

The increasing population of Texas affects the Water Quality and Quantity for Future Growth

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Region: EAST ANR

Section 1. Relevance

Where did this issue surface?

Texas Community Futures Forum
County Committees
Commodity / Industry / Special Interest Groups
Specialist(s)
Other: County Extension Agents

What is the issue/problem?

Maintain water quality and conservation for Agriculture and Community use.

Problem size and scope? (How many people does it affect? How wide spread?)

Maintain water quantity for future population growth, promote watershed management in forest lands, rangelands, and suburban environments (urban) to maintain water quality and quantity.

Problem severity? (How serious is this issue?) *High*

Description: Impacts everyone and everyone, can positively impact water quality and conservation.

Target Audience? (Who does the problem impact and how many?)

All publics.

What are some general characteristics of the audience this program targets? How will you market this program to others?

Landowners from watershed management and of course general public on conservation and quality market; Define the problem and the needs clearly, using mass media and educational activities at the county multi-county and regional levels.

Section 2. Response

State the goal of the program.

State the outcome objectives.

Client Change	At the end of this program, will....
<i>Knowledge</i>	increase knowledge on....
<i>Skills</i>	develop skills....
<i>Attitude</i>	change their attitudes pertaining to...
<i>Behavior Change</i>	adopt....
<i>New Technology</i>	adopt....
<i>Best Practice</i>	adopt

Program Design

Topic (Subject Matter)	Strategy to Deliver Content (Method)	Existing Resource(s)	Contact Person(s) (Includes CEA's Specialists, Commodity Reps)
Public Education About Policy			
Planning for Future Growth through Conservation	TCFF	- water specialist - other state agencies dealing with water	
Watershed Management			

Water use by Urban/Suburban runoff system			
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Section 3. Results

EXAMPLE #1 Water Type Questions Post Only

Quality and Quantity of Water from Rangeland Watersheds

Thanks for participating in the “Quality and Quantity of Water from Rangeland Watersheds” Program. In order for us to put together the most effective educational program for you, please take a few minutes to answer the questions below.

Please rate your level of understanding about with the following statements. Simply place an ‘x’ in the box that best matches your thoughts.

LEVEL OF UNDERSTANDING

Very Poor
1

Poor
2

Average
3

Good
4

Excellent
5

STATEMENTS	LEVEL OF UNDERSTANDING				
	1	2	3	4	5
Loss of plant cover, resulting in bare ground leads decreases water infiltration.	1	2	3	4	5
Loss of plant cover, resulting in bare ground leads increases runoff.	1	2	3	4	5
Loss of plant cover, resulting in bare ground leads to higher soil erosion.	1	2	3	4	5
Maintaining adequate vegetation and litter cover to intercepts and reduces raindrop impact.	1	2	3	4	5
Maintaining adequate vegetation and litter cover to intercept and reduce improves infiltration.	1	2	3	4	5
Maintaining adequate vegetation and litter cover shade and stabilize soil temperatures.	1	2	3	4	5
Maintaining adequate vegetation and litter cover increases soil organism activity.	1	2	3	4	5

Maintaining adequate vegetation and litter cover lessens wind effects and reduces runoff.	1	2	3	4	5
The loss of topsoil can result in drought like conditions which reduce the soil water holding capacity.	1	2	3	4	5
The loss of topsoil can result in lower fertility and organic matter.	1	2	3	4	5
The loss of topsoil can result in the production of sedimentation flowing into my streams, ponds or other water bodies.	1	2	3	4	5
Soil characteristics that influence water infiltration into the soil include: antecedent moisture, bulk density, depth, slope, organic matter, soil texture, aggregate stability and soil parent material.	1	2	3	4	5
The water cycle process.	1	2	3	4	5
The three major components of the rangeland water cycle that man can affect are soil, vegetation, and soil surface.	1	2	3	4	5

EXAMPLE #2 Water Type Questions (Post then Pre)

For each of the topics listed below, in the LEFT column, circle the ONE number that best reflects your LEVEL OF UNDERSTANDING before the *Quality and Quantity of Water from Rangeland Watersheds*. Then, in the RIGHT column, circle the ONE number that best reflects your LEVEL OF UNDERSTANDING after the *Quality and Quantity of Water from Rangeland Watersheds*.

LEVEL OF UNDERSTANDING

Very Poor
1

Poor
2

Average
3

Good
4

Excellent
5

TOPICS	<u>BEFORE</u> the Program					<u>AFTER</u> the Program				
Loss of plant cover, resulting in bare ground leads decreases water infiltration.	1	2	3	4	5	1	2	3	4	5
Loss of plant cover, resulting in bare ground leads increases runoff.	1	2	3	4	5	1	2	3	4	5
Loss of plant cover, resulting in bare ground leads to higher soil erosion.	1	2	3	4	5	1	2	3	4	5
Maintaining adequate vegetation and litter cover to intercepts and reduces raindrop impact.	1	2	3	4	5	1	2	3	4	5
Maintaining adequate vegetation and litter cover shade and stabilize soil temperatures.	1	2	3	4	5	1	2	3	4	5
Maintaining adequate vegetation and litter cover increases soil organism activity.	1	2	3	4	5	1	2	3	4	5
Maintaining adequate vegetation and litter cover lessens wind effects and reduces runoff.	1	2	3	4	5	1	2	3	4	5

The loss of topsoil can result in drought like conditions which reduce the soil water holding capacity.

1

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The loss of topsoil can result in lower fertility and organic matter.

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The loss of topsoil can result in the production of sedimentation flowing into my streams, ponds or other water bodies.

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Soil characteristics that influence water infiltration into the soil include: antecedent moisture, bulk density, depth, slope, organic matter, soil texture, aggregate stability and soil parent material.

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The three major components of the rangeland water cycle that man can affect are soil, vegetation, and soil surface.

1

2

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1

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EXAMPLE #3 Open ended

What is the most significant thing you learned during the Quality and Quantity of Water from Rangeland Watersheds (feel free to list more than one)?

Do you feel like what you learned today provides you the ability to analyze your land situation and make better land management decisions? (Circle the best answer)

YES

NO

- Please explain your answer or provide an example.

Please provide any additional information in the space below.