FOIA Number: 2013-0661-F
(3)

FOIA MARKER

This is not a textual record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

Collection/Record Group: Clinton Presidential Records

Subgroup/Office of Origin: Americorps

Series/Staff Member: General Files

Subseries:

OA/ID Number: 24233

FolderID:

Folder Title:
Project Information: Fire

Stack:	Row:	Section:	Shelf:	Position:
S	66	1	3	1

USDA/AmeriCorps

Louisiana

FAX

To:	Joel Berg/Dee DiFiore
Fax #:	(202) 720-4614
Subject:	Dry Fire Hydrant Report - Update
Date:	September 4, 1996
Pages:	25, including this cover sheet.

COMMENTS:

Attached is an updated report for the USDA/AmeriCorps dry fire hydrant program in Louisiana. Included in this revised report are funding sources, hydrant costs, projected savings in insurance premiums, and projected value of property saved.

Please call me at (318) 473-7753 if you have any questions.

Holly

Holly Martien

From the desk of...

Holly L. Martien
Administrative Program Specialist
USDA, Natural Resources Conservation Service
3737 Government Street
Alexandria, Louisiana 71302

(318) 473-7753
Fax: (318) 473-7682

USDA/AmeriCorps Dry Fire Hydrant Project

Louisiana

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

Background

In many rural areas, the lack of an established water system and domestic fire hydrants can impair a fire department's ability to do its job quickly and efficiently. Many fire departments have chosen to develop a water hauling or "shuttle" procedure. Tanker trucks are used to carry large amounts of water to the fire scene to deliver a continuous supply of water. The success of this system is relative to the distance the trucks must travel to refill. A dry hydrant system provides a solution to the problem of distant fill-up points.

USDA/AmeriCorps members are working with the Natural Resources Conservation Service in Louisiana to plan, survey, and coordinate the installation of over 2,000 dry fire hydrants in rural areas through the Louisiana Statewide Dry Fire Hydrant Program.

Louisiana Statewide Dry Fire Hydrant Program

Over 2,000 dry fire hydrants are being installed across Louisiana to help improve rural fire protection and rural road maintenance through the Louisiana Statewide Dry Hydrant (SWDH) program. The SWDH program was funded through a $996,984 grant to Trailblazer Resource Conservation and Development, Inc., from the Louisiana Department of Natural Resources using oil overcharge funds from the Stripper Will Settlement as approved by the U.S. Department of Energy. Local units of government and local volunteer fire departments will provide in-kind matching funds in the form of equipment and labor for installations. Materials for dry hydrants average $1,000-$1,500 per hydrant.

What is a Dry Hydrant?

A dry hydrant is a non-pressurized pipe system permanently installed in existing bodies of water (lakes, ponds, streams, etc.) to provide a means of suctioning water into a tank truck. One end of the dry hydrant protrudes out of the ground to give tanker trucks a hose connection. The other end is composed of a strainer submerged in the pond or stream to draw water directly through the system. The dry hydrant system gives tanker trucks access to ponds and streams from the main road and ends the necessity of going all the way back to the starting point for a refill.

Water Shuttle

In a water hauling operation, the time it takes to fill the tanker, the distance the tanker has to travel to the fire, and the time it takes to discharge the water from the tanker are critical elements in rural fire protection. Time saved on any one of the above points will increase the amount of water that can be hauled to the fire. Dry hydrants, properly located, can substantially reduce travel time from a water source to the fire.

Some departments are using the system in the following manner: when a fire alarm is received, equipment is dispatched on a pre-planned basis determined by such things as fire flow needs, hazards involved, water supply available, etc. One tanker and one pumper respond to the fire. The pumper begins the fire attack with water from its booster tank. The

first responding tanker may act as a "nurse" tanker, or may set up a portable drop tank and begin discharging its load of water into the drop tank. The water in the tanker can be transferred to the portable drop tank at a rate of approximately 1,000 gallons per minute. As soon as the tanker is empty, it immediately heads to the water supply. In the meantime, another fire department pumper has responded to the water supply, connected to the dry hydrant, and primed its pump. When the empty tanker arrives as the water supply, the pumper is ready to fill the tanker. The refilled tanker returns to the fire site, discharges its water, and the cycle is repeated.

Expected Benefits

Saves Lives and Property

The most important benefit of the installation of dry hydrants in rural areas is the increased capability of firefighters to save lives and property. Eight structures have been directly saved because a dry hydrant was near the fire or because no pressurized hydrants were in the area. Ten structures were indirectly saved when grass fires and forest fires were contained with the use of dry hydrants.

During a hard freeze in February 1996, Concordia Parish (Vidalia and Ferriday, Louisiana) lost electricity so pressurized hydrants were not accessible for fire protection. Dry hydrants were used for the three fires encountered throughout the power failure. The Concordia Parish Fire District was thankful for the use of the dry hydrants, as well as neighboring fire districts.

In DeSoto Parish, Louisiana, dry hydrants were used to save two saw mills.

In Iberia Parish, Louisiana, a dry hydrant was used to contain a structure fire.

In February 1996, Ward 4 Fire Protection District in Jackson Parish, Louisiana, used water drawn from a dry hydrant to extinguish an approximately ten-acre grass fire, which was endangering a nearby dwelling. Due to the proximity of the hydrant to the fire, the fire did not harm the building.

In April 1997, Ward 4 Fire Protection District in Jackson Parish, Louisiana, got another chance to utilize their dry hydrants to extinguish a woods fire. They were able to save three homes from destruction.

In Beauregard Parish, Louisiana, a dry hydrant was used to contain a forest fire that was threatening to endanger surrounding homes.

In Vermilion Parish, Louisiana, a dry hydrant was used to contain a barn fire which was located near two houses, a barn, and a greenhouse.

In DeSoto Parish, Louisiana, a dry hydrant was used to contain a house fire.

In Calcasieu Parish, Louisiana, a dry hydrant is used on a continuous basis for training area volunteer firefighters.

Numerous brush fires and woods fires throughout Louisiana were contained with the use of dry hydrants before the fires caused destruction to surrounding homes and buildings.

It is estimated that during a recent six-month period, property valued at an estimated $730,000 was saved by containing fires with the use of dry hydrants. By the year 2000, it is projected that property valued at over $5 million will have been saved because of the use of dry hydrants.

Decrease in Fire Classification Rating

Fire insurance premiums for each area are based on a classification determined by the Property Insurance Association of Louisiana (PIAL). The classification PAIL assigns depends on each area's ability to fight fires. Areas with no fire departments are given a class 10 rating. As the fire-fighting capability increases, the rating decreases. Higher training levels and better equipment are among the ways this can be accomplished. For example, if a fire department can demonstrate the ability to pump 250 gallons of water per minute for two hours at a fire scene, the area's fire classification rating could potentially decrease to a six or seven. Dry fire hydrants play an important role in such a demonstration in rural areas.

Based on information collected through interviews of fire chiefs of volunteer fire departments participating in the dry fire hydrants program in rural Louisiana, the installations of dry fire hydrants are a contributing factor in affecting the district's fire classification rating in one of two ways, either (1) the fire rating will drop one or two points, or (2) the fire rating will be maintained at the current level and will not go up a point. This decrease in fire classification rating or maintenance of a rating significantly influences the insurance premiums of homeowners in these rural communities.

It is important to note that most major insurance companies will not issue fire insurance coverage for homes located in fire classification 10 or 9 areas. Therefore, it is reasonable to predict that the installation of dry fire hydrants in rural Louisiana will contribute significantly to the ability of homeowners to acquire affordable fire insurance.

Insurance Premium Savings

In Jackson Parish, Louisiana, the Quitman Fire Protection District successfully conducted a water shuttle demonstration using a dry hydrant for PIAL. This shuttle enabled the district to improve their property insurance rating from a 9 to an 8, leading to a **21% drop in commercial insurance premiums.**

In Natchitoches Parish Fire District 7, dry fire hydrants are contributing to a fire insurance rating reduction from a class 10 to a class 7. A homeowner in Fire District 7 with a brick house worth $100,000 can expect the insurance premium with a class 10 fire rating to be $1,940/year. The premium for the same house with a class 7 rating is significantly reduced to $1,086/year. This is a savings of $854/year for the homeowner. **This is a 44% reduction from the original premium.**

The following table demonstrates the money saved or lost and the percentage change in rural homeowners' insurance premiums when fire classification ratings change:

Premium Change as a Result of Fire Classification Rating Change

Table data based on fire classification ratings/premiums for a $50,000 house in Lecompte, Rapides Parish, Louisiana (see Appendix A).

	Present Fire Classification Rating/Premium			
Future Fire Classification Rating/Premium	**10** **$1,059.00**	**9** **$797.00**	**8** **$622.00**	**7** **$523.00**
10 **$1,059.00**	0	$262 (+33%)	$437 (+70%)	$536 (+102%)
9 **$797.00**	-$262 (-25%)	0	$175 (+28%)	$274 (+52%)
8 **$622.00**	-$437 (-41%)	-$175 (-22%)	0	$99 (+19%)
7 **$523.00**	-$536 (-51%)	-$274 (-34%)	-$99 (-16%)	0

Based on the above table, the prediction can be made that when the Lecompte Volunteer Fire Department receives a fire rating reduction from a 9 to an 8, the rural homeowner of a $50,000 home will save $175 a year or 22 percent on their homeowners' insurance. Yet, if that fire rating was to increase from an 8 to a 9, the homeowner would see a $175 or 28 percent increase in their homeowners insurance premium (see Appendix A).

Projected Savings

Population data was collected on the number of rural homeowners living in all parishes in Louisiana from 1990 U.S. Census information. Figures were compiled for the number of rural homeowners in the parishes participating in the dry fire hydrants program. The results indicated that 638,042 homeowners will reap significant financial benefits because of the installation of dry hydrants in their communities. As stated previously, fire chiefs estimate at least a one point drop in their fire rating with the installation of dry hydrants as a contributing factor. Based on the table above, if 638,042 rural Louisiana homeowners live in a fire district that receives a one point rate decrease from a 9 to an 8, they could save $111,657,350 in one year on insurance premium costs (the value of the homes, number of points changed in fire classification ratings, and insurance premium rates will vary from fire district to fire district).

Other Benefits

Other benefits of dry fire hydrants include conservation of limited water storage for drinking water and the use of natural, unprocessed water for road maintenance.

