community character can be reduced or avoided altogether. Some communities explicitly offer to expedite the permitting process for conservation subdivisions.
- Conservation development projects typically have significantly reduced costs for infrastructure engineering and construction. Fewer homes on smaller lots reduce the need for roads and utility systems, reduce the extent of clearing and grading, and reduce storm water management requirements.
- Lots and homes in conservation development projects typically sell more quickly and for higher prices than lots and homes in conventional subdivisions.

Buyers will often pay a premium to purchase lots and homes adjacent to permanently protected open space, particularly when lots are laid out to maximize views of conservation land.

Conservation development also reduces the environmental impacts of new development when compared to conventional development:

- Conservation development protects the most sensitive natural resources – wetlands, floodplains, steep slopes, mature woodlands, and wildlife habitat – from physical intrusion.
- Conservation development protects buffers adjacent to wetlands and water bodies, thereby reducing the impacts of new development on water quality.
- Conservation development reduces the extent of clearing and grading required for new development.
- Conservation development reduces the impervious surface area in new developments, in turn reducing the storm water runoff from new development.
- Conservation development allows for more flexibility in the layout of on-site disposal systems by making it possible to locate on-site disposal systems in areas better suited for wastewater disposal.

Conservation Development in Flower Mound

Conservation development is proposed in this Open Space Plan as an option that the Town should consider permitting and facilitating wherever possible as a means of accomplishing its open space goals and objectives. To do so, the Town should allow and encourage preservation of a portion of proposed development sites as open space when accompanied by a reduction in minimum lot size below those established in existing zoning and subdivision regulations. This would be made possible through revisions to the Zoning Ordinance and Subdivision Regulations that permit conservation development as an alternative within Agricultural zoning districts.

When utilizing the conservation development option, applicants should follow a five-step site planning process that differs somewhat from conventional site planning. Summarized briefly, these five steps are as follows:

- **Step One** - Identify the open space conservation area, composed of the open space elements and qualities present on the site that are to be protected.
- **Step Two** - Locate house sites within the proposed development area and outside of the proposed open space preservation area.
- **Step Three** - Design the streets and trails for the development.
- **Step Four** - Lay out of lot lines.

- **Step Five** - Design on-site waste disposal treatment and utility systems.

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Long-Term Ownership, Protection and Management of Open Space in Conservation Development Subdivisions

Over the long-term, success of the conservation development approach to building an open space system requires that local government implement standards regarding the ownership and management responsibilities for open space that is set aside in conservation development subdivisions. These can be included directly within the ordinance language that enables the conservation development option.

Ownership of Open Space in Conservation Subdivisions. There are a number of ownership options for open space in conservation subdivisions. The conserved open space can be owned and/or managed by:

- A homeowner association,
- One or more individual landowners, or
- A non-profit land trust.

For some subdivisions, only one option may be appropriate. For others, it may be suitable to combine two or more options. In general it is preferable not to designate open space within lots owned by individual homeowners.

When a homeowner association holds title to the open space, it is important that membership in the association is automatic for all landowners in the subdivision, that the association is empowered to place liens on landowners in the subdivision who fail to pay their dues, and that every effort is made to design the open space to

minimize the costs of long-term maintenance.

Permanent Protection of Open Space in Conservation Subdivisions. The developer of a conservation development subdivision should be required to convey a conservation easement on the open space that is to be preserved. Covenants, deed restrictions, and wording on the final recorded plan do not adequately protect land from future changes in use or from further subdivision. They are therefore not recommended as an acceptable alternative to a conservation easement as a means of permanently protecting open space in conservation subdivisions.

The conservation easement will permanently remove the development rights from the parcel designated as open space. The easement will also stipulate the types of uses that will be allowed within the open space area. Depending upon the project, this will generally include passive recreation, nature preserve, agricultural production, and wastewater disposal. In special cases the easement could be written to allow for limited commercial use related to the sale of agricultural products grown on the open space that is preserved. Wastewater disposal could be allowed where conditions are favorable and systems can be installed without impacts to sensitive natural resources. Whether the public is allowed access to the open space will also depend upon the specific project, and will be determined by the developer and the organization which holds the conservation easement.

The terms of the easement are set forth in a legal agreement between the developer and a qualified non-profit organization or government agency. The conservation easement is conveyed by the developer to the receiving organization or agency. It is then recorded at the county courthouse and forever is a legally binding instrument that “runs with the land” regardless of the party who owns it in the future.

A tax benefit may or may not be available to the developer who conveys the easement on the open space. This will depend upon the extent to which the developer is utilizing the full development potential of the property under existing zoning and subdivision regulations. If there is less than full development of the property, then the developer may be able to deduct the value of the easement as a charitable contribution. The value of the charitable contribution will be determined through an appraisal process. It will be equal to the value of the number of lots that the developer was entitled to create but voluntarily chose not to. Conversely, if the developer sells the full number of lots allowed under existing zoning and subdivision regulations, then the developer will not be entitled to take a deduction. He is considered to have received full value for the property. In addition, permanently setting aside the open space will be a condition of the Town’s approval of the project.

Management of Open Space in Conservation Development Subdivisions. Ordinance language for conservation subdivisions should include requirements for an Open Space Maintenance and

Operations Plan. This should address the various types of situations that are likely to occur – perhaps broken down by habitat type and the extent of public access and passive recreation anticipated. The Town should also provide guidance as to what is to be included in such plans. Some communities provide a model plan as an illustration. The model plan should demonstrate how to establish management objectives, management procedures, and responsibilities for maintenance.

Rural Development

Rural Development, as it relates to Flower Mound, describes any development that is comprised of lots five-acres or larger that respect Flower Mound’s country atmosphere and natural environment. An example of rural development might be an equestrian oriented subdivision where individual homeowners maintain horses. A rural development must contain quality open space elements to be considered for the SMARTGrowth incentives offered to developers.

Preservation Through Purchase of Development Rights

Preservation of open space can also be accomplished through an alternative type of purchase – referred to as a “purchase of development rights” (PDR). PDR is a tool that has been used throughout the United States since the early 1970s to preserve farm and forest lands and open space. It is currently not in use in Texas either at the state or local level.

There may be a limited role for the Town to play in purchase of

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development rights. It is anticipated that if such a process were pursued, it would only be for strategic properties of significance to the town as a whole. If the Town did decide to participate in a PDR program, it would be with grant money or similar funding and not from tax revenues. Most likely, any Town participation would be shared with another party.

PDR programs pay landowners to protect their land from development. In a PDR program a trust, a government agency, or any other qualified non-profit entity purchases the development rights to land that is considered to offer open space benefits to the community. The purchase price is equal to the difference between the market value of the land assuming full development and the reduced value of the land once it can no longer be developed. Once the development rights are sold, a conservation easement is conveyed on the property to either a local government, or to a qualified non-profit organization. The owner retains ownership of the land and the right to continue to live on the property. Property taxes paid on the land would generally not be affected, since most eligible property is typically already preferentially assessed for agriculture. The holder of the conservation easement is charged with responsibility for annual monitoring and enforcement of the terms of the easement.

There are six basic steps to setting up a publicly funded PDR program and acquiring development rights:

- **PDR Step One.** Local government adopts an ordinance establishing the basic provisions

of the PDR program, designating the entity (a government agency or private land trust) that will operate the program and identifying potential funding sources for purchasing development rights.

- **PDR Step Two.** Local government drafts PDR program regulations and guidelines, including a method to target land for preservation.
- **PDR Step Three.** Entity administering program solicits and receives applications from landowners willing to sell development rights and rank them according to the program's regulations and guidelines.
- **PDR Step Four.** An independent appraiser conducts an appraisal of the development rights value of land selected from among the applications submitted.
- **PDR Step Five.** Entity administering program negotiates the conservation easement price with the landowner and purchases the development rights.
- **PDR Step Six.** Entity administering program holds the conservation easement and monitors and enforces the terms of the easement.

Open Space Action Steps

A structured approach to the conservation of open space is a new concept in Flower Mound, and its success will be dependant on the cooperative actions of private landowners and developers, third party non-profit organizations, and the Town of Flower Mound.

There are a number of actions that the Town can take to promote conservation of open spaces, falling into five categories:

- Public education and information,
- Identifying land trust options,
- Incentive programs,
- Regulatory measures, and
- Management and oversight of the open space conservation process.

Public Education and Information

Issues of development rights, conservation easements, conservation subdivision development, land trusts and other issues related to open space conservation are complex and can be easily misunderstood, particularly because they are not widely known in Texas. There is a need for the Town of Flower Mound to take the leadership role in educating residents, landowners, and developers in Flower Mound about open space conservation.