Dry Hydrants. . . "Worth Their Weight in Gold"

Following is a letter submitted to the editor of a local newspaper from D. J. Brown, Chief, District 8, DeSoto Parish, Louisiana

> *Dry hydrants are worth their weight in gold. We found out in May of 1996. One of the first dry hydrants we installed was on a spring-fed pond on Highway 509, about 2.5 miles from the Broadway Saw Mill. Little did we know that we would use these dry hydrants two times in the next three weeks.*
>
> *The first fire call came in the second week of May, one week after we had installed our dry hydrant. When we arrived at the scene, the sawmill was over half involved in fire. We knew that this was going to be a water shuttle fire, so we sent 812, our LDH pumper straight to the Highway 509 dry fire hydrant to set up. But this time, unlike before, with other structure fires, we only sent the driver instead of the driver and at least five other firefighters.*
>
> *What was the difference? Simply this: a six-inch dry hydrant. That's right! Instead of having to hook up 30 feet of heavy hard suction pipe, have three firefighters put it in the pond, find a bucket to tie the end of the strainer to keep it from dragging bottom, pull the hard suction pipe back to the pumper to hook up and prime, and finally start to pump, now all we have to do is put our pumper 8 feet from the hydrant end, hook up just one section of pipe, prime, and pump, pump, pump!*
>
> *The second fire was at the same location, two weeks later. A large wood scrap ship pile was fully involved, and the wind was forcing it back towards the mill. Again, we sent our 812 pumper straight to the dry hydrant, and within 5 minutes it was primed and ready to pump. The first fire we pumped 40,000 gallons of water, the second fire*

we pumped 70,000 gallons of water.

In May we needed to test our 1250 pumpers, so again we went to a newly installed dry hydrant and tested our trucks. Both trucks we tested pumped over 1,350 gallons per minute each.

Another advantage I noticed was the ability of a dry hydrant to out-perform the rural town hydrant systems. Take for example in my hometown, the hydrant system was installed sometime in the 1950's. It only has a four-inch supply line and several miles of pipe. For us this meant that our water supply was limited to 200 to 400 gallons per minute, and that our pressure would be between 20 and 40 psi. The psi is supplied by a pump at the water tank which means that should you lose power, then the hydrant system would have very little pressure. With a dry hydrant you don't need any electricity, a one-man set up is all that is required, there is little or no friction loss, and only 20 to 100 feet of hard suction pipe is needed.

The dry hydrant is truly a multi-purpose hydrant. This is why we at Fire District 8 say that dry hydrants are WORTH THEIR WEIGHT IN GOLD!!

Building Community

Police juries and volunteer fire departments work with USDA/AmeriCorps members to plan, survey and install dry fire hydrants. This local volunteer effort is reflected by 40,919 hours of community time donated to this effort at a value of $1,529,002.40.

Progress Report of Dry Hydrant Installations by Parish

Following is a progress report of dry hydrant installations in Louisiana:

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Acadia Parish	52			20
		Acadia Fire District 1	6	
		Acadia Fire District 8	2	
		Acadia Fire Protection District 3	3	
		Acadia Parish Fire District 5	4	
		Eunice Fire Department	2	

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Fire Protection District 6	3	
Allen Parish	35			34
		Elton Volunteer Fire Department	8	
		Oberlin Volunteer Fire Department	2	
		Elizabeth Volunteer Fire Department	1	
		Fire Protection District 4	1	
		Oakdale Fire Department	7	
		Allen Fire Protection District 2, Ward 3	12	
		Grant Volunteer Fire Department	3	
Ascension Parish	35			0
Assumption Parish	35			0
Avoyelles Parish	35			6
		Avoyelles Fire Protection District 2, Subdistrict 8	6	
Beauregard Parish	35			35
		Beauregard Fire District 1	6	
		Beauregard Fire District 2	3	
		Beauregard Fire District 3	7	
		Beauregard Fire District 3A	5	

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Beauregard Fire District 4	8	
		Merryville Volunteer Fire Department	6	
Bienville Parish	10			10
		Bienville Fire District 6	5	
		Bienville Ward 1 & 2 Fire District	2	
		Bienville Ward 7 Fire Protection District	3	
Bossier Parish	10			9
		Benton Fire District 4	2	
		Bossier Fire District 2	2	
		Bossier Fire District 6	3	
		East Central Bossier Fire Protection District 1	2	
Caddo Parish	48			42
		Caddo Parish Fire District 2	10	
		Caddo Parish Fire District 3	1	
		Caddo Parish Fire District 4	9	
		Caddo Parish Fire District 6	3	
		Caddo Parish Fire District 7	8	
		Caddo Parish Fire District 8	11	
Calcasieu Parish	35			35

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Carlyss Volunteer Fire Department	2	
		DeQuincy Volunteer Fire Department	2	
		Hayes Volunteer Fire Department	3	
		Houston River Volunteer Fire Department	5	
		Iowa Volunteer Fire Department	1	
		Lake Charles Fire Department	6	
		Starks Volunteer Fire Department	8	
		Vinton Volunteer Fire Department	3	
		Westlake Volunteer Fire Department	5	
Caldwell Parish	35			30
		Caldwell Parish Rural Fire Protection District	30	
Cameron Parish	35			34
		Cameron Fire District 1	4	
		Cameron Fire District 7	3	
		Cameron Fire District 9	9	
		Cameron Fire District 11	3	
		Cameron Fire District 14	11	
		Klondike Volunteer Fire Department	4	

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Catahoula Parish	35			10
		Maitland Volunteer Fire Department	7	
		Manifest Volunteer Fire Department	3	
Claiborne Parish	10			1
		Claiborne Fire Protection District 4	1	
Concordia Parish	35			1
		Concordia Parish Rural Fire Protection District	1	
DeSoto Parish	58			45
		DeSoto Fire District 1	12	
		DeSoto Fire District 2	5	
		DeSoto Fire District 3	2	
		DeSoto Fire District 5	7	
		DeSoto Fire District 8	19	
East Baton Rouge Parish	35			0
East Carroll Parish	12			0
East Feliciana Parish	35			0

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Evangeline Parish	30			17
		Mamou Fire Protection District 1	4	
		Pine Prairie Area Fire Protection District	7	
		Ville Platte Volunteer Fire Department	2	
		Ward 5 Fire Protection District	4	
Franklin Parish	59			15
		Liddieville Volunteer Fire Department	6	
		Fort Necessity Volunteer Fire Department	4	
		Turkey Creek Volunteer Fire Department	5	
Grant Parish	43			20
		District 5 VFD	5	
		Grant Fire District 1	4	
		Grant Fire District 3	3	
		Grant Fire District 7	5	
		Tullos Volunteer Fire Department	3	
Iberia Parish	35			35
		Iberia Parish Fire District 1	35	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Iberville Parish	35			0
Jackson Parish	18			10
		Hodge Volunteer Fire Department	2	
		Jackson Fire District 6	1	
		Quitman Fire Protection District 1	1	
		Ward 4 Fire Protection District	6	
Jefferson Parish	4			4
		Jefferson Fire Districts 1 & 2	4	
Jefferson Davis Parish	35			35
		Jefferson Davis Fire District 1	1	
		Jefferson Davis Fire District 2	8	
		Jefferson Davis Fire District 3	2	
		Jefferson Davis Fire District 4	10	
		Jefferson Davis Fire District 5	3	
		Jefferson Davis Fire District 6	9	
		Jefferson Davis Fire District 7	2	
Lafayette Parish	27			8
		Carencro Fire Department	1	

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Duson Volunteer Fire Department	2	
		Judice Volunteer Fire Department	2	
		Milton Volunteer Fire Department	2	
		Youngsville Volunteer Fire Department	1	
Lafourche Parish	37			17
		Lafourche Fire District 1	7	
		Lafourche Fire District 2	4	
		Lafourche Fire District 6	3	
		Lafourche Fire District 7	3	
LaSalle Parish	0			0
Lincoln Parish	10			0
Livingston Parish	35			18
		Livingston Fire District 1	9	
		Livingston Parish Fire District 8	2	
		Livingston Parish Fire District 10	2	
		Livingston Parish Fire District 11	4	
		Livingston Volunteer Fire Department	1	

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Madison Parish	35			35
		Madison Parish Rural Fire Protection District	35	
Morehouse Parish	12			0
Natchitoches Parish	29			22
		Natchitoches Fire District 1	3	
		Natchitoches Fire District 2	3	
		Natchitoches Fire District 3	1	
		Natchitoches Fire District 6	5	
		Natchitoches Fire District 7	4	
		Natchitoches Fire District 8	3	
		Natchitoches Fire District 9	3	
Orleans Parish	52			0
Ouachita Parish	35			0
Plaquemines Parish	35			0
Pointe Coupee Parish	35			1
		Pointe Coupee Fire District 1	1	

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Rapides Parish	62			39
		Rapides Fire Protection District 2	6	
		Rapides Fire District 3	7	
		Rapides Fire District 4	2	
		Rapides Fire District 5	4	
		Rapides Fire District 6	9	
		Rapides Fire District 10	5	
		Rapides Fire District 14	6	
Red River Parish	25			12
		Red River Fire Protection District	12	
Richland Parish	57			13
		Delhi Volunteer Fire Department	1	
		Mangham Fire Protection District 4	4	
		Rayville Volunteer Fire Department	1	
		Start-Girard Fire Protection District	7	
Sabine Parish	52			44
		Sabine Fire District 1, Wards 1 & 2	15	
		Sabine Fire District 1, Wards 3 & 4	14	

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		North Sabine Fire Protection District	15	
St. Bernard Parish	35			7
		St. Bernard Parish Fire Department	7	
St. Charles Parish	0			0
St. James Parish	10			0
St. Helena Parish	35			0
St. John the Baptist Parish	13			0
St. Landry Parish	35			1
		Leonville Volunteer Fire Department	1	
St. Martin Parish	55			38
		Arnaudville Volunteer Fire Department	2	
		Belle River Volunteer Fire Department	4	
		Breaux Bridge Volunteer Fire Department	4	
		Butte LaRose Volunteer Fire Department	2	

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Cade Volunteer Fire Department	2	
		Catahoula Volunteer Fire Department	4	
		Cecilia Volunteer Fire Department	3	
		Coteau Holmes Volunteer Fire Department	4	
		Henderson Fire Service Area	3	
		Parks Volunteer Fire Department	4	
		St. Martinville Volunteer Fire Department	3	
		Stephensville Volunteer Fire Department	3	
St. Mary Parish	39			15
		St. Mary Fire District 4	2	
		St. Mary Fire District 5	4	
		St. Mary Fire District 9	0	
		St. Mary Fire District 11	7	
		St. Mary Fire District 12	2	
St. Tammany Parish	35			8
		St. Tammany Fire District 1	8	
Tangipahoa Parish	35			0

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Tensas Parish	35			6
		Tensas Parish Rural Fire Protection District	6	
Terrebonne Parish	35			19
		Terrebonne Fire District 1, 2, & 3, Zone B	6	
		Terrebonne Fire District 9	13	
Union Parish	10			7
		Bernice Volunteer Fire Department	1	
		Sardis Ward 4 Volunteer Fire Department	3	
		Spencer/West Sterlington Volunteer Fire Department	1	
		Ward 5 Volunteer Fire Department	2	
Vermillion Parish	59			40
		Vermillion Fire District 1	3	
		Vermillion Fire District 3	3	
		Vermillion Fire District 4	4	
		Vermillion Fire District 5	3	
		Vermillion Fire District 6	3	
		Vermillion Fire District 7	3	
		Vermillion Fire District 9	4	
		Vermillion Fire District 11	3	
		Vermillion Fire District 12	3	

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Vermillion Fire District 13	3	
		Vermillion Fire District 14	3	
		Vermillion Fire District 15	3	
		Vermillion Fire District 16	2	
Vernon Parish	35			29
		Vernon Parish Fire District 1	29	
Washington Parish	35		0	
Webster Parish	10			7
		Webster/Evergreen Fire Protection District	1	
		Webster Fire District 2	2	
		Webster Fire District 4	2	
		Webster Fire District 11	2	
West Baton Rouge Parish	0			0
West Carroll Parish	35			4
		West Carroll Ward 2 Fire Protection District	4	
West Feliciana Parish	0			0
Winn Parish	12			10

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Winnfield Fire Department	10	

As of August 30, 1996:

Total Planned Hydrants: ***1,975*** ***Total Installed Hydrants:*** ***848***

Some parishes have declined dry hydrants. All parishes will have an opportunity to requested the declined hydrants to supplement the hydrants installed in their parishes.

This report was prepared by the following USDA/AmeriCorps members:

Tom Morton, Trailblazer RC&D, Ruston, Louisiana
Nancy Dyer, Twin Valley RC&D, Natchitoches, Louisiana
Donna Haydel, Imperial Calcasieu RC&D, Jennings, Louisiana
Robin Torrence, Capital RC&D, Denham Springs, Louisiana

Insurance premium information provided by Pat Harvey, Allstate Insurance Company agent, Alexandria, Louisiana.

Allstate®
You're in good hands.

ALLSTATE INSURANCE COMPANY
PROPERTY INSURANCE QUOTATION
AUGUST 13, 1996

ESPECIALLY PREPARED FOR:

NANCY DYER
A
LECOMPTE LA 71423

PREPARED BY:

PAT HARVEY
AGENT
1335 PETERMAN DR
ALEXANDRIA LA 71301
318 442 3496
318 442 3497

LOUISIANA
DELUXE HOMEOWNERS

Thank you for the opportunity to discuss your property insurance needs. I look forward to offering you the service and value that is the standard of Allstate Insurance. I am sure you will see that this quote can affordably enhance your insurance program.

TERRITORY ZONE 034 Town Class 0010

Policy Coverages:	Amount	Premium
Dwelling	50,000	1,059.00
Other Structures Protection	5,000	
Replacement Cost Guarantee Dwelling/Attached Structures		
Personal Property Protection	25,000	
Additional Living Expense	Up to 12 Months	
Family Liability (each occurrence)	100,000	
Guest Medical (each person)	1,000	
Deductibles Applicable	500	
New/Renovated Building Discount		
Total Annual Premium		1,059.00

This quote is not a contract, or binder of coverage. All coverages are subject to the terms and conditions contained in the policy and endorsements. The premiums shown are for a 12 month policy period. If you have questions, please contact me at the number listed above.

Allstate
You're in good hands.

ALLSTATE INSURANCE COMPANY
PROPERTY INSURANCE QUOTATION
AUGUST 13, 1996

ESPECIALLY PREPARED FOR:

NANCY DYER
MAIN ST
LECOMPTE LA 71346

PREPARED BY:

PAT HARVEY
AGENT
1335 PETERMAN DR
ALEXANDRIA LA 71301
318 442 3496
318 442 3497

LOUISIANA
DELUXE HOMEOWNERS

Thank you for the opportunity to discuss your property insurance needs. I look forward to offering you the service and value that is the standard of Allstate Insurance. I am sure you will see that this quote can affordably enhance your insurance program.

TERRITORY ZONE 034 Town Class 0009

Policy Coverages:	Amount	Premium
Dwelling	50,000	797.00
Other Structures Protection	5,000	
Replacement Cost Guarantee Dwelling/Attached Structures		
Personal Property Protection	25,000	
Additional Living Expense	Up to 12 Months	
Family Liability (each occurrence)	100,000	
Guest Medical (each person)	1,000	
Deductibles Applicable	500	
New/Renovated Building Discount		
Total Annual Premium		797.00

This quote is not a contract, or binder of coverage. All coverages are subject to the terms and conditions contained in the policy and endorsements. The premiums shown are for a 12 month policy period. If you have questions, please contact me at the number listed above.

Allstate
You're in good hands.

ALLSTATE INSURANCE COMPANY
PROPERTY INSURANCE QUOTATION
AUGUST 13, 1996

ESPECIALLY PREPARED FOR:

NANCY DYER
A
LECOMPTE LA 71423

PREPARED BY:

PAT HARVEY
AGENT
1335 PETERMAN DR
ALEXANDRIA LA 71301
318 442 3496
318 442 3497

LOUISIANA
DELUXE HOMEOWNERS

Thank you for the opportunity to discuss your property insurance needs. I look forward to offering you the service and value that is the standard of Allstate Insurance. I am sure you will see that this quote can affordably enhance your insurance program.

TERRITORY ZONE 034 Town Class 0008

Policy Coverages:	Amount	Premium
Dwelling	50,000	622.00
Other Structures Protection	5,000	
Replacement Cost Guarantee Dwelling/Attached Structures		
Personal Property Protection	25,000	
Additional Living Expense	Up to 12 Months	
Family Liability (each occurrence)	100,000	
Guest Medical (each person)	1,000	
Deductibles Applicable	500	
New/Renovated Building Discount		
Total Annual Premium		622.00

This quote is not a contract, or binder of coverage. All coverages are subject to the terms and conditions contained in the policy and endorsements. The premiums shown are for a 12 month policy period. If you have questions, please contact me at the number listed above.

Allstate®
You're in good hands.

ALLSTATE INSURANCE COMPANY
PROPERTY INSURANCE QUOTATION
AUGUST 13, 1996

ESPECIALLY PREPARED FOR:

NANCY DYER
A
LECOMPTE LA 71423

PREPARED BY:

PAT HARVEY
AGENT
1335 PETERMAN DR
ALEXANDRIA LA 71301
318 442 3496
318 442 3497

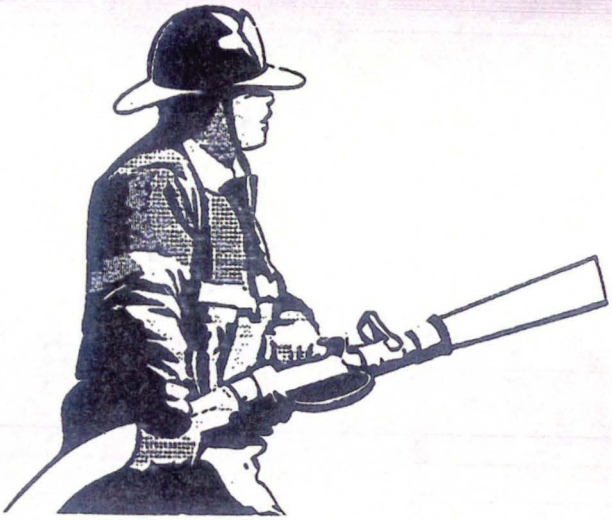
LOUISIANA
DELUXE HOMEOWNERS

Thank you for the opportunity to discuss your property insurance needs. I look forward to offering you the service and value that is the standard of Allstate Insurance. I am sure you will see that this quote can affordably enhance your insurance program.

TERRITORY ZONE 034 Town Class 0007

Policy Coverages:	Amount	Premium
Dwelling	50,000	523.00
Other Structures Protection	5,000	
Replacement Cost Guarantee Dwelling/Attached Structures		
Personal Property Protection	25,000	
Additional Living Expense	Up to 12 Months	
Family Liability (each occurrence)	100,000	
Guest Medical (each person)	1,000	
Deductibles Applicable	500	
New/Renovated Building Discount		
Total Annual Premium		523.00

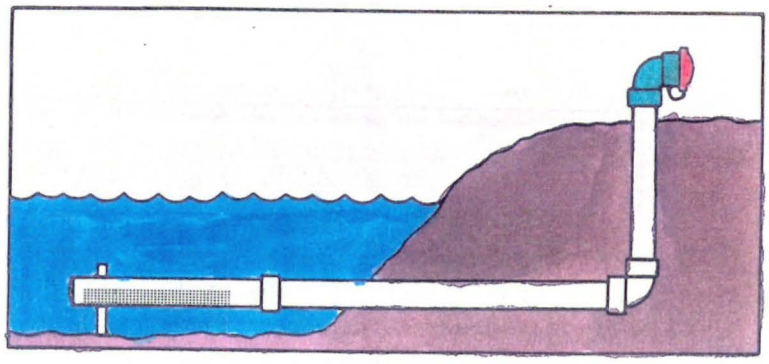
This quote is not a contract, or binder of coverage. All coverages are subject to the terms and conditions contained in the policy and endorsements. The premiums shown are for a 12 month policy period. If you have questions, please contact me at the number listed above.



DRY FIRE HYDRANTS PROGRAM

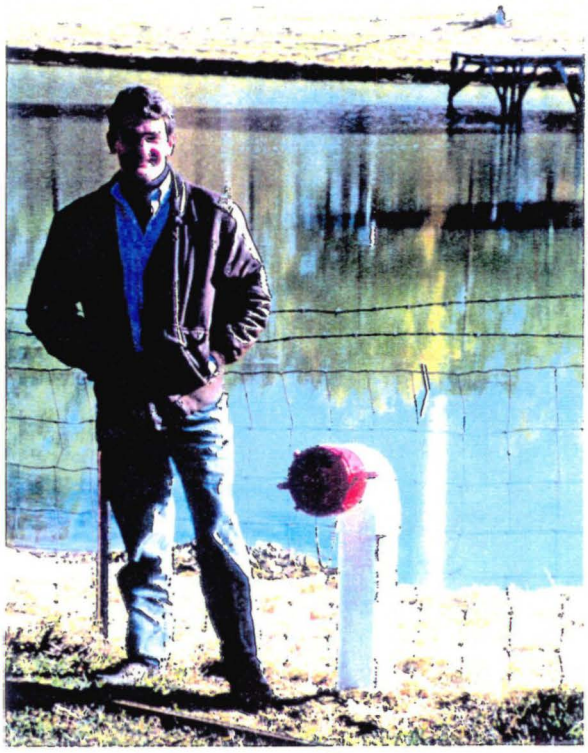
Five USDA/NRCS AmeriCorps Members were recruited to help plan and coordinate the installation of over 2,000 dry hydrants in rural areas of Louisiana.