The Town made a major first step on February 12, 2000, when it sponsored an open space symposium. "Conservation Development: The Next Texas Frontier" was presented at Circle R Ranch in Flower Mound as a symposium for the preservation of North Texas' natural heritage and creation of economic value. A

panel of nationally recognized speakers presented topics that included landowner options, the economic value of open land, conservation subdivisions, economic incentives, tools needed to implement a land trust, building partnerships and the importance of developing land responsibly to not only realize the monetary value, but to create long-term benefits for future generations as well. The symposium speakers included:

- Carolyn Scheffer - Texas Land Trust Council and Texas Parks and Wildlife
- Stephen Small - Attorney and Author of Preserving Family Lands
- Eben Fodor - Author of Better NOT Bigger - How to Take Control of Urban Growth and Improve You Community
- Van James - Town Manager, on Flower Mound's SMARTGrowth Management Plan
- Randall Arendt - Author of Conservation Design for Subdivisions
- Bob Engstrom - Developer of the Fields of St. Croix
- David Stahle - University of Arkansas, The Ancient Cross Timbers Forest Project
- Kevin Bennet - Yampa Valley Land Trust and City Council President of Steamboat Springs, Colorado

After such a successful beginning, the Town needs to maintain the public education and information initiative. As a first step, the "Conservation Development: The Next Texas Frontier" symposium was video taped, and will be broadcast over the Flower Mound local cable television channel. Future initiatives might include

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public forums and materials such as:

- Public service announcements
- Educational literature
- Community discussion groups
- Future symposia

Exploring Land Trust Options

Essential to accomplishing the Town of Flower Mound's open space goals will be a cooperative working relationship with a non-profit land trust. This land trust – be it an existing trust already operating within the Dallas-Fort Worth area, or a newly formed land trust – will be the Town's conservation partner in working with landowners, developers, government agencies, and other conservation groups to preserve open space in Flower Mound.

There are a number of reasons why Flower Mound should consider working with a land trust:

- Non-profits bring speed, flexibility and creativity to negotiations with landowners, frequently utilizing knowledge of the tax code and novel financing arrangements to accomplish land transactions that are beyond the capabilities of government.
- Non-profits are perceived as friendly participants in negotiations, without the stigma that may be associated with government agencies, frequently facilitating negotiations with landowners, particularly those suspicious of government.
- Non-profits provide vehicles for donor foundations, corporations, and individuals and other donors to make gifts of land or cash to facilitate an acquisition.
- Non-profits can provide manpower to accomplish

preservation, such as drumming up public support for projects, launching a successful campaign for acquisition funds, or maintaining preserved properties.

What is a Land Trust?

In the past few decades, communities and concerned citizens across America have set up hundreds of non-profit conservation organizations, referred to as land trusts or conservancies, to protect land for its resource and open space values.

The Land Trust Alliance, based in Washington, D.C., is the national umbrella organization of land trusts providing leadership, public policy, educational, and advisory support for land trusts. The Land Trust Alliance in its *"Guide to Forming a Land Conservation Organization"* defines a land trust as follows:

"...Land trusts are local, state, or regional nonprofit organizations directly involved in protecting land for its natural, recreational, scenic, historical, or productive value. Most land trusts are private, non-profit corporations. There are also a few governmental or quasi-governmental bodies called land trusts that operate with the freedom and flexibility of a private trust, some of which have a private board or the ability to use private funds. Land trusts are not "trusts" in the legal sense, and may also be called "conservancies," "foundations," or any number of other names descriptive of their purpose.

Land trusts are distinguished by their first-hand involvement in land transactions or management. This involvement can take many forms.

Some land trusts purchase or accept donations of land or of conservation easements. Some manage land owned by others or advise landowners on how to preserve their land. Some land trusts help negotiate conservation transactions in which they play no other role. Land trusts often work cooperatively with government agencies by acquiring or managing land, researching open space needs and priorities, and assisting in the development of open space plans. They also may work with other non-profit organizations and sometimes with developers. A land trust may do one, several, or all of these things.

Some land trusts are organized to protect a single piece of property, but the more active trusts have a larger land protection agenda. They may focus their efforts in a community, in a region, on a particular type of resource, or on a protection project. Some operate statewide and work cooperatively with local land trusts in addition to conducting their own land conservation projects. Resources protected by land trusts are as diverse as forests, prairie grasslands, islands, urban gardens, river corridors, farmland, watersheds, parklands, marshes, ranchland, scenic vistas, cultural landscapes, Civil War battlefields, and hiking trails.

Most land trusts depend on volunteer leadership and support even if they also have a professional staff. They have the potential to bring together a wide range of people in a community, such as naturalists, planners, farmers, hunters, landowners, community leaders, sometimes developers, and others who care

about special lands in their communities.

Land trusts have many advantages as a vehicle for protecting land. They can hold and manage land and other assets as a corporation, rather than through individuals. As private organizations, land trusts can be more flexible and creative and can generally act more quickly than government agencies, since they are not as restrained by politics and procedures. They are able to negotiate with landowners discreetly, confidentially, and quickly.

Their nonprofit status brings them a variety of tax benefits. Donations to land trusts may qualify donors of land, conservation easements, or money for income, estate, or gift tax savings. Properly structured land trusts are exempt from federal and state income taxes, and sometimes from local property and real estate transfer taxes as well. Nonprofit status is also an advantage in raising funds from a variety of sources.

As community-based organizations, land trusts draw on community resources, including volunteer time and skills. Their community orientation is also helpful in selecting and negotiating transactions. They are familiar with the land in the area and often have the trust and confidence of local landowners that may not want to work with government agencies or entities from outside the community.

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Role of a Land Trust in the Town's Open Space System

The Town of Flower Mound should view its future relationship with a land trust as a conservation partnership. The Town will set the stage for conservation by establishing public policy to preserve open space, implementing the recommendations of the Open Space Plan, and considering options to provide support for a land trust working in the Town. The land trust will take on a number of functions critical to accomplishing the open space goals that are outside the purview of government or that can more effectively be implemented by a non-profit organization. These roles could include:

Working with Landowners. The major role of the land trust will be to work with landowners in the Town. There will be a number of goals – to promote public understanding of the Town's open space program, to help landowners understand their options, to help interested landowners develop master plans for their properties, and to assist landowners with implementing their plans. Typically the land trust will work with landowners through a network of contacts in the community, gaining initial opportunities to meet with landowners through informal referrals – from friends, family members, and professional advisors such as estate lawyers, accountants, and financial advisors.

Working with Developers and Realtors. Secondly, the land trust will be encouraged to work with the development and real estate community – including developers, architects, landscape

architects and engineers – to increase awareness regarding conservation development and limited development options. In communities with successful conservation development and limited development projects, there are typically one or two Realtors and developers who realize the potential market and develop specialty practices serving conservation buyers and/or selling lots/homes in conservation development projects.

Receive Charitable Gifts of Land, Cash, and Other Assets to Support the Open Space Program. As a non-profit corporation with tax-exempt status the land trust will be qualified to receive charitable gifts that enable donors to potentially qualify for significant tax benefits. This includes traditional gifts of cash and appreciated stocks, as well as gifts of land (trade lands) and interests in land (conservation easements). Gifts of cash and other assets will be available to the trust to finance its operations and/or land acquisition.

Hold, Monitor and Enforce Conservation Easements. The land trust will be qualified to receive, monitor and enforce conservation easements. The trust will assist landowners with activities such as baseline documentation required to draft and convey easements. The trust will monitor its easement properties on a regular basis, typically once a year, to make certain that the terms of each easement are being complied with. If monitoring reveals a violation of an easement, then the trust has the legal right to require the owner to correct the violation and restore the property to its condition prior to the violation.

Seek Funds to Support Acquisition of Open Space. The land trust will be able to assist with land preservation in the Town by helping to raise funds to acquire lands. The Trust could help the town to qualify for special state and federal monies that can be used for acquisition. The trust could run special project campaigns that are focused drives to raise money solely for acquisition of specific parcels. It could also qualify for specific grants from private foundations for specific acquisitions.

Seek Funds to Continue Operation of the Trust in Support of the Open Space Program. The land trust will seek funding to sustain its operations in a number of ways, preferably in accordance with a well-structured development program. Development activities will likely include special campaigns to raise endowment monies, sponsoring special events, seeking grants from private foundations, and/or contributions from members.

Options for Facilitating a Land Trust Working in Flower Mound

There are three basic options for facilitating land trust activities in support of the open space preservation program in Flower Mound.

Develop a Working Relationship with an Existing Land Trust

The best alternative for working with a land trust is probably to establish a cooperative relationship with an existing land trust that is already up and running in the Dallas-Fort Worth area. The Town could take advantage of an existing

institutional structure and the expertise and experience already in place.

The key to this approach is identifying a willing and able land trust. A number of land trusts are presently active in the Dallas-Fort Worth Area:

Natural Areas Preservation Association, Inc. (NAPA) is a Dallas-based, private, non-profit volunteer organization dedicated to preserving areas of natural land as an example of Texas heritage. NAPA protects more than 3,000 acres in 34 preserves in twenty-two counties. Acquisitions are by gifts, purchase or conservation easements. There are approximately 300 members. NAPA's primary means of preserving land is through land donations, land purchases, and easement donations.

Connemara Conservancy is a Collin County-based private non-profit volunteer organization that holds beautiful tracts of land in trust for the enjoyment of the people. Its primary area of operation is Collin County and adjoining North Texas counties. The Conservancy currently owns 72 acres, has 200 members, and no professional staff. Its primary means of preserving land is through land donations.

Save Open Space is a Dallas-based private non-profit volunteer organization that advocates intelligent use and acquisition of natural open space in and around Dallas. The organization has protected approximately 650 acres and has approximately 250 members. Its primary means of preserving land is through land

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exchanges, limited development, and negotiating with landowners.

Discussion with each of these three trusts will have to occur before a determination can be made as to whether any of them would be suitable for and interested in working with Flower Mound. There are considerations related to each organization's institutional capacity to provide assistance in Flower Mound, as well as the programmatic interests of each – whether they would be interested in the type of program that Flower Mound is seeking to implement.