A dry fire hydrant is a non-pressurized pipe system permanently installed in existing lakes, ponds and streams that provide a ready means of water supply to a tank truck.



USDA/NRCS AmeriCorps Members and Duty Station

Dry Fire Hydrant Coordinators



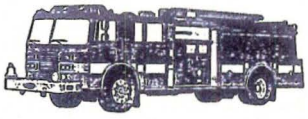
Tom Morton
Trailblazer RC&D
Ruston, LA

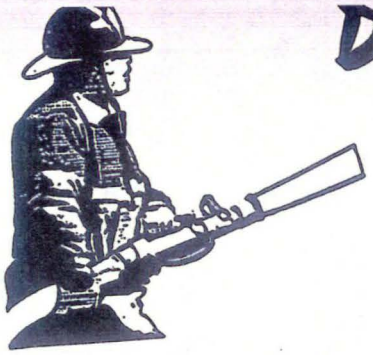
Robin Torrence
Capital RC&D
Denham Springs, LA

John Tom Murray
Northeast Delta RC&D
Winnsboro, LA

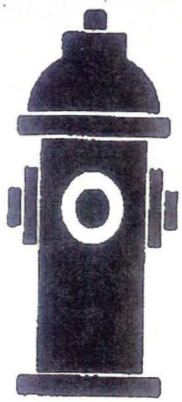
Nancy Dyer
Twin Valley RC&D
Natchitoches, LA

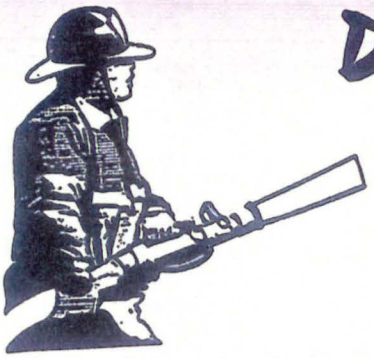
Donna Haydel
Imperial Calcasieu RC&
Jennings, LA





DRY FIRE HYDRANTS PROGRAM





DRY FIRE HYDRANTS PROGRAM

Your point of view

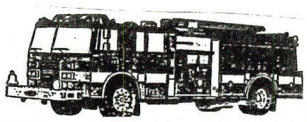
Dear Editor,

Vermilion Parish is presently participating in the statewide dry fire hydrant program. A dry fire hydrant is a hydrant that is connected to a non-pressurized source of water. Fire trucks can connect suction hoses and fill their tanks from sources such as ponds and bayous. These hydrants are located in areas where pressurized sources are not available. By using these hydrants for fire fighting, it also reduces the amount of treated water that would have been used from the municipal supplies.

With the assistance of the Police Jury, Drainage Districts and farmers these structures are being installed throughout Vermilion Parish. Local firefighters, soil and water conservation district employees, RC&D council members and NRCS employees are all cooperating on this project. Vermilion Parish has been allocated 45 hydrants to be installed parishwide, with locations determined by the fire department personnel themselves. These hydrants will assist in providing better fire protection and hopefully play a part in improving the insurance rating when the parish is rated by the Public Insurance Association of Louisiana in 1997.

These hydrants have been made possible through a grant from the Department on Natural Resources and being administered in our area by the Acadiana Resource Conservation and Development Council. Donna Haydel, Americorp employee is the RC&D Dry Fire Hydrant Coordinator for the Acadiana Council. Because of the cooperation of all people and agencies mentioned, this program will be a success and benfit all Vermilion Parish residents.

Donald Menard
Vermilion Parish Hydrant Coordinator
Acadiana RC&D Council Member



U.S. Postage
Marksville, La.
Permit No. 1
Copyright 19

The Sunday Journal
Greater Avoyelles
La Bonne Gazette des Avoyelles

July 14, 1

Vol. 18, No. 37

Dry fire hydrants could lower ratings

The installation of 35 dry fire hydrants planned for Avoyelles Parish could help lower fire insurance costs for rural residents. The most recent installation was July 9 on the Tunica-Biloxi Indian Reservation in Marksville, in the pond to the right of the entrance.

A dry fire hydrant is a non-pressurized pipe system permanently installed in an existing lake, pond or stream. The dry hydrant provides a water delivery system that allows tank trucks or pumpers to use suction to obtain water from the roadside hydrant.

Properly installed, dry hydrants can eliminate the problem of hauling water over long distances for use in fires or road maintenance, and provide natural, unprocessed water for use.

Results include energy savings to consumers and road maintenance departments, rural fire protection and lower insurance ratings.

Agencies involved in Tuesday's installation included USDA/-AmeriCorps National Service represented by Nancy Dyer, Natural Resources Conservation Service represented by Benny Dobson, Twin Valley RC&D, Mansura Fire Department represented by Tommy Simon, Linster Guillot and Dalvin Warren, and Bunkie Fire Department, represented by Joey Frank.

The installation took about three hours, according to Larry Burgess, Tunica-Biloxi Tribal Planner.

The Statewide Dry Hydrant Program is partially funded by a grant from the Louisiana Department of Natural Resources-Energy Division.

Thus far, six dry fire hydrants have been installed and certified in Avoyelles, said Ms. Dyer. Others are awaiting certification. All hydrants are to be completed by September 15, Ms. Dyer said.

Installation and testing. . . . . .

Mansura and Bunkie firemen lend a hand in the installation and testing of a dry fire hydrant on the Tunica-Biloxi Reservation in Marksville Tuesday, July 9.

Shown from left to right are Larry Burgess, Tunica-Biloxi Tribal Planner; Joey Frank of the Bunkie Fire Department; and Linster Guillot, Dalvin Warren and Tommy Simon of the Mansura Fire Department.

South Carolina

USDA Natural Resources Conservation Service
State Office
1835 Assembly Street, Room 950
Columbia, South Carolina 29201

Date: 7-30-96

Pages (including transmittal sheet): 12

To: Dee DiFiore

Telephone Number: _____ *Fax Number:* 202-720-4614

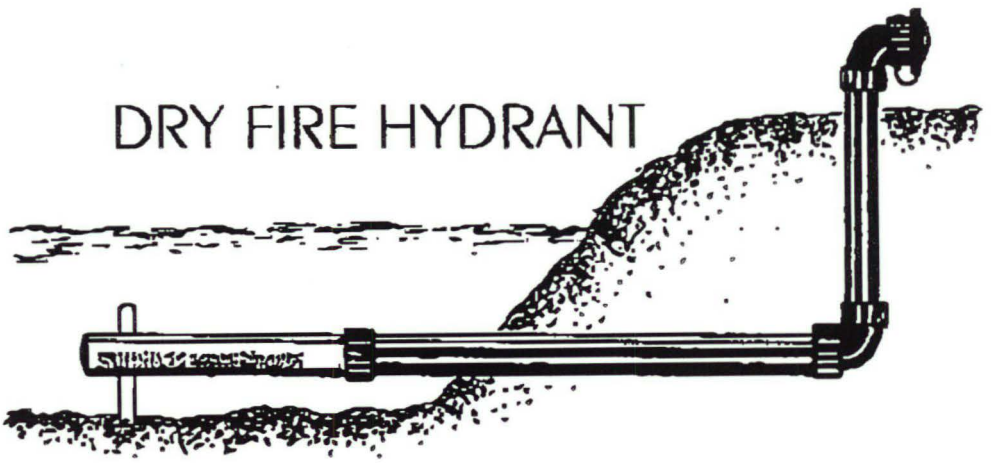
From: Walley Turner

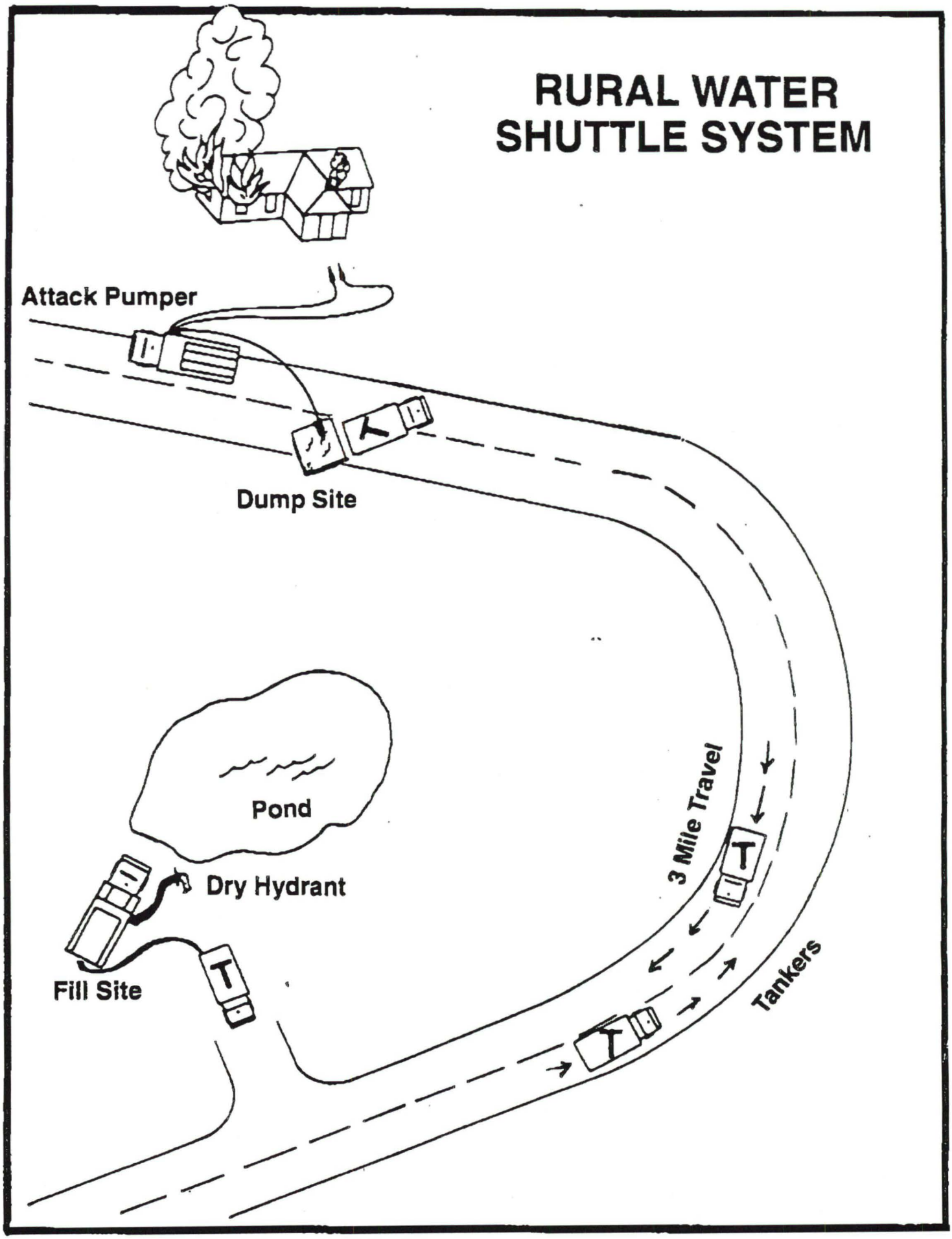
Telephone Number: 803-253-3314 *Fax Number:* (803)253-3670

Comments:

Information on Dry hydrant you requested.

Congressman Jim Clyburn attended a dry hydrant Ceremony that was recently held in state. our Americorps folks helped with this Project


DRY FIRE HYDRANT


RURAL WATER
SHUTTLE SYSTEM
Attack Pumper
Dump Site
Pond
Dry Hydrant
Fill Site
3 Mile Travel
Tankers

Suggested Sidebar *with graphic*

FOR IMMEDIATE RELEASE

Can a dry fire hydrant located three miles from a fire help?

"No problem," explained Chief Wayne Walker with the Colleton Rural Fire Department. "We have a system to make them one of the most effective tools in rural fire protection."

This is how that system typically works, according to Walker. When the fire department receives an alarm, the fire fighters, two pumper trucks and a tanker truck are dispatched.

A pumper and tanker arrive at the fire scene. The pumper begins fighting the fire with water from its booster tank. A portable drop tank is set up and using a quick-dump valve, the tanker transfers its water to the portable tank.

Meanwhile, the second pumper arrives at the nearest dry fire hydrant, usually two or three miles from the fire. It connects to the hydrant and primes its pump.

Back at the fire, the tanker has emptied its load. It then heads to the dry fire hydrant. When it arrives, the primed pumper is ready to fill the tanker. That takes about two minutes and the re-filled tanker returns to the fire, discharges its water and the cycle is repeated as necessary.

With the proper equipment and trained personnel, this water shuttle can provide an unlimited amount of water.

"No problem," Walker concluded.

POTENTIAL INSURANCE PREMIUM SAVINGS BY COUNTY

Abbeville	$600,000	Hampton	$580,000
Aiken	$1,700,000	Horry	$1,000,000
Allendale	$240,000	Jasper	$560,000
Anderson	$2,200,000	Kershaw	$1,300,000
Bamberg	$340,000	Lancaster	$520,000
Barnwell	$280,000	Laurens	$1,600,000
Beaufort	$950,000	Lexington	$530,000
Berkeley	$1,180,000	McCormick	$140,000
Calhoun	$460,000	Marion	$870,000
Charleston	$640,000	Marlboro	$400,000
Cherokee	$680,000	Newberry	$800,000
Chester	$700,000	Oconee	$1,160,000
Chesterfield	$830,000	Orangeburg	$1,600,000
Clarendon	$540,000	Pickens	$1,400,000
Colleton	$640,000	Richland	$1,360,000
Darlington	$820,000	Saluda	$490,000
Dillon	$470,000	Spartanburg	$2,800,000
Dorchester	$870,000	Sumter	$1,700,000
Edgefield	$400,000	Union	$570,000
Fairfield	$490,000	Williamsburg	$1,030,000
Florence	$890,000	York	$1,940,000
Georgetown	$600,000		
Greenville	$1,660,000	Total	$41,390,000
Greenwood	$860,000		

STATEWIDE SAVINGS

Insurance Premiums (ISO 10,9,8 rating to ISO 7 rating)	$ 41,390,000
Property and Contents	$ 10,586,411
Fuel (Primary and Mutual Aid responses)	$ 259,083
Water	$ 34,684
Total	$ 52,270,178

A $50,000 house has a potential average savings in insurance premiums of $159.

Schlumberger has recognized the need for cost reductions of dry hydrant materials. It is critical for fire departments to have the necessary quantity of dry hydrants installed in their fire districts to realize an increase in operating efficiencies. Our new price schedule offers quantity discounts which will allow the maximum number of dry fire hydrants to be installed for your dollar investment.

Dry fire hydrant projects have proven to be a worthwhile investment of resources. We encourage you and your organization to continue supporting these projects.

As a manufacturer and consultant of rural fire protection systems, Schlumberger Industries is committed to assisting you in the conservation and enrichment of Rural America.

Please contact our office if we can help you in any way.

Sincerely,

John Parks

John Parks
Marketing Manager, Fire Products

The Mountain Rest V.F.D is a well trained department. They had the manpower and equipment requirements to be rated much lower than an ISO Class 9, but they were lacking in one very important area, adequate water supply points.

Through the efforts of the local fire chief, Joe Devita, the 96th District RC&D Coordinator, Jimmy Sanders, the District Conservationist, Dennis Bauknight and many more, thirteen dry fire hydrants were installed in strategic locations throughout the community of Mountain Rest. These thirteen dry fire hydrants provided the necessary water supply to enable the Mountain Rest V.F.D to be re-classified as a Class 7 rated department.

The difference between a Class 9 and a Class 7 from an insurance standpoint, is approximately a 40% savings on home owner's premiums. This savings, community-wide, has been estimated to be approximately $200,000 a year.

What was the payback?

Approximate Expense	Projected Annual Savings	Payback Period
$15,000	**$200,000**	**1-Month**

Is this an example of rural economic development?

Approximately $17,000 a month will remain in the hands of the residents of Mountain Rest. The majority of this new found income will probably either be invested at community banks or spent at community businesses. You be the judge.

These are just two examples of many similar success stories occurring across the United States. Schlumberger Industries is committed to this nation-wide effort to improve rural fire protection and we are pleased to have had the opportunity to play a part in these dry fire hydrant success stories.

Our research and development department is constantly evaluating new and improved dry fire hydrant system designs. Through our field support functions, we have identified specific application needs that require custom dry hydrant strainers, check valves and additional freeze insulation protection.

Schlumberger Industries is proud to introduce our new line of dry fire hydrant products. We guarantee our systems to offer the highest quality materials and superior performance characteristics. We are enclosing our new literature and design schematics for you review.

Schlumberger

Water Division

Wally Turner
SCS
1835 Assembly, Room 950
Columbia, SC 29201

Dear Wally:

Thanks to the RC&D Councils, SCS and USFS, this past year has been an exciting year for Rural America. We have seen small town residents, fire departments, local officials and state and federal agencies pull together to create change within rural communities. This change has been toward the improvement of rural fire protection.

Saving Rural Property...

In September of 1993, Lindell Coriasco, fire chief for Williamson County Fire District, Marion, Illinois, responded to a fire call in rural Williamson County. When they arrived on site, a rural farm home was well involved and was beyond saving. Homes of other family members were adjacent to the burning structure and were beginning to smolder. Approximately 40,000 gallons of water, shuttled by five responding tanker trucks, allowed the fire men to shield the other structures on the property and extinguished the burning home. Thousands of dollars of property was saved.

This is a success story instead of a tragedy because of the efforts of the local fire department, Joe Fasig coordinator for Shawnee RC&D, Marion, Illinois, and the installation of twenty-two dry fire hydrants strategically placed throughout this fire district. Those dry fire hydrants reduced the travel time of the tanker trucks significantly, allowing the firemen to shuttle the volume of water they needed quick enough to save all the surrounding structures at this fire site.

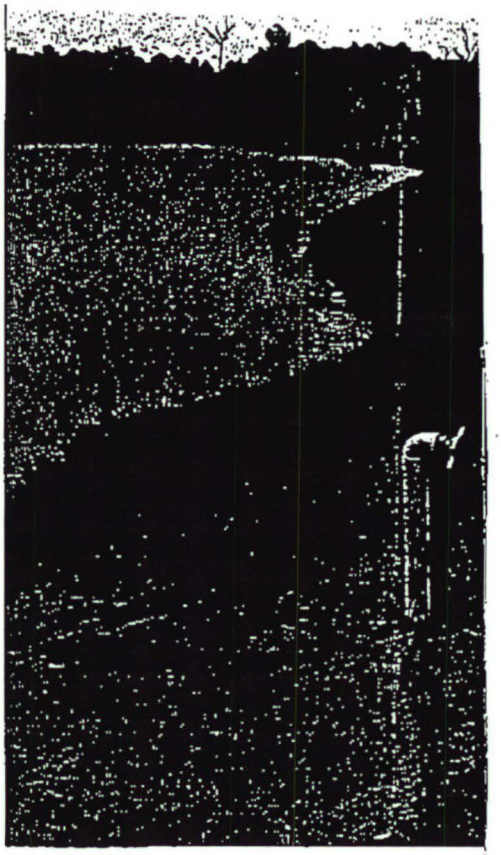
Promoting Rural Economic Development...

In August of 1993, Mountain Rest, South Carolina, a small rural community of approximately 2000 families, experienced a community-wide increase in cash flow. Starting in August, approximately $200,000 a year would be channeled into the community. This was not due to new business development. It did not come from employee raises and no one in the community won a lottery. This $200,000 annuity was a result of the Mountain Rest Volunteer Fire Department ISO rating re-classification from a Class 9 to a Class 7.

Highway 229 South • Tallassee, Alabama 36078 • Tel: (205) 283-6555 • FAX: (205) 283-7292
A Division of Schlumberger Industries, Inc.

Fire Hydrants For the Farm

A steady water supply saves buildings and a bundle on insurance.



This past July, during an otherwise uneventful steamy afternoon, a brief thunderstorm lingered over Jackson Farms in Clarendon County, S.C. It lasted just long enough to send a bolt of lightning surging through the hog farm's feed mill.

The resulting fire wasn't discovered until 15 minutes later. When Fire Chief Carter Jones arrived at the scene, the two-story metal building was engulfed in fire. Sacks of feed were burning, and flames leaped at adjacent grain bins.