Facilitate Start-Up of a New Private Land Trust

As an alternative to working with an existing land trust, the Town of Flower Mound could facilitate start-up of a new private land trust. The Town could facilitate creation of a trust that has an exclusively local focus, or alternatively a trust that has a regional focus – such as one that is focused upon protection of the Cross Timbers or other natural areas in the Dallas-Fort Worth area. Under this option, the trust would operate privately, working cooperatively with the Town and perhaps other local governments in the region.

There are a number of approaches to starting a land trust. Most trusts formed in recent years are community-based products of a grass roots effort by citizens rallying around a common cause to protect diminishing open space in their community or to protect a particular resource area from development. Less often they are jump-started with support from local government, a federal or state government program, business leaders, or other conservation groups.

While there is no set process for starting a land trust, there are a number of tasks that typically should occur:

- Develop a group of core individuals who are well respected in the community who will devote the time and energy needed to develop support, to locate potential funding sources, and to identify and pursue opportunities.
- Get educated regarding land trusts in general.
- Identify and implement activities to inform the community regarding the land trust's mission.
- Create an Organizing Committee that will coordinate the initial work needed to organize and establish the land trust.
- Create a Board of Directors.
- Hold regular meetings of the Board and Organizing Committee.
- Complete technical and legal work to incorporate the land trust, to obtain tax exempt status, and to set up administrative functions.
- Establish the trust's mission.
- Prepare a strategic plan for accomplishing the trust's mission.

- Initiate fundraising activities.
- Hire staff (if needed and if funding is available).
- Identify and accomplish a first conservation project.

The decision to form a new land trust must be carefully considered to determine whether or not it is necessary, timely and the best approach to achieving the community's conservation goals. The scope of the mission must be broad enough to sustain interest in the organization's activities. This lends support to the concept of a regional land trust that has a broader geographic basis and looks at the conservation needs of a variety of natural resource areas in the broader Dallas-Fort Worth area. There should also be no duplication of effort with other land trusts that are already successfully working in the area. Finally, there must be adequate leadership, skilled committed volunteers to get the effort organized and ability to raise funds to support the trust's activities.

Start a Town Land Trust

A less used alternative is creation of a town government land trust that could operate much like a private land trust, with the ability to use both public and private funds. This is generally a less desirable choice. Landowners are generally suspicious of government and inclined to be less interested in working cooperatively with government. Many landowners will not consider giving land or interests in land to government entities.

Other Conservation Partners

Several non-profit conservation organizations with a nationwide

conservation agenda are active in the Dallas-Fort Worth area. These groups have a number of conservation initiatives underway across the country, including the State of Texas. One or more of these could be interested in the open space program proposed in Flower Mound, not as the Town's primary non-profit conservation partner, but by providing some type of technical or perhaps financial support for the program in general or for a specific project.

The Nature Conservancy. The Nature Conservancy is an international, private non-profit conservation organization. Its mission is "to preserve plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive." Since 1951, The Nature Conservancy (TNC) has protected more than 11 million acres of habitat in the United States and an additional 60 million acres worldwide.

TNC maintains offices in all fifty states. The Nature Conservancy of Texas is "dedicated to preserving the rich heritage of plants, animals and natural systems that represent Texas' natural heritage." TNC of Texas has a professional staff of over 65, and has conserved over 365,400 acres of ecologically unique lands through acquisition. Currently TNC of Texas maintains 16 offices throughout the State – the state chapter headquarters in San Antonio, 13 regional and preserve offices, and two development offices, including a two person development office in Dallas. TNC of Texas has divided the state into eleven ecoregions. The Dallas-Ft. Worth area lies

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within the Cross Timbers and Southern Tallgrass Prairie Ecoregion. Within this ecoregion TNC of Texas maintains six preserves that are overseen by the North Texas Office in Celeste, Texas.

TNC of Texas is involved in three main conservation programs across the state:

- Through the Texas Land Stewards' Society, TNC of Texas works with private landowners who are voluntarily protecting the unique elements of the state's natural heritage that occur on their land.
- Through acquisition – by gift or purchase – TNC of Texas secures and transfers conservation lands to other private and public groups which have expertise in natural area management.
- By working with willing sellers and donors, TNC of Texas acquires land and legal interests in land through gift or purchase and manages a system of nature preserves.

The Town of Flower Mound should view The Nature Conservancy as a potential conservation partner. TNC of Texas is likely to be interested in conservation projects involving ecologically significant lands in Flower Mound – particularly areas within the Cross Timbers. The Town should inform TNC of Texas regarding its new open space program. TNC may at some time be interested and in the position to assist the Town with its conservation efforts by providing technical support, and/or possibly financial support for acquisition of land or interests in land (such as conservation easements) within the Cross Timbers.

The Trust for Public Land. The Trust for Public Land (TPL), established in 1972, works to protect land in communities across the United States for recreation and human enjoyment and to generally improve the health and quality of life for Americans. TPL offers real estate, finance, and legal expertise to community groups, government agencies, and landowners seeking to conserve critical open space resources. Since its inception, TPL has facilitated preservation of some 1.18 million acres of public open space.

TPL works with landowners, government agencies and community groups to:

- Create urban parks, gardens, greenways, and river ways.
- Build livable communities by setting aside open space in the path of growth.
- Conserve land for watershed protection, scenic beauty, and close-to-home recreation.
- Safeguard the character of communities by preserving historic landmarks and landscapes.

In Texas, TPL has protected over 18,000 acres, including the Great Trinity River Park in Dallas. TPL has also established the Texas Our Texas Heritage Program (TOT) whose goal is “to establish a sufficient level of public funds in the state budget for the next ten years to enhance, manage and conserve the natural and cultural resources of Texas for the use and enjoyment of present and future generations.” It is a three-year

research, education and partnership building effort – that began in 1999 – to promote parkland, water, wildlife, farm, ranch and historic resource protection. If successful, like other similar state conservation programs, TOT will provide at least \$1 billion in state funds over its first ten years. Legislation is anticipated in 2001. TPL recently opened a Texas State office located in Austin that is supported by staff in the Southwest Regional Office in Santa Fe, New Mexico.

In 1999, TPL initiated a program to promote land conservation as a smart-growth strategy. This program – Greenprint for Growth – promotes a smart-growth strategy that emphasizes land conservation to ensure quality of life, clean air and water, recreation, and economic health. Among the cities cited by TPL in 1999 for an integrated, long-term, land conservation program to meet smart growth goals is Austin, Texas. In 1992 Austin initiated a Smart Growth Initiative. This program's goal is to protect sensitive resources in advance of growth while still attracting development to the community. Permanent open space, protected through three voter referendums in the last decade that provided \$130 million in acquisition funds, is a part of a package of incentives designed to encourage smart development.

TPL's focus on smart-growth, and its ongoing initiative to create a statewide land conservation program, make it an obvious potential non-profit partner for the Town of Flower Mound. TPL is interested in finding communities in Texas where it can demonstrate

the benefits of smart-growth. Flower Mound is very likely such a community. In addition, if a statewide land conservation fund is established in 2001, as TPL hopes, then Flower Mound has the potential to become a model community that is prepared to receive funds for open space acquisition in accordance with an adopted comprehensive plan and open space plan. TPL staff will be able to assist the Town with preparing itself to qualify for state acquisition funds if and when they become available.

The Conservation Fund. The Conservation Fund is a national, non-profit land and water conservation organization based in Arlington, Virginia, which works in partnership with businesses, private landowners, and other non-profit and public agencies. The Fund has provided land use planning and community conservation services to communities around the country, particularly in areas adjacent to national parks and wildlife refuges. Since it began, the Fund has forged partnerships to protect more than two million acres of conservation land. The Fund maintains offices across America, including an office in Austin, Texas.

The Conservation Fund sponsors a number of conservation programs, among them the American Greenways Program. The Greenways Program is designed to help communities and states establish public and private open space corridors. For example, the Fund is currently initiating a greenway program for the Schuylkill River in Philadelphia, utilizing \$2.9 million in grants that it helped secure for local

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organizations from a number of private foundations interested in land conservation in the Philadelphia area.

The Town of Flower should explore opportunities available through The Conservation Fund. The Fund could potentially assist the Town with securing financial support for conservation initiatives from businesses and private foundations in the Dallas-Ft. Worth area and elsewhere in Texas.

Incentive Programs

The Town of Flower Mound is in the position to offer a number of incentives to encourage landowners and developers to preserve open space through the conservation development process.

Incentives to Promote Conservation Development and Rural Development

The conservation development subdivision concept is new to the Town of Flower Mound. In order to encourage developers to take on a conservation development, the Town can offer a number of incentives that will increase its attractiveness. Generally, the Town can make the subdivision and land development process less burdensome in terms of time and cost, as well as promote creation of new development that retains a more rural character. Briefly summarized these incentives include:

- Adoption of rural development standards pertaining to road construction, sidewalks, street lighting and drainage.

- Supporting consideration of alternatives for accommodating on-site wastewater disposal.
- Expediting the development review process.
- Supporting an effort to obtain relief from roll-back taxes.
- Granting relief from the requirements for parkland dedication.
- Allowing income-generating agricultural uses on land protected through conservation easements.

Rural Development Standards for Conservation Development Subdivisions and Rural Developments

The Town should consider adoption of a set of rural development standards. These standards will enable design of conservation development subdivisions and rural developments that retain a rural character. They will also reduce the cost for constructing roads and utility systems.

To encourage conservation development subdivisions, the Town of Flower Mound should adopt Rural Development Standards, with relaxed development standards, such as:

- Roadways - permit narrower street widths, permit asphalt streets; eliminate requirements for curbs and gutters.
- Sidewalks - Do not require sidewalks.
- Street Lighting - Do not require street lighting.
- Drainage - Encourage maximum use of non-structural stormwater management measures, including siting detention/ retention facilities in common open space area.