Within 20 minutes, firemen had brought the blaze under control. Losses were kept to about $40,000. The feed ingredients supplier made arrangements so that the hogs never went hungry. And the mill was back to grinding feed within eight days.

But things could have been worse.

The fire was quickly controlled because a nearby dry hydrant supplied a steady stream of water. The hydrant is in a 3-acre pond about 1½ miles from the feed mill.

"It cut our response time in half," says Jones. "We never ran out of water."

Quick Refill

Rural fires often get out of control when the firetruck must leave the scene to refill with water. With dry hydrants, that isn't a problem. Trucks can be filled in a matter of minutes.

Dry hydrants can be placed in ponds, lakes, streams, and even in cisterns, livestock watering tanks, and irrigation valves.

The hydrant is basically a long tube. The end with the water intake is placed beneath the water. The other end extends 2 feet aboveground, where a threaded fitting allows firefighters to hook up their pumper hoses.

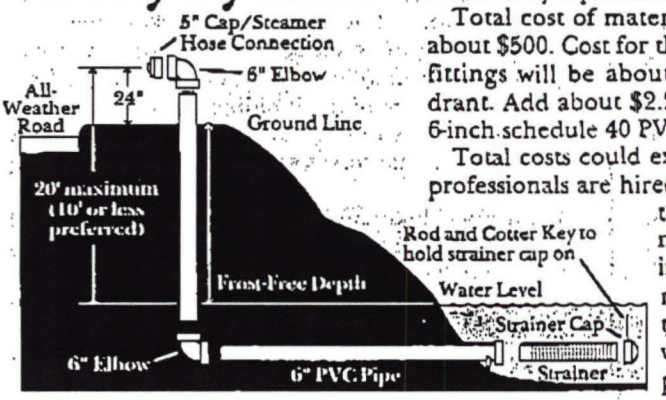
In the fire at Jackson Farms, three trucks were dispatched. One immediately began to douse the blaze. The second unloaded its water into a 2,000-gallon portable folding tank, and then, along with the third truck, began shuttling water from the dry hydrant to the fire scene.

"If you are thinking about installing a dry hydrant, it is important to first check with your local fire department," says Parker Browne with Red Head Brass, Inc., a supplier of dry-hydrant equipment. This ensures that hydrants meet national standards. Hydrants must also fit in with fire department plans for fighting fires, and hydrant fittings must be compatible with firetruck equipment.

Others to consult include the local SCS office for assistance in hydrant design, the local roads department for help with improving access to the site, and insurance agencies to find out whether having a dry hydrant might result in lower insurance premiums.

One hydrant in Oconee County, S.C., has helped put out three fires within two months.

How To Build A Dry Hydrant



The cost of installing a dry hydrant really isn't much when you consider the security it provides.

Total cost of materials should be about $500. Cost for the strainer and fittings will be about $250 per hydrant. Add about $2.25 per foot for 6-inch schedule 40 PVC pipe.

Total costs could exceed $1,000 if professionals are hired for site investigation, engineering design, installation, and road construction. These services may be provided free if SCS, the local fire department, and the local government's road crew are willing to pitch in.

Designs and materials required may vary due to site conditions. An engineer should approve designs.

Here's a list of what you'll need:

✔ 6-inch schedule 40 PVC pipe, usually purchased in 21-foot lengths.

✔ Two 45- or 90-degree PVC elbow joints for each hydrant.

✔ One threaded cleanout plug to clean mud and trash from the water intake strainer if it gets clogged.

✔ One threaded brass connection and cap at aboveground outlet. The hookup capability of the local fire de-

T Bulletin

Dry Hydrants Helps Combat Rural Fires

As the temperature drops and winter weather is upon us, many rural residents will crank up their wood stoves to provide an economical method of heating. As most of us are aware during the winter months, a higher number of home fires occur with associated fatalities.

Rural residents are the most vulnerable because of the large number of wood stoves and the lack of adequate fire protection. About 53 percent of the state's population live in unincorporated rural areas, and most of these areas have an inadequate water supply for fire protection.

According to Walley Turner, assistant state conservationist for programs, USDA Soil Conservation Service, "In November 1992, the South Carolina Resource Conservation and Development Council decided to implement a statewide program to improve fire protection by attacking the problem of inadequate water supply in rural areas." "The program centered around the use of dry fire hydrants to provide a ready supply of water to use in fighting fires," Turner said.

Since 1992, more than 815 hydrants were installed in 46 South Carolina counties, according to Raymond Wells, Jr., chairperson of the South Carolina Resource Conservation and Development Council. "The dry fire hydrants will provide increased fire protection for more than 136,600 homes and businesses in rural South Carolina," Wells said.

Before dry fire hydrants became available, rural fire protection was largely dependent upon tanker trucks making several trips to get water from a source as far as 10 miles from the fire. Lives and property were sometimes lost because of the travel time involved in obtaining water for fire fighting.

A dry fire hydrant provides a ready solution to this problem by providing a source of water near the scene of a fire. It is a non-pressurized pipe system installed in a pond, lake or stream. Tanker trucks can fill up at a site closer to the fire and respond in a shorter time period.

"With these hydrants, fire departments are able to provide better service to their districts and save fuel because of the shorter distance to refill," Turner said. "Homeowner insurance rates have also decreased as much as 45-50 percent as a result of the dry fire hydrants."

An example of the savings in insurance rates can be found in the Mountain Rest area of Oconee County. Joe DeVita, chief of the Mountain Rest Volunteer Fire Department, reports that hydrants installed in his service area are lowering fire insurance premiums an average of $200 per home per year for 1000 homes served. This is a total annual savings of $200,000.

"Of course, the greatest benefit of the dry fire hydrants is the increased safety to lives and property," Turner said. "This is impossible to measure in dollars."

Many agencies and organizations throughout the state worked on the statewide installation of the hydrants. The project was developed by the state's four Resource Conservation and Development Areas. These areas consist of local community leaders from neighboring counties who join to form a council.

Technical assistance in the form of engineering design and project inspection was provided by the USDA Soil Conservation Service. The SCS also provides a full time coordinator for each RC&D Council. Material was purchased with a $200,000 grant from the South Carolina Governor's Office of Energy Program.

The Electric Cooperative of South Carolina funded administrative expenses which involved printed material, video production and a project coordinator. The hydrants were installed through cooperation of county governments and local businesses.

"The majority of the hydrants installed were made possible by pond owners who volunteered use of their ponds for the benefit of their communities," Wells said. "We appreciate their support."

Even though 815 hydrants have been installed across the state, **the job is not finished.** The South Carolina RC&D Council's goal is to provide adequate water supply for fire fighting for all rural residents. Approximately 1,252 additonal dry fire hydrants are needed to complete the job. The council encourages homeowners to work with their local fire district officials and local governments in securing materials and installing the needed hydrants in their community.

07/30/96 14:19 ☎8032533670 USDA NRCS SC →→→ USDA OPL 002/012

AGENDA

Williamsburg County Fire Department

Monday - July 8, 1996
10:00 A.M.

10:00 A.M.

Welcome	Raymond E. Wells, Chairman Santee Wateree RC&D Council
Dry Hydrant Partnerships	David Wilson, Forest Supervisor USDA Forest Service
Americorps	Mark Berkland, State Conservationist USDA Natural Resource Conservation Service
The Dry Hydrant Concept	Ethan Weston & Vincent Bostic USDA Natural Resource Conservation Service & Americorps
Benefits to the Community	Ed Harville, Fire Chief Williamsburg County
Remarks	Congressman James E. Clyburn

10:30 A.M.

Refreshments

11:00 A.M.

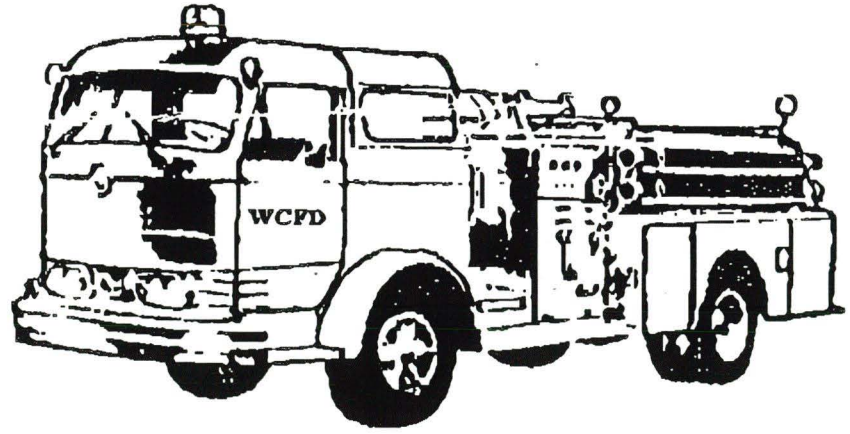
Travel to Dry Hydrant Site

11:15 A.M.

Dry Hydrant Project Demonstration	Williamsburg County Fire Department

PROTECTING RURAL SOUTH CAROLINA

Dry Fire Hydrants for Williamsburg & Florence Counties



"Improving Fire Protection in our Rural Communities"

USDA/AmeriCorps

Louisiana

FAX

To:	Joel Berg/Dee DiFiore
Fax #:	(202) 720-4614
Subject:	Dry Fire Hydrant Report - Update
Date:	September 4, 1996
Pages:	25, including this cover sheet.

COMMENTS:

Attached is an updated report for the USDA/AmeriCorps dry fire hydrant program in Louisiana. Included in this revised report are funding sources, hydrant costs, projected savings in insurance premiums, and projected value of property saved.

Please call me at (318) 473-7753 if you have any questions.

Holly Martien

From the desk of...

Holly L. Martien
Administrative Program Specialist
USDA, Natural Resources Conservation Service
3737 Government Street
Alexandria, Louisiana 71302

(318) 473-7753
Fax: (318) 473-7682

USDA/AmeriCorps Dry Fire Hydrant Project

Louisiana

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

Background

In many rural areas, the lack of an established water system and domestic fire hydrants can impair a fire department's ability to do its job quickly and efficiently. Many fire departments have chosen to develop a water hauling or "shuttle" procedure. Tanker trucks are used to carry large amounts of water to the fire scene to deliver a continuous supply of water. The success of this system is relative to the distance the trucks must travel to refill. A dry hydrant system provides a solution to the problem of distant fill-up points.

USDA/AmeriCorps members are working with the Natural Resources Conservation Service in Louisiana to plan, survey, and coordinate the installation of over 2,000 dry fire hydrants in rural areas through the Louisiana Statewide Dry Fire Hydrant Program.

Louisiana Statewide Dry Fire Hydrant Program

Over 2,000 dry fire hydrants are being installed across Louisiana to help improve rural fire protection and rural road maintenance through the Louisiana Statewide Dry Hydrant (SWDH) program. The SWDH program was funded through a $996,984 grant to Trailblazer Resource Conservation and Development, Inc., from the Louisiana Department of Natural Resources using oil overcharge funds from the Stripper Will Settlement as approved by the U.S. Department of Energy. Local units of government and local volunteer fire departments will provide in-kind matching funds in the form of equipment and labor for installations. Materials for dry hydrants average $1,000-$1,500 per hydrant.

What is a Dry Hydrant?

A dry hydrant is a non-pressurized pipe system permanently installed in existing bodies of water (lakes, ponds, streams, etc.) to provide a means of suctioning water into a tank truck. One end of the dry hydrant protrudes out of the ground to give tanker trucks a hose connection. The other end is composed of a strainer submerged in the pond or stream to draw water directly through the system. The dry hydrant system gives tanker trucks access to ponds and streams from the main road and ends the necessity of going all the way back to the starting point for a refill.

Water Shuttle

In a water hauling operation, the time it takes to fill the tanker, the distance the tanker has to travel to the fire, and the time it takes to discharge the water from the tanker are critical elements in rural fire protection. Time saved on any one of the above points will increase the amount of water that can be hauled to the fire. Dry hydrants, properly located, can substantially reduce travel time from a water source to the fire.

Some departments are using the system in the following manner: when a fire alarm is received, equipment is dispatched on a pre-planned basis determined by such things as fire flow needs, hazards involved, water supply available, etc. One tanker and one pumper respond to the fire. The pumper begins the fire attack with water from its booster tank. The

first responding tanker may act as a "nurse" tanker, or may set up a portable drop tank and begin discharging its load of water into the drop tank. The water in the tanker can be transferred to the portable drop tank at a rate of approximately 1,000 gallons per minute. As soon as the tanker is empty, it immediately heads to the water supply. In the meantime, another fire department pumper has responded to the water supply, connected to the dry hydrant, and primed its pump. When the empty tanker arrives as the water supply, the pumper is ready to fill the tanker. The refilled tanker returns to the fire site, discharges its water, and the cycle is repeated.

Expected Benefits

Saves Lives and Property

The most important benefit of the installation of dry hydrants in rural areas is the increased capability of firefighters to save lives and property. Eight structures have been directly saved because a dry hydrant was near the fire or because no pressurized hydrants were in the area. Ten structures were indirectly saved when grass fires and forest fires were contained with the use of dry hydrants.

During a hard freeze in February 1996, Concordia Parish (Vidalia and Ferriday, Louisiana) lost electricity so pressurized hydrants were not accessible for fire protection. Dry hydrants were used for the three fires encountered throughout the power failure. The Concordia Parish Fire District was thankful for the use of the dry hydrants, as well as neighboring fire districts.

In DeSoto Parish, Louisiana, dry hydrants were used to save two saw mills.

In Iberia Parish, Louisiana, a dry hydrant was used to contain a structure fire.

In February 1996, Ward 4 Fire Protection District in Jackson Parish, Louisiana, used water drawn from a dry hydrant to extinguish an approximately ten-acre grass fire, which was endangering a nearby dwelling. Due to the proximity of the hydrant to the fire, the fire did not harm the building.

In April 1997, Ward 4 Fire Protection District in Jackson Parish, Louisiana, got another chance to utilize their dry hydrants to extinguish a woods fire. They were able to save three homes from destruction.

In Beauregard Parish, Louisiana, a dry hydrant was used to contain a forest fire that was threatening to endanger surrounding homes.

In Vermilion Parish, Louisiana, a dry hydrant was used to contain a barn fire which was located near two houses, a barn, and a greenhouse.

In DeSoto Parish, Louisiana, a dry hydrant was used to contain a house fire.

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

In Calcasieu Parish, Louisiana, a dry hydrant is used on a continuous basis for training area volunteer firefighters.

Numerous brush fires and woods fires throughout Louisiana were contained with the use of dry hydrants before the fires caused destruction to surrounding homes and buildings.

It is estimated that during a recent six-month period, property valued at an estimated $730,000 was saved by containing fires with the use of dry hydrants. By the year 2000, it is projected that property valued at over $5 million will have been saved because of the use of dry hydrants.

Decrease in Fire Classification Rating

Fire insurance premiums for each area are based on a classification determined by the Property Insurance Association of Louisiana (PIAL). The classification PAIL assigns depends on each area's ability to fight fires. Areas with no fire departments are given a class 10 rating. As the fire-fighting capability increases, the rating decreases. Higher training levels and better equipment are among the ways this can be accomplished. For example, if a fire department can demonstrate the ability to pump 250 gallons of water per minute for two hours at a fire scene, the area's fire classification rating could potentially decrease to a six or seven. Dry fire hydrants play an important role in such a demonstration in rural areas.

Based on information collected through interviews of fire chiefs of volunteer fire departments participating in the dry fire hydrants program in rural Louisiana, the installations of dry fire hydrants are a contributing factor in affecting the district's fire classification rating in one of two ways, either (1) the fire rating will drop one or two points, or (2) the fire rating will be maintained at the current level and will not go up a point. This decrease in fire classification rating or maintenance of a rating significantly influences the insurance premiums of homeowners in these rural communities.

It is important to note that most major insurance companies will not issue fire insurance coverage for homes located in fire classification 10 or 9 areas. Therefore, it is reasonable to predict that the installation of dry fire hydrants in rural Louisiana will contribute significantly to the ability of homeowners to acquire affordable fire insurance.

Insurance Premium Savings

In Jackson Parish, Louisiana, the Quitman Fire Protection District successfully conducted a water shuttle demonstration using a dry hydrant for PIAL. This shuttle enabled the district to improve their property insurance rating from a 9 to an 8, leading to a **21% drop in commercial insurance premiums.**

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

In Natchitoches Parish Fire District 7, dry fire hydrants are contributing to a fire insurance rating reduction from a class 10 to a class 7. A homeowner in Fire District 7 with a brick house worth $100,000 can expect the insurance premium with a class 10 fire rating to be $1,940/year. The premium for the same house with a class 7 rating is significantly reduced to $1,086/year. This is a savings of $854/year for the homeowner. **This is a 44% reduction from the original premium.**

The following table demonstrates the money saved or lost and the percentage change in rural homeowners' insurance premiums when fire classification ratings change:

Premium Change as a Result of Fire Classification Rating Change

Table data based on fire classification ratings/premiums for a $50,000 house in Lecompte, Rapides Parish, Louisiana (see Appendix A).

	Present Fire Classification Rating/Premium			
Future Fire Classification Rating/Premium	**10** **$1,059.00**	**9** **$797.00**	**8** **$622.00**	**7** **$523.00**
10 **$1,059.00**	0	$262 (+33%)	$437 (+70%)	$536 (+102%)
9 **$797.00**	-$262 (-25%)	0	$175 (+28%)	$274 (+52%)
8 **$622.00**	-$437 (-41%)	-$175 (-22%)	0	$99 (+19%)
7 **$523.00**	-$536 (-51%)	-$274 (-34%)	-$99 (-16%)	0

Based on the above table, the prediction can be made that when the Lecompte Volunteer Fire Department receives a fire rating reduction from a 9 to an 8, the rural homeowner of a $50,000 home will save $175 a year or 22 percent on their homeowners' insurance. Yet, if that fire rating was to increase from an 8 to a 9, the homeowner would see a $175 or 28 percent increase in their homeowners insurance premium (see Appendix A).

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Projected Savings

Population data was collected on the number of rural homeowners living in all parishes in Louisiana from 1990 U.S. Census information. Figures were compiled for the number of rural homeowners in the parishes participating in the dry fire hydrants program. The results indicated that 638,042 homeowners will reap significant financial benefits because of the installation of dry hydrants in their communities. As stated previously, fire chiefs estimate at least a one point drop in their fire rating with the installation of dry hydrants as a contributing factor. Based on the table above, if 638,042 rural Louisiana homeowners live in a fire district that receives a one point rate decrease from a 9 to an 8, they could save $111,657,350 in one year on insurance premium costs (the value of the homes, number of points changed in fire classification ratings, and insurance premium rates will vary from fire district to fire district).

Other Benefits

Other benefits of dry fire hydrants include conservation of limited water storage for drinking water and the use of natural, unprocessed water for road maintenance.

Dry Hydrants. . . "Worth Their Weight in Gold"

Following is a letter submitted to the editor of a local newspaper from D. J. Brown, Chief, District 8, DeSoto Parish, Louisiana

> *Dry hydrants are worth their weight in gold. We found out in May of 1996. One of the first dry hydrants we installed was on a spring-fed pond on Highway 509, about 2.5 miles from the Broadway Saw Mill. Little did we know that we would use these dry hydrants two times in the next three weeks.*
>
> *The first fire call came in the second week of May, one week after we had installed our dry hydrant. When we arrived at the scene, the sawmill was over half involved in fire. We knew that this was going to be a water shuttle fire, so we sent 812, our LDH pumper straight to the Highway 509 dry fire hydrant to set up. But this time, unlike before, with other structure fires, we only sent the driver instead of the driver and at least five other firefighters.*
>
> *What was the difference? Simply this: a six-inch dry hydrant. That's right! Instead of having to hook up 30 feet of heavy hard suction pipe, have three firefighters put it in the pond, find a bucket to tie the end of the strainer to keep it from dragging bottom, pull the hard suction pipe back to the pumper to hook up and prime, and finally start to pump, now all we have to do is put our pumper 8 feet from the hydrant end, hook up just one section of pipe, prime, and pump, pump, pump!*
>
> *The second fire was at the same location, two weeks later. A large wood scrap ship pile was fully involved, and the wind was forcing it back towards the mill. Again, we sent our 812 pumper straight to the dry hydrant, and within 5 minutes it was primed and ready to pump. The first fire we pumped 40,000 gallons of water, the second fire*

we pumped 70,000 gallons of water.

In May we needed to test our 1250 pumpers, so again we went to a newly installed dry hydrant and tested our trucks. Both trucks we tested pumped over 1,350 gallons per minute each.

Another advantage I noticed was the ability of a dry hydrant to out-perform the rural town hydrant systems. Take for example in my hometown, the hydrant system was installed sometime in the 1950's. It only has a four-inch supply line and several miles of pipe. For us this meant that our water supply was limited to 200 to 400 gallons per minute, and that our pressure would be between 20 and 40 psi. The psi is supplied by a pump at the water tank which means that should you lose power, then the hydrant system would have very little pressure. With a dry hydrant you don't need any electricity, a one-man set up is all that is required, there is little or no friction loss, and only 20 to 100 feet of hard suction pipe is needed.

The dry hydrant is truly a multi-purpose hydrant. This is why we at Fire District 8 say that dry hydrants are WORTH THEIR WEIGHT IN GOLD!!

Building Community

Police juries and volunteer fire departments work with USDA/AmeriCorps members to plan, survey and install dry fire hydrants. This local volunteer effort is reflected by 40,919 hours of community time donated to this effort at a value of $1,529,002.40.

Progress Report of Dry Hydrant Installations by Parish

Following is a progress report of dry hydrant installations in Louisiana:

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Acadia Parish	52			20
		Acadia Fire District 1	6	
		Acadia Fire District 8	2	
		Acadia Fire Protection District 3	3	
		Acadia Parish Fire District 5	4	
		Eunice Fire Department	2	

APPENDIX A

ALLSTATE INSURANCE COMPANY
PROPERTY INSURANCE QUOTATION
AUGUST 13, 1996

ESPECIALLY PREPARED FOR:

NANCY DYER
A
LECOMPTE LA 71423

PREPARED BY:

PAT HARVEY
AGENT
1335 PETERMAN DR
ALEXANDRIA LA 71301
318 442 3496
318 442 3497

LOUISIANA
DELUXE HOMEOWNERS

Thank you for the opportunity to discuss your property insurance needs. I look forward to offering you the service and value that is the standard of Allstate Insurance. I am sure you will see that this quote can affordably enhance your insurance program.

TERRITORY ZONE 034 Town Class 0010

Policy Coverages:	Amount	Premium
Dwelling	50,000	1,059.00
Other Structures Protection	5,000	
Replacement Cost Guarantee Dwelling/Attached Structures		
Personal Property Protection	25,000	
Additional Living Expense	Up to 12 Months	
Family Liability (each occurrence)	100,000	
Guest Medical (each person)	1,000	
Deductibles Applicable	500	
New/Renovated Building Discount		
Total Annual Premium		1,059.00

This quote is not a contract, or binder of coverage. All coverages are subject to the terms and conditions contained in the policy and endorsements. The premiums shown are for a 12 month policy period. If you have questions, please contact me at the number listed above.

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Fire Protection District 6	3	
Allen Parish	35			34
		Elton Volunteer Fire Department	8	
		Oberlin Volunteer Fire Department	2	
		Elizabeth Volunteer Fire Department	1	
		Fire Protection District 4	1	
		Oakdale Fire Department	7	
		Allen Fire Protection District 2, Ward 3	12	
		Grant Volunteer Fire Department	3	
Ascension Parish	35			0
Assumption Parish	35			0
Avoyelles Parish	35			6
		Avoyelles Fire Protection District 2, Subdistrict 8	6	
Beauregard Parish	35			35
		Beauregard Fire District 1	6	
		Beauregard Fire District 2	3	
		Beauregard Fire District 3	7	
		Beauregard Fire District 3A	5	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Beauregard Fire District 4	8	
		Merryville Volunteer Fire Department	6	
Bienville Parish	10			10
		Bienville Fire District 6	5	
		Bienville Ward 1 & 2 Fire District	2	
		Bienville Ward 7 Fire Protection District	3	
Bossier Parish	10			9
		Benton Fire District 4	2	
		Bossier Fire District 2	2	
		Bossier Fire District 6	3	
		East Central Bossier Fire Protection District 1	2	
Caddo Parish	48			42
		Caddo Parish Fire District 2	10	
		Caddo Parish Fire District 3	1	
		Caddo Parish Fire District 4	9	
		Caddo Parish Fire District 6	3	
		Caddo Parish Fire District 7	8	
		Caddo Parish Fire District 8	11	
Calcasieu Parish	35			35

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Carlyss Volunteer Fire Department	2	
		DeQuincy Volunteer Fire Department	2	
		Hayes Volunteer Fire Department	3	
		Houston River Volunteer Fire Department	5	
		Iowa Volunteer Fire Department	1	
		Lake Charles Fire Department	6	
		Starks Volunteer Fire Department	8	
		Vinton Volunteer Fire Department	3	
		Westlake Volunteer Fire Department	5	
Caldwell Parish	35			30
		Caldwell Parish Rural Fire Protection District	30	
Cameron Parish	35			34
		Cameron Fire District 1	4	
		Cameron Fire District 7	3	
		Cameron Fire District 9	9	
		Cameron Fire District 11	3	
		Cameron Fire District 14	11	
		Klondike Volunteer Fire Department	4	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Catahoula Parish	35			10
		Maitland Volunteer Fire Department	7	
		Manifest Volunteer Fire Department	3	
Claiborne Parish	10			1
		Claiborne Fire Protection District 4	1	
Concordia Parish	35			1
		Concordia Parish Rural Fire Protection District	1	
DeSoto Parish	58			45
		DeSoto Fire District 1	12	
		DeSoto Fire District 2	5	
		DeSoto Fire District 3	2	
		DeSoto Fire District 5	7	
		DeSoto Fire District 8	19	
East Baton Rouge Parish	35			0
East Carroll Parish	12			0
East Feliciana Parish	35			0

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Evangeline Parish	30			17
		Mamou Fire Protection District 1	4	
		Pine Prairie Area Fire Protection District	7	
		Ville Platte Volunteer Fire Department	2	
		Ward 5 Fire Protection District	4	
Franklin Parish	59			15
		Liddieville Volunteer Fire Department	6	
		Fort Necessity Volunteer Fire Department	4	
		Turkey Creek Volunteer Fire Department	5	
Grant Parish	43			20
		District 5 VFD	5	
		Grant Fire District 1	4	
		Grant Fire District 3	3	
		Grant Fire District 7	5	
		Tullos Volunteer Fire Department	3	
Iberia Parish	35			35
		Iberia Parish Fire District 1	35	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Iberville Parish	35			0
Jackson Parish	18			10
		Hodge Volunteer Fire Department	2	
		Jackson Fire District 6	1	
		Quitman Fire Protection District 1	1	
		Ward 4 Fire Protection District	6	
Jefferson Parish	4			4
		Jefferson Fire Districts 1 & 2	4	
Jefferson Davis Parish	35			35
		Jefferson Davis Fire District 1	1	
		Jefferson Davis Fire District 2	8	
		Jefferson Davis Fire District 3	2	
		Jefferson Davis Fire District 4	10	
		Jefferson Davis Fire District 5	3	
		Jefferson Davis Fire District 6	9	
		Jefferson Davis Fire District 7	2	
Lafayette Parish	27			8
		Carencro Fire Department	1	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Duson Volunteer Fire Department	2	
		Judice Volunteer Fire Department	2	
		Milton Volunteer Fire Department	2	
		Youngsville Volunteer Fire Department	1	
Lafourche Parish	37			17
		Lafourche Fire District 1	7	
		Lafourche Fire District 2	4	
		Lafourche Fire District 6	3	
		Lafourche Fire District 7	3	
LaSalle Parish	0			0
Lincoln Parish	10			0
Livingston Parish	35			18
		Livingston Fire District 1	9	
		Livingston Parish Fire District 8	2	
		Livingston Parish Fire District 10	2	
		Livingston Parish Fire District 11	4	
		Livingston Volunteer Fire Department	1	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed In Parish
Madison Parish	35			35
		Madison Parish Rural Fire Protection District	35	
Morehouse Parish	12			0
Natchitoches Parish	29			22
		Natchitoches Fire District 1	3	
		Natchitoches Fire District 2	3	
		Natchitoches Fire District 3	1	
		Natchitoches Fire District 6	5	
		Natchitoches Fire District 7	4	
		Natchitoches Fire District 8	3	
		Natchitoches Fire District 9	3	
Orleans Parish	52			0
Ouachita Parish	35			0
Plaquemines Parish	35			0
Pointe Coupee Parish	35			1
		Pointe Coupee Fire District 1	1	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Rapides Parish	62			39
		Rapides Fire Protection District 2	6	
		Rapides Fire District 3	7	
		Rapides Fire District 4	2	
		Rapides Fire District 5	4	
		Rapides Fire District 6	9	
		Rapides Fire District 10	5	
		Rapides Fire District 14	6	
Red River Parish	25			12
		Red River Fire Protection District	12	
Richland Parish	57			13
		Delhi Volunteer Fire Department	1	
		Mangham Fire Protection District 4	4	
		Rayville Volunteer Fire Department	1	
		Start-Girard Fire Protection District	7	
Sabine Parish	52			44
		Sabine Fire District 1, Wards 1 & 2	15	
		Sabine Fire District 1, Wards 3 & 4	14	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		North Sabine Fire Protection District	15	
St. Bernard Parish	35			7
		St. Bernard Parish Fire Department	7	
St. Charles Parish	0			0
St. James Parish	10			0
St. Helena Parish	35			0
St. John the Baptist Parish	13			0
St. Landry Parish	35			1
		Leonville Volunteer Fire Department	1	
St. Martin Parish	55			38
		Arnaudville Volunteer Fire Department	2	
		Belle River Volunteer Fire Department	4	
		Breaux Bridge Volunteer Fire Department	4	
		Butte LaRose Volunteer Fire Department	2	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Cade Volunteer Fire Department	2	
		Catahoula Volunteer Fire Department	4	
		Cecilia Volunteer Fire Department	3	
		Coteau Holmes Volunteer Fire Department	4	
		Henderson Fire Service Area	3	
		Parks Volunteer Fire Department	4	
		St. Martinville Volunteer Fire Department	3	
		Stephensville Volunteer Fire Department	3	
St. Mary Parish	39			15
		St. Mary Fire District 4	2	
		St. Mary Fire District 5	4	
		St. Mary Fire District 9	0	
		St. Mary Fire District 11	7	
		St. Mary Fire District 12	2	
St. Tammany Parish	35			8
		St. Tammany Fire District 1	8	
Tangipahoa Parish	35			0

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Tensas Parish	35			6
		Tensas Parish Rural Fire Protection District	6	
Terrebonne Parish	35			19
		Terrebonne Fire District 1, 2, & 3, Zone B	6	
		Terrebonne Fire District 9	13	
Union Parish	10			7
		Bernice Volunteer Fire Department	1	
		Sardis Ward 4 Volunteer Fire Department	3	
		Spencer/West Sterlington Volunteer Fire Department	1	
		Ward 5 Volunteer Fire Department	2	
Vermillion Parish	59			40
		Vermillion Fire District 1	3	
		Vermillion Fire District 3	3	
		Vermillion Fire District 4	4	
		Vermillion Fire District 5	3	
		Vermillion Fire District 6	3	
		Vermillion