Permit and Encourage Alternatives for On-Site Disposal

Future residential subdivisions in the Cross Timbers Conservation Development District of Flower Mound will rely upon individual on-site disposal systems (OSDS).

The Town of Flower Mound is in the position to offer a number of incentives related to on-site disposal that could facilitate the conservation development subdivision alternative:

- Allow OSDS Systems Off-Lot in Open Space - Allow OSDS in conservation development subdivisions to be located off-lot, within undivided common open space having suitable soil, slope, and drainage characteristics that will enable the smaller lots – one acre in size – proposed in conservation development subdivisions.
- Allow In-Ground Community Disposal Systems in Open Space - Allow use of in-ground community septic systems in conservation subdivisions to serve multiple residences, with treatment and disposal occurring in undivided open space having suitable soil, slope, and drainage characteristics.
- Encourage Alternative Types of Community Disposal Systems - Encourage appropriate use of environmentally sensitive innovative sewage treatment and disposal alternatives in conservation subdivisions such as land treatment, spray irrigation, wastewater reclamation and reuse, and constructed wetlands

Expedite Development Permitting

Permitting requirements generally add substantial time and costs to the conventional residential development process. Time is required for local government to review, process, and act on applications. Time is also required when proposed projects are found to have adverse impacts on the environment and/or community character, when there is public resistance to the project, or when the proposal does not meet minimum subdivision and land development regulations.

Conservation development and rural development have the potential to eliminate a number of these expensive delays. In general, the public is likely to be more receptive to a conservation development than a conventional subdivision, thereby reducing the likelihood and extent of public resistance. Second, conservation development is likely to have fewer environmental impacts, thereby posing fewer design challenges and areas of potential conflict with permitting agencies.

To encourage conservation development and rural development the Town of Flower Mound should adopt expedited development permitting for conservation development subdivisions, by implementing revisions to the development review process that will shorten time periods required for review of permit applications for conservation and rural developments.

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Pursue Options for Rollback Tax Relief

Most landowners in Texas who own rural land, historically or currently in agriculture, are enrolled in the State's agricultural tax program. Enacted in 1966, this is a deferred taxation program in which landowners receive preferential property assessment as long as their land remains in agriculture. When land is converted to an ineligible use or sold for development, landowners must pay a penalty. This penalty – referred to as a "rollback" – is calculated based on the sum of tax benefits received for a number of years before the land was converted.

Some communities and land trusts – seeking to promote conservation subdivision and limited development on rural agricultural lands as a means of preserving open space – have explored a number of options to obtain rollback tax relief where there is less than full development of land.

To encourage conservation subdivision the Town of Flower Mound should explore and support options under Texas law to enable landowners to obtain relief from rollback tax penalties in certain situations. Qualified situations would include those where a landowner pursues less than full development of a property currently enrolled in the State agricultural tax program or pursues a conservation or rural development subdivision. Land that remains undeveloped in open space must be permanently protected through conveyance of a conservation easement to a qualified non-profit organization

that allows no further developed land uses.

Partial Relief from Requirements for Parkland Dedication

The Town of Flower Mound's Parkland Dedication Ordinance requires developers to dedicate parkland or to pay a fee in lieu of parkland dedication. This requirement is based upon current development practices in which land is fully developed, without preservation of permanently protected open space on-site. Without the Town's parkland dedication requirement the primary means of meeting the park needs of new residents living in residential developments would be to utilize town funds to acquire land, placing a heavy burden on the Town and its taxpayers.

Conservation and rural development when properly designed will help to build the Town's proposed open space system. Recognizing this, it is reasonable to suggest that developers choosing the conservation or rural development option be given partial relief from the requirements for parkland dedication.

To encourage conservation and rural development the Town of Flower Mound should amend the Parkland Dedication Ordinance to provide partial relief from parkland dedication requirements for conservation and rural development, by reducing parkland dedication or impact fee requirements for conservation development and for qualifying rural developments. Relief would be based upon a number of

considerations, including but not limited to:

- The amount and character of the open space preserved.
- Provisions for public access to open space.
- The potential for community-wide trail connections through the open space.
- In certain limited situations, the potential use of a portion of the open space to meet active recreation needs.
- The proposed use, if any, of open space for income-generating agricultural uses.

Allowance for Income-Producing Agricultural Uses on Protected Land

The Town of Flower Mound historically was a ranching and agricultural community. Today, while the character of much of the Town has changed, there remain areas where cattle graze, hay and pasture crops are grown, and horse farms operate. In an effort to retain a sense of its historic ranching and agricultural character, the Town should enable the continuation of income-generating agricultural uses on protected open space in conservation subdivisions. For some landowners, this will be a strong incentive to utilize the conservation development option.

To encourage conservation development the Town of Flower Mound should include compatible income-producing agricultural operations and related direct sales of agricultural products as permitted uses in open space areas of conservation developments. Income-generating agricultural uses should be defined to include farming and ranching activities

required to produce crops and livestock (including horses). Recognizing the changing character of Flower Mound, care should be taken to exclude agricultural uses that are incompatible with adjacent residential development (i.e. – permitted uses should not include dairy operations, pig farms, poultry houses, etc.). Commercial activities should be limited to the sale of products grown on-site or the sale of services related to the agricultural activity (rental of equestrian facilities and/or equestrian training services).

6.0 OPEN SPACE PLAN

Regulatory Measures

On February 17, 2000, the Flower Mound Town Council adopted a new Section 3.01.01 of the Town's Land Development Code, entitled "SMARTGrowth Management Plan," as well as modifications and proposed modifications to other sections of the Land Development Code. Several aspects of the SMARTGrowth Management Plan and the other Land Development Code modifications are directly supportive of the goals and intent of the Town's Open Space Plan. A summary of those aspects is included below.

SMARTGrowth Management Plan

The SMARTGrowth Management Plan is a community-based growth management strategy employing a zoning overlay to effectuate the community vision and values embodied in the Flower Mound Comprehensive Plan by translating them into "Threshold Zoning Criteria" to establish the character and quality of development desired within each of the Town's four land use planning districts. Emphasizing the character and quality of development, the SMARTGrowth Management Plan's overarching purpose is to preserve and enhance Flower Mound's community character and its quality of life.

The SMARTGrowth Management Plan was adopted to mitigate the ill effects of rapid and intense urbanization caused by explosive population growth. These ill effects include, but are not limited to the following open space effects:

- Destruction of natural landforms and associated natural and ecological resources, including important plant and wildlife habitat.
- Loss of open space, agricultural land and scenic vistas.
- Degradation in the quality of the community's natural and built environments resulting in the loss of community character or sense of place (i.e., "placelessness").

The objectives of the SMARTGrowth Management Plan as they relate to open space include:

- Protect the open lands, natural landforms, agricultural landscapes and scenic vistas that create and define Flower Mound's unique community character and quality of life.
- Protect the natural, scenic, and ecological resources that are essential elements of Flower Mound's community character and which provides irreplaceable plant and wildlife habitat.
- Ensure that development is respectful of and appropriately integrated with the natural physical geography of the land in Flower Mound by requiring environmentally sensitive development techniques to eliminate "scrape and build" developments.
- Ensure that the character and quality of Flower Mound's built environment, relative to residential development, contribute to desired community character objectives and integrate with surrounding natural landscapes.
- Protect existing farmland and agricultural operations from conflict with new residential development.

- Implement a long-term strategy of sustainable development that embodies the community's vision and values; achieves both community character and economic development objectives; and considers the social, environmental and fiscal impacts of land development.
- Preserve and enhance Flower Mound's distinctive community character and quality of life by ensuring that its natural and built environments are consistent with the community vision and values embodied in the Flower Mound Comprehensive Plan.

In the Flower Mound context, SMARTGrowth encompasses sustainability, but also means:

- Growth that respects and preserves open lands and natural landscapes and that recognizes and capitalizes on the tremendous natural, scenic, economic and social values inherent in the Town's natural environment.
- Growth that not only respects and preserves the natural environment, but also enhances the quality of the built environment, for community character or sense of place is defined by the quality and character of both the natural and built environment.

The SMARTGrowth Management Plan requires several conditions that affect open space to be met before a development application or project can be approved. These are briefly summarized below:

Drainage: the projected velocity and volume of surface run-off must not exceed pre-development conditions.

Wetlands: proof of compliance with regulations pertaining to the protection and mitigation of jurisdictional wetlands, with the Town reserving the right to require the protection and preservation of any or all jurisdictional wetland areas and to deny mitigation measures.

Habitat Protection: in either the Cross Timbers Conservation Development District or the Cross Timbers Protection Area, a professionally prepared Habitat Protection Plan must be submitted for the protection of habitat and wildlife values.

No Urban Residential Development in the Cross Timbers conservation Development District: a development application or project in the Cross Timbers Development District must not propose urban residential development, defined as residential development containing residential lots of less than two acres in area, exclusive of smaller lot sizes approved by the Town in conjunction with a conservation development. The purpose of this criterion is to protect the open lands, natural landforms, agricultural landscapes and scenic vistas that create and define Flower Mound's unique community character and quality of life.

Slope Protection: in the Cross Timbers Conservation Development District, no development on any existing topographic slopes of 12.0% or greater, nor alteration of any existing topographic slopes that are less than 12.0% but equal to or greater than 5.0% (other than within five feet of the footprint of the proposed structure or structures).

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Ponds Protection: in the Cross Timbers Conservation Development District, no alteration or discontinuation of recharge flows to existing impoundments of water with a surface area capacity of one-half acre or more, and integration into the proposed development and Habitat Protection Plan.

"Right to Farm:" in the Cross Timbers Conservation Development District, an agricultural resource management easement must be recorded acknowledging the existence of agricultural operations or uses on adjacent properties, and granting an easement to adjacent property owners to continue agricultural operations or uses.

Scenic Corridors and Vistas: in the Cross Timbers Conservation Development District, development must occur in patterns that minimize the visual impacts of the development in relation to scenic corridors or vistas as viewed from arterial or collector thoroughfares.

Land Development Code Revisions

Several related Land Development Code amendments and other related ordinances were adopted in conjunction with the SMARTGrowth Management Plan, which support the Open Space Plan. These related amendments and ordinances include the following:

Amendments to the Town's Agricultural Zoning District

The amendments to the Town's Agricultural Zoning District were adopted to:

- Provide for a conservation development option under the agricultural zoning district classification.
- Provide for the calculation of density on the basis of one unit per two acres, which complies with the existing rural land use designation and corresponding agricultural zoning district classification.
- Provide for a minimum lot size of one acre with conservation development, with the remaining acreage to be preserved.
- Require a minimum of 50% of the gross land area proposed for development to be conserved.
- Require that all conserved land be placed in a conservation easement.
- Create incentives for conservation development, consistent with the Conservation Development Threshold Zoning Criteria (e.g. expedited development review, permit fee waivers, reduced street infrastructure requirements, reduced park land dedication requirements, and reduction of monetary assessments relative to agricultural rollback taxes).

Amendments to Tree Preservation Requirements

The amendments to the Town's tree preservation requirements were adopted to:

- Create the position of Tree Preservation and Enforcement Officer.
- Create a "Majestic Tree" designation, which will include any protected tree with a caliper width equal to or greater than 75% of the caliper width of the largest tree of the same species listed in the most recent edition

of the Big Tree Registry published by the Texas Forest Service.

- Require public hearings before both the Tree Board and Town Council for applications for Tree Removal Permits for Specimen, Majestic or Historic Trees and for Protected Trees located in the Cross Timbers Protection Area.
- Extend the same protections provided for Specimen and Majestic Trees to Protected Trees in both the Cross Timbers Conservation Development Area and Cross Timber Protection Area.
- Require mitigation for the removal of all protected tree designations, even with a Tree Removal Permit. Such mitigation will consist of either replacement trees or mitigation fees, with the mitigation varying with the type of protected tree removed. For example, Protected Trees are proposed to be replaced based upon a caliper width ratio of 1.5 to 1.0, while Specimen Trees are proposed to be replaced based upon a caliper width ratio of 2.0 to 1.0, and Majestic and Historic Trees are proposed to be replaced based upon a ratio of 2.5 to 1.0.
- Substantially increase the penalties for the unauthorized removal of all protected tree designations.
- Allow monetary penalties and mitigation fees to be used for tree preservation, tree planting and/or enforcement purposes.
- Prevent Tree Removal Permits for trees on one acre lots or larger from being obtained prior to the issuance of a building permit.
- Require applications for Tree Removal Permits to be completed and signed by a registered Arborist or Landscape Architect.

- Require the application for a Tree Removal Permit to contain the following information for all trees proposed for removal: trunk location, drip line, caliper width, height, reproducible color photograph, approximate age, common name, and natural and proposed grade elevations at each trunk location.
- Require on-site signage to notify the general public that a Tree Removal Permit has been applied for relative to the subject lot or tract.

Amendments to Park Land Dedication Requirements

The amendments to the Town's parkland dedication requirements that were adopted will:

- Increase the land dedication requirement from two acres per 100 residential units to 3.36 acres, based upon the National Recreation and Park Association's standard of 10.5 acres of parkland for each 1,000 population.
- Increase the park dedication fee (or the fee-in-lieu-of land) from \$500 per residential lot to an amount equivalent to the fair market value of the amount of land that would have otherwise been required to be dedicated within the proposed development, as determined by an appraisal.
- Implement a new park development fee of \$789 per residential unit to ensure that new neighborhood parks are provided with minimum, standard amenities, based upon the amenities cost for a typical five acre neighborhood park.

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- Require dedicated parkland to be established with grass by the developer.
- Require all park land dedication requirements to be satisfied prior to the acceptance of public improvements for a development.
- Eliminate credits for private parks and amenities.

The level of park development appropriate for the Cross Timbers Conservation Development District can be less than the more urbanized districts of Flower Mound, which allows the Town to be able to provide a reduction in parkland dedication requirements for conservation or rural development in that district without compromising the quality of life for the district's residents.

Amendments to the Town's Engineering Standards

The Town Council approved preparation of amendments to the Town's Engineering Standards, which will support the Open Space Plan by providing for:

- An asphalt paving option for conservation development, and
- New design requirements for drainage structures to conform to the new Threshold Zoning Criterion relative to drainage.

Management and Oversight of the Open Space Conservation Process

The Flower Mound Open Space Advisory Committee was founded on December 17th, 1999 by resolution of the Town Council.

The mission of the Open Space Advisory Committee is to assist the Town Council in identifying,

developing and implementing effective strategies for protecting Flower Mound's open spaces – it's open, productive agricultural, natural, and scenic lands – while creating compatible recreational opportunities where appropriate.

The committee was given the following powers and duties:

- To inform and engage the citizens and landowners of Flower Mound in a series of public discussions relative to the importance of open spaces and the techniques and options that exist to protect and preserve same.
- Assist the Town Council in identifying citizen and landowner attitudes and preferences with regard to protecting open space resources in Flower Mound.
- Assist the Town Council and its consultants in the development of an Open Space Plan for Flower Mound in conjunction with a comprehensive review and update of the Town's Master Plan.
- Develop a package of appropriate land protection techniques and tools for protecting open, productive agricultural, natural, and scenic lands, while creating compatible recreational opportunities where appropriate.
- Assist the Town Council in determining which techniques, tools, and funding strategies have the greatest potential for protecting open spaces in Flower Mound.
- Formulate a strategy for public education relative to the importance of open space to the future character and economic health of Flower Mound.
- Develop and provide educational and technical resources to landowners.

- Assist the Town in creating incentives and regulatory requirements to improve rural development patterns.

The members of the committee were appointed to serve an indefinite term, serving from the date of appointment until adoption of an Open Space Plan by the Town Council; at which time, the purpose, powers and duties, and continued existence of the Committee are to be reviewed and evaluated by the Town Council.

There will be a definite need for an entity of the Town to have an ongoing role in encouraging, promoting and monitoring the development of the open space process in Flower Mound.

The existing Open Space Advisory Committee should eventually evolve into the Flower Mound Open Space Advisory Board. The Board's mission will be to help the Town facilitate grant and loan applications for open space funding programs, facilitate relations between landowners and land trusts, and to evaluate and keep current the Open Space Plan and its components. Individual tasks for the Open Space Board should include the establishment of a Technical Open Space Resource Team and to formulate the Open Space Public Education Program. By establishing the resource team, the Board can provide the expert knowledge base required to successfully implement the plan and to facilitate landowners during the process.

Facilitation of Grant and Loan Applications

There are potential sources of funds to help the Town and the Open Space Advisory Board implement the Open Space Plan. The Town would be most effective at competing for these funds with the assistance of a staff member assigned to and with expertise in, grant applications and other techniques in fund raising.

Public Funding Options for Open Space

Public funds to support open space in the Town of Flower Mound can come from a variety of federal and state sources.

Federal Funding Programs

Land and Water Conservation Fund.

The Land and Water Conservation Fund (LWCF) is the largest source of federal money for park, wildlife, and open space land acquisition. Authorized expenditures are approximately \$900 million, financed primarily from offshore oil and gas drilling receipts. A portion of the money is intended to go to states as matching grants for local park and open space projects. Unfortunately, during most years Congress has generally appropriated only a small portion each year, diverting LWCF funds to other government programs. (The exception occurred in 1998 when the full \$900 million was appropriated.) Since 1995, Congress has appropriated no funds for the state and local grant portion of the program.

Purchase of Development Rights.

Federal support has been available to qualified state and local governments (those with PDR programs in place) under provisions of the Farmland Protection Program

6.0 OPEN SPACE PLAN

(FFP) Component of the 1996 Farm Bill. A total of \$35 million of matching funds originally appropriated for PDR nationwide over six years were allocated by NRCS in the first three years of the FFP. Additional authorizations are anticipated in upcoming farm bills. Legislation is currently before Congress (Bills S.333 and H.R. 1950) to reauthorize the FFP at \$55 million per year for matching grants to state and non-profits.

State Funding Programs

Funding sources available from the State of Texas are currently quite limited. Texas currently does not have a statewide conservation program as in some states where there are substantial dollars available on an annual basis for land conservation. This may change in the next few years if the Trust for Public Land (TPL) is successful in its campaign to create the "Texas Our Texas Heritage Program" (see Section 5.2.4). TPL's goal is to achieve state legislation in the 2001 legislative session that would provide at least \$1 billion in state funds over its first 10 years. This program would fund the enhancement, management and conservation of Texas parkland, water, wildlife, farm, ranch, and historic resources. Funds would be available to local governments, probably on a matching fund basis, who have clearly established open space goals and plans in effect.

Technical Open Space Resource Team

A Technical Open Space Resource Team could provide a variety of technical resources to landowners that desire to keep land rather than developing it, or to pursue conservation or rural development options, and requested such information resources. Technical resources could be provided at little or no cost to the landowner.

Support for a Technical Open Space Resource Team could come from a variety of sources. For example, it could be supported in the following ways:

- The Town, or local and regional land trusts, could coordinate the assistance, providing expertise, and assisting in covering a portion of the costs.
- The County Extension Office and other County resources might be able to provide certain expertise and funds for its establishment.
- Area lawyers, accountants, or real estate associations might be approached about supporting such a service and supplying TOSRT members on a *pro bono* basis.
- Potential funders could be approached about providing assistance in conjunction with some of these other resources.

Once the Technical Open Space Resource Team was established, a landowner could request its services to meet particular family, financial, and conservation objectives. The issues relevant to the landowner would indicate the types of technical resources that might be utilized in the consultation. The following is a list of the kinds of expertise that might

be available through the consultation:

- Land Conservation
- Legal
- Financial
- Estate Planning
- Land Planning
- Professional services, organizations and individuals that consult on related issues.

The consultation with the landowner would be confidential between the landowner and the Technical Open Space Resource Team. It would be geared towards providing options for consideration by the landowner working with his or her family advisors. The opportunity to tailor options to the specific financial, family and land circumstances will permit a realistic examination of the alternatives.



ENVIRONMENTAL CONSERVATION COMMISSION AGENDA ITEM NO. 3

WORK SESSION ITEM

DATE: February 6, 2018
FROM: Matthew Green, Environmental Review Analyst
ITEM: Receive an update on the 2018 Annual Stormwater Report.

BACKGROUND INFORMATION:

The Town has been covered by the Texas Pollutant Discharge Elimination System (TPDES) MS4 General Permit which covers all large and small municipal separate storm sewer systems (MS4) since January 1, 2009. The permit provides guidelines to MS4s on how to properly regulate and control stormwater runoff for municipal construction activities and also provides a framework for the Town's Stormwater Management Program (SWMP).

The Town is required under the permit to submit an annual report to the TCEQ within 90 days of the end of each reporting year. The Town has selected the calendar year option which runs from January 1st through December 31st with the annual report due on March 31, 2018.

The annual report includes:

- The status of compliance with permit conditions
- An assessment of the appropriateness of the identified best management practices (BMPs)
- Progress made towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable (MEP)
- Measurable goals for each of the minimum control measures (MCMs)
- An evaluation of the success of the implementation of the measurable goals
- A summary of the stormwater activities undertaken during the previous year as well as activities planned for the upcoming year
- Proposed changes to the SWMP
- The number of construction activities that occurred within the jurisdictional area of the small MS4

ALTERNATIVES/OPTIONS:

N/A

ATTACHMENTS:

1. 2018 MS4 Annual Report

RECOMMENDATION: This item is for information and discussion purposes; therefore, no formal action is required.

Phase II (Small) MS4 Annual Report Form

TPDES General Permit Number TXR040000

A. General Information

Authorization Number: TXR040542

Reporting Year (year will be either 1, 2, 3, 4, or 5): 4

Annual Reporting Year Option Selected by MS4: 2017

Calendar Year: 2018

Permit Year: 2017

Fiscal Year: 2017-2018 Last day of fiscal year: September 30th

Reporting period beginning date (month/date/year): (January/01/2017)

Reporting period end date (month/date/year): (December/31st/2017)

MS4 Operator Level: 3 Name of MS4: Town of Flower Mound

Contact Name: Matthew Green Telephone Number: 972-874-6354

Mailing Address: 2121 Cross Timbers Road, Flower Mound, Texas 75028

E-mail Address: Matthew.Green@Flower-Mound.com

A copy of the annual report was submitted to the TCEQ Region YES ✓ NO

Region the annual report was submitted. TCEQ Region 4 Dallas/Fort Worth

B. Status of Compliance with the MS4 GP and SWMP

1. Provide information on the status of complying with permit conditions:
(TXR040000 Part IV Section B.2.):

	Yes	No	Explain
Permittee is currently in compliance with the SWMP as submitted to and approved by the TCEQ.	✓		No changes have been made to the SWMP. Changes to the SWMP will be made once deemed necessary.

Permittee is currently in compliance with recordkeeping and reporting requirements.	✓		Town staff maintains records for all datasets referenced within the annual reports.
Permittee meets the eligibility requirements of the permit (e.g., TMDL requirements, Edwards Aquifer limitations, compliance history, etc.)	✓		The Town has met all permittee requirements.

2. Provide a general assessment of the appropriateness of the selected BMPs. You may use the table below (**See Example 1 in instructions**):

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
1: Public Education, Outreach and Involvement	Municipal Channel Stormwater Quality Messages	Yes, the feedback we receive from residents indicates that the FMTV municipal channel BMP is still an effective education and outreach tool.
1: Public Education, Outreach and Involvement	Municipal website and stormwater quality information	Yes, the feedback we receive from residents indicates the BMP is still effective.
1: Public Education, Outreach and Involvement	Anti-Littering/Dumping Brochure	Yes, the feedback we receive from residents indicates the BMP is effective. Brochures continue to be periodically disseminated with notices of violation and/or citations.
1: Public Education, Outreach and Involvement	Watershed Address Program	Yes, areas where watershed signs are located are effective at reducing illegal dumping and illicit discharges.
1: Public Education, Outreach and Involvement	Storm Drain Labeling	Yes, the BMP serves as an effective public education tool. New storm drain labels are added as new inlets are constructed.
1: Public Education, Outreach and Involvement	Comply with State and Local Public Notice Requirements	Yes, the Town of Flower Mound continues to comply with State and Local Public Notice Requirements.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
1: Public Education, Outreach and Involvement	Community Source Water Protection Program	Yes, the BMP provides valuable and quantifiable water quality data. This data is a tool used by Texas State University and the Town to evaluate the overall health of the surface water in the state of Texas. Staff continues to run the program for sampling locations within city limits.
2: Illicit Discharge Detection and Elimination	Storm Sewer System Map	Yes, the map continues to be updated as new outfalls and inlets are built. It is a useful tool to identify and eliminate illicit discharges.
2: Illicit Discharge Detection and Elimination	Develop an Illicit Discharge Detection and Elimination (IDDE) Program	A dry-weather sampling program has been created to establish baseline water quality parameters. Forty locations throughout the watershed are being sampled on a monthly basis.
2: Illicit Discharge Detection and Elimination	Develop and Maintain an Illicit Discharge Document	Yes, illicit discharges and other stormwater related violations are tracked and documented through our internal TRAKiT database. TRAKiT is also being used to generate documents for our stormwater reports.
3: Construction Site Stormwater Runoff Control	Evaluate and Update Regulatory Authority and Procedures	Yes, our process has allowed for the evaluation of procedures and provides staff with the regulatory authority to enforce stormwater ordinances. The Town has recently divided stormwater oversight between our Environmental Services and Public Works Departments. Environmental Services oversees new private development and Public Works is responsible for the oversight of Capital Improvement Projects (CIP).
3: Construction Site Stormwater Runoff Control	Construction Site Reporting Hotline	Yes, the construction site reporting hotline continues to receive calls about stormwater non-compliance items at construction sites.
3: Construction Site Stormwater Runoff Control	Develop and Maintain a Construction Site Inventory Document	Yes, Town staff currently has a construction site inventory document that is updated as developments are permitted and/or completed. Our TRAKiT database has had a custom report created that will automatically compile all ground disturbing activity within the Town.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
4: Post-Construction Stormwater Management in New Development and Redevelopment	Comprehensive Stormwater Ordinance	Yes, since the adoption of the Stormwater Ordinance staff has used it to enforce stormwater violations through notices and citations. Cases are created and filed using our TRAKiT system.
4: Post-Construction Stormwater Management in New Development and Redevelopment	Evaluate and Update Stormwater Inspections Programs	As previously mentioned, we have also delegated stormwater oversight for CIP to our Public Works Department. Our Environmental Services Department will continue to have oversight of private development. Having Public Works regulate CIP will increase the effectiveness of stormwater inspection program. Additionally, a meeting was held with our Lead Building Official to reevaluate our inspection and finalization process for new developments.
5: Pollution Prevention/Good Housekeeping for Municipal Operations	Facility Specific Standard Operating Procedures (SOPs)	Yes, our facility specific SOPs are a scaled down version of the Environmental Management System that the Town had previously researched. Currently, we have SOPs created for our Fleet Services and Operations and Maintenance facilities. Standard operating procedures for additional facilities and their related activities are currently in progress.
5: Pollution Prevention/Good Housekeeping for Municipal Operations	MS4 Facility and Stormwater Controls Map	Yes, the Town currently has a layer in ArcReader dedicated to Town facilities and their associated stormwater controls. The previously mentioned map is updated as new facilities and controls are constructed.
5: Pollution Prevention/Good Housekeeping for Municipal Operations	MS4 Operations and Maintenance (O&M) Program	Yes, Town staff undergoes training to recognize pollutants of concern from O&M activities.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
5: Pollution Prevention/Good Housekeeping for Municipal Operations	MS4 Facility Inventory	Yes, Town staff has an inventory of all Town facilities. Updates to the facility inventory are made as needed.

3. Describe progress towards reducing the discharge of pollutants to the maximum extent practicable. Summarize any information used (such as visual observation, amount of materials removed or prevented from entering the MS4, or if required monitoring data, etc.) to evaluate reductions in the discharge of pollutants. You may use the table (**See Example 2 in instructions**):

MCM	BMP	Information Used	Quantity	Units	Does the BMP Demonstrate a Direct Reduction in Pollutants?
1: Public Education, Outreach and Involvement	Municipal Channel Stormwater Quality Messages	Stormwater messages through FMTV	There were three stormwater related FMTV messages in 2016	Number of messages	Yes, FMTV allows residents to educate themselves about stormwater and water conservation.

Attachment 1

1: Public Education, Outreach and Involvement	Municipal Website and Stormwater Quality Information	Stormwater education and information through municipal website	Flower Mound's Stormwater webpage was viewed 496 times in 2016	Webpage views	Yes, the website allows residents to educate themselves about stormwater and water conservation.
1: Public Education, Outreach and Involvement	Anti-Littering/ Dumping Brochure	Brochure distribution through education events and enforcement	We conducted (9) 2 nd grade events reaching 820 students and (5) 7 th grade events reaching 975 students. Two (2) environmental fairs were also conducted	Number of education events	Yes, staff hands out brochures and educates the public about stormwater and watershed protection during education events and through the public education process.
1: Public Education, Outreach and Involvement	Watershed Address Program	Placement of watershed signs	Three (3) signs were added in 2017	Illegal dumping; Illicit discharges	Yes, signs help make public cognizant of local watersheds.
1: Public Education, Outreach and Involvement	Storm Drain Labeling	Storm Drain labeling as new inlets are added	Inlets were inspected and 319 new labels were added	Illegal dumping; Illicit discharges	Yes, storm drain labels make public cognizant of local creeks.

1: Public Education, Outreach and Involvement	Community Source Water Protection Program	Continued monthly sampling	6 active volunteers. Flower Mound staff have recently been trained and are exploring the possibility of offering annual training events for new volunteers.	pH; DO; conductivity; temperature	Yes however, a numerical value cannot be assigned. Samples are taken once a month and the same time and date. To date, all samples have returned indicating healthy water bodies.
2: Illicit Discharge Detection and Elimination	Storm Sewer System Map	Updating map, if necessary	In 2017, 5.8 miles of gravity mains, 93 storm manholes and 201 storm inlets were added	Inlets; outfalls;	Yes, this allows staff to recognize potential areas for illegal dumping and illicit discharges.
2: Illicit Discharge Detection and Elimination	Develop an Illicit Discharge Detection and Elimination Program	Periodic dry weather sampling	Dry weather sampling has begun and 40 locations are sampled monthly	pH; DO; conductivity; temperature; TDS; salinity; turbidity, odor, color, floatables	Yes, our dry weather sampling program allows us to establish baseline water quality parameters for 40 different locations.
2: Illicit Discharge Detection and Elimination	Develop and Maintain an Illicit Discharge Document	Create cases and add to document, when needed.	22 cases related to Stormwater – Illicit Discharges. 18 were residential/commercial and 6 were construction.	Number of cases	Yes, this document allows staff to track illicit discharges.

Attachment 1

3: Construction Site Stormwater Runoff Control	Evaluate and Update Regulatory Authority and Procedures	Update stormwater policy & procedures, if necessary	No updates in 2017	Updates	Yes, staff continues to evaluate internal policies to reduce discharges.
3: Construction Site Stormwater Runoff Control	Construction Site Reporting Hotline	Continue monitoring hotline	Six calls in 2017	Number of calls from the hotline	Yes, staff continues to use the hotline to monitor illegal dumping/illicit discharge calls.
3: Construction Site Stormwater Runoff Control	Develop and Maintain a Construction Site Inventory Document	Continue to update the construction site inventory document, when needed.	A custom database report is used to quickly view all active sites.	Updates to the document	Yes, this inventory allows for a more efficient inspection process.
4: Post-Construction Stormwater Management in New Development and Redevelopment	Comprehensive Stormwater Ordinance	Continue enforcement of stormwater ordinance through notices and citations.	One citation and three notices were issued relating to stormwater – illicit discharge in 2017	Number of citations	Yes, staff continued enforcement of the ordinance in 2017.
4: Post-Construction Stormwater Management in New Development and Redevelopment	Evaluate and Update Stormwater Inspections Programs	Continued evaluation of the program through meetings and update, if needed.	Four meetings were held in 2017.	Number of meetings	Yes, meetings were held periodically throughout the year.

Attachment 1

5: Pollution Prevention/Good Housekeeping for Municipal Operations	Facility Specific Standard Operating Procedures (SOPs)	Continue to create Standard Operating Procedures	No new SOPs were created in 2017	Number of SOP's completed for a facility	Yes, staff has developed an SOP template for town facilities.
5: Pollution Prevention/Good Housekeeping for Municipal Operations	MS4 Facility and Stormwater Controls Map	Create a map of town facilities with associated stormwater controls for each facility.	Stormwater control inventory was added to map.	Facilities and stormwater controls added to the map	No, this BMP does not directly relate to activities taken in the field or training of staff.
5: Pollution Prevention/Good Housekeeping for Municipal Operations	MS4 Operations and Maintenance Program	Develop an O&M program through training materials and procedures.	12 training sessions.	Training sessions	Yes, there were 12 training sessions in 2017 with 124 participants.
5: Pollution Prevention/Good Housekeeping for Municipal Operations	MS4 Facility Inventory	Develop a spreadsheet document an inventory of all Town of Flower Mound facilities.	No new Town facilities were added in 2017.	Facilities added to the inventory	Yes, this allows staff to document potential stormwater impacts from town facilities.

4. Provide the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals (**See Example 3 in instructions**):

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
1	Post 3 stormwater quality messages.	Met goal- 3 stormwater utility bill inserts
1	Update and maintain the stormwater website.	Met goal - The stormwater webpage was updated as needed.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
1	Anti-littering/dumping brochure.	Met goal- Town Staff increased the number of stormwater education events in 2016 where stormwater information was disseminated.
1	Continue sign placement.	Met goal- 3 signs were placed.
1	Continue the storm drain labeling program.	319 new storm drain labels were placed. 352 inlets, 9 manholes, and 5 outfalls were inspected.
1	Comply with state & local rules.	Met goal- Town continues to comply with state and local rules.
1	Continue program, training and providing technical services.	Met goal- Town staff has increased the number of education and outreach events significantly over the previous year's numbers.
2	Periodically update map.	Met goal- Updates continue to be made.
2	Research and develop an Illicit Discharge Program.	Met goal- A dry-weather sampling program was created and 40 locations are currently being sampled monthly.
2	Develop and maintain an Illicit Discharges document.	Met goal- TRAKiT is currently used to track all stormwater non-compliance cases in Flower Mound.
3	Update inspection program and ordinance, if necessary.	Met goal- Updates are added to our inspection program when issues arise in the current process.
3	Monitor hotline.	Met goal- Calls continue to be received by residents that have observed stormwater violations within Town limits.
3	Maintain and update stormwater inventory document.	Met goal- A custom TRAKiT report was created to enable staff to easily obtain data on current stormwater activity.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
4	Enforce all provisions of the stormwater ordinance. Update, if necessary.	Met goal- Ordinance is continuously reviewed and amendments will be made when deemed necessary.
4	Provide for periodic inspections for targeted locations.	Met goal- Sites are continuously inspected by Town staff. Non-compliance items are often caught during inspections and corrective measures are enacted.
5	Develop SOP(s) annually for dedicated facilities.	Met goal- SOPs have been developed and will be updated when necessary.
5	Collect data and start developing map.	Met goal- Map has been created. Updates are made when new controls are constructed within the Town
5	Develop Operations and Maintenance Program training materials.	Met goal- Town staff was trained to increase general stormwater awareness.
5	Develop a MS4 Facility Inventory.	Met goal- Facility Inventory has been developed. Updates are made when new facilities are added.

C. Stormwater Data Summary

Sampling was not conducted by the Town of Flower Mound for the year 2016. We are currently in the process of getting our dry weather sampling program together so that the Town can begin collecting water quality data in 2017. In the meantime, staff has relied on Citizen Scientists from our Texas Stream Team program to provide our Stormwater Department with water quality data.

During 2016 the Town inspected 230 inlets and two outfalls. No items of concern were noted during infrastructure inspections. Staff also responded to several reports from citizens of illicit discharges in local waterways. Upon investigation of the previously mentioned reports, it was determined that none of the reported items were actually substances that were not natural processes of the environment. Biological processes, such as a bio-sheens and algae growth, are often mistaken by our residents as water pollution.

D. Impaired Waterbodies

1. If applicable, explain below any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the small MS4's BMPs used to address the pollutant of concern:

The Town of Flower Mound directly discharges stormwater into an impaired segment known as 0826 – Grapevine Lake. The Pollutant of Concern (POC) for the impaired segment is identified in the *2012 Texas Integrated Report Index of Water Quality Impairments* as pH. The pH level for this segment has been consistently high. On February 2, 2015, the Town of Flower Mound sought to determine whether or not the Town contributed to the high pH associated with segment 0826. Seven streams, which, discharged into the northern portion of Grapevine Lake were sampled to determine if a point source could be identified. The sampling locations and resulting pH are as follows:

Site Number	Location	Coordinates	pH	Temp (°C)
2	Graham Branch at Cross Timbers Rd	33.061373, -97.220478	8.51	8.6
4	Balturosol Dr at Pine Valley Dr	33.068110, -97.164627	7.80	7.8
5	Lighthouse Drive	33.064130, -97.159889	8.10	7.0
6	Tour 18 Dr at Cross Timbers Rd	33.043567, -97.165271	10.11	7.5
38	Raintree Place btwn Hidden Trail and Valley View	33.040873, -97.138480	8.56	7.0
40	Drainage to Smoot Creek at U.S. 377	33.075553, -97.200311	8.40	6.5
NA	Drainage to Smoot Creek near Argyle	33.080825, -97.197498	8.41	5.6

2. Describe the implementation of targeted controls if the small MS4 discharges to an impaired water body with an approved TMDL (Refer to the MS4 General permit TXR040000; Part II Section D.4.(a)):

In 2017 the Town implemented a dry weather sampling program as part of our illicit discharge detection and elimination minimum control measures. Our dry weather sampling program consists of 40 strategically chosen sampling locations that will monitor ten water quality parameters. The dry weather sampling will allow us to determine baseline values for each location, as well as providing continuous monitoring of pH levels for streams which discharge into Grapevine Lake.

[Data Summary Here](#)

3. Report the benchmark identified by the MS4 and assessment activities (Refer to the MS4 General permit TXR040000; Part II Section D.4.(a)(6)):

Benchmark Parameter	Benchmark Value	Description of additional sampling or other assessment activities	Year(s) conducted
pH level	<9	The pH level of Grapevine Lake is consistently over 9 according to the 2012 Texas Integrated Report Index of Water Quality Impairments. Streams discharging into Grapevine Lake will continually be monitored at predetermined sampling sites under our Dry Weather Sampling Program.	2

4. Provide an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark (Refer to the MS4 General permit TXR040000; Part II Section D.4.(a)(4)):

Benchmark Parameter	Selected BMP	Contribution to achieving Benchmark
pH level	Staff will determine if the Town is a significant contributor to the impairment.	Sampling was conducted, and the Town was not found to be contributing to the high pH level associated with segment 0826.
pH level	Sampling/monitoring and public education.	Periodic sampling continues to take place under our Dry Weather Sampling Program. Water quality information will also continue to be disseminated by multiple methods.

5. If applicable, report on focused BMPs to address impairment for bacteria (Refer to the MS4 General Permit TXR040000; Part II Section D.4.(a)(5)):

Description of bacteria-focused BMP	Comments/Discussion
N/A	

6. Assess the progress to determine BMP's effectiveness in achieving the benchmark (Refer to the MS4 General Permit TXR040000; Part II.D.4.(a)(6)):

For example, the MS4 may use the following benchmark indicators:

- number of sources identified or eliminated;
- decrease in number of illegal dumping;
- increase in illegal dumping reporting;
- number of educational opportunities conducted;
- reductions in sanitary sewer flows (SSOs)
- increase in illegal discharge detection through dry screening

Benchmark Indicator	Description/Comments
N/A	

E. Stormwater Activities

Describe stormwater activities the MS4 operator plans to undertake during the next reporting year. You may use the table below (Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(d)):

2: Illicit Discharge Detection and Elimination	Develop an Illicit Discharge Detection and Elimination	Periodic dry weather sampling	Continue sampling monthly
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	Program		
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In 2016 Public Works was approved to purchase sampling equipment for our Dry Weather Sampling Program. In 2017 Public Works purchased sampling equipment And began monthly sampling of 40 sites around the Town.

Due to turnover in the staff, proposed changes and updates to the SWMP were not reviewed during the 2017 permit year. The following changes and updates proposed in the previous annual report will be reviewed in order to create a more effective stormwater program. Presented in the table below is a series of MCM's that our Stormwater Department is reviewing, as well as replacement MCM's that would eliminate items that the Town believes should already be enacted regardless of SWMP requirements.

1: Public Education, Outreach and Involvement	Municipal Channel Stormwater Quality Messages	Review MCM and amend SWMP if approval is granted.	Change current MCM to the Stormwater Department's participation in the Town's Environmental Conservation Committee. Meetings for the previously mentioned committee are held on the first Tuesday of every month and discuss a wide range of environmental items, including stormwater. The ECC meetings provide a platform for the Town to offer citizens with updates from our Stormwater Department, as well as providing an opportunity for citizens to give feedback.
1: Public Education, Outreach and Involvement	Anti-Littering/Dumping Brochure	Review MCM and amend SWMP if approval is granted.	Change current MCM to include all stormwater outreach promoted through our elementary and middle school education programs.

1: Public Education, Outreach and Involvement	Comply with State and Local Public Notice Requirements	Review MCM and amend SWMP if approval is granted.	Change current MCM to include our bi-annual environmental fairs. During these events trash is removed from various locations throughout the Town and stormwater outreach is presented at our Environmental Services booths. Complying with State and Local Public Notice requirement is an item that would be enacted regardless of the MCM.
3: Construction Site Stormwater Runoff Control	Construction Site Reporting Hotline	Review MCM and amend SWMP if approval is granted.	Change current MCM to include meeting attendance for the North Central Texas Council of Governments (NCTCOG) IDDE Task Force. Meetings are currently held quarterly at the NCTCOG building in Arlington and to include online reporting as well as general phone reporting. The site reporting hotline will continue to operate regardless of the MCM.
4: Post-Construction Stormwater Management in New Development and Redevelopment	Evaluate and Update Stormwater Inspections Programs	Review MCM and amend SWMP if approval is granted.	Change current MCM to include the review and enforcement of Appendix H of the Town's Design Criteria. Appendix H summarizes design criteria for 'Potential Best Management Practices for Watershed Protection.' The design criteria specifically cites EPA's "Post-Construction Stormwater Management in New Development & Redevelopment" manual, as well as the North Central Texas Council of Governments iSWM manual. Review and updates to the Town's inspection program would continue regardless of the MCM.

5: Pollution Prevention/Good Housekeeping for Municipal Operations	MS4 Facility and Stormwater Controls Map	Review MCM and amend SWMP if approval is granted.	Change current MCM to include our Smart Growth Program, which seeks to better balance new development and the conservation of the Town's natural resources. The stormwater controls will be added to the MS4 Facility Inventory MCM.
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F. SWMP Modifications

- Changes have been made or are proposed to the SWMP since the NOI or the last annual report, including changes in response to TCEQ's review.
☐ Yes ☒ No

If 'Yes', report on changes made to measurable goals and BMPs (Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(e)):

MCM(s)	Measurable Goal(s) or BMP(s)	Implemented or Proposed Changes (Submit NOC as needed)
N/A		

Note: If changes include additions or substitutions of BMPs, include a written analysis explaining why the original BMP is ineffective or not feasible and why the replacement BMP is expected to achieve the goals of the original BMP.

- Explain additional changes or proposed changes not previously mentioned (i.e. dates, contacts, procedures, annexation of land etc.):

G. Additional BMPs for TMDLs and I-Plans

Provide a description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans (Refer to the MS4 General permit TXR040000 Part IV Section B.2.(f)).

BMP	Description	Implementation Schedule (Start Date etc.)	Status / Completion Date (completed, in progress, not started)
Stream Monitoring/ Testing	Preliminary sampling of seven predetermined locations.	2014-2015	02/02/2016
Stream Monitoring/ Testing	The town will continue to periodically sample tributaries that discharge into Grapevine Lake through our IDDE program. If at any point, we determine that we are contributing to segment 0826's high pH then we will implement additional BMP's.	2015-2019	In progress

H. Additional Information

1. Is the permittee relying on another entity to satisfy some of its permit obligations? (refer to the MS4 General Permit TXR040000 Part IV Section B.2.(g))

☐ Yes ☒ No

If 'Yes,' provide the name(s) of other entities and an explanation of their responsibilities (add more spaces or pages if needed):

Name and Explanation:

Name and Explanation:

Name and Explanation:

Name and Explanation:

2.a. Is the permittee part of a group sharing a SWMP with other entities?

☐ Yes ☒ No

2.b. If 'yes,' is this a system-wide annual report including information for all permittees?

☐ Yes ☒ No

If 'Yes,' list all associated authorization numbers, permittee names, and SWMP responsibilities of each member. (add additional spaces or pages if needed):

Authorization Number: _____ Permittee: _____

Authorization Number: _____ Permittee: _____

Authorization Number: _____ Permittee: _____

Authorization Number: _____ Permittee: _____

I. Construction Activities

1. The number of construction activities that occurred in the jurisdictional area of the MS4 (Notices of intent and site notices received; Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(h)) **63**

2a. Does the permittee utilize the optional 7th MCM related to construction?

☐ Yes ☒ No

2b. If 'yes,' then provide the following information for this permit year (refer to the MS4 General Permit TXR040000 Part IV Section B.2.(i)):

The number of municipal construction activities authorized under this general permit	
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The total number of acres disturbed for municipal construction projects	

Note: Though the seventh MCM is optional, implementation must be requested on the NOI or on a NOC and approved by the TCEQ.

J. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (printed): _____ Title: _____

Signature: _____ Date: _____

Name of MS4 _____

Name (printed): _____ Title: _____

Signature: _____ Date: _____

Name of MS4 _____

Name (printed): _____ Title: _____

Signature: _____ Date: _____

Name of MS4 _____

Name (printed): _____ Title: _____

Signature: _____ Date: _____

Name of MS4

Name (printed): _____ Title: _____

Signature: _____ Date: _____

Name of MS4

Note: If this is this a system-wide annual report including information for all permittees, each permittee shall sign and certify the annual report in accordance with 30 TAC §305.128 (relating to Signatories to Reports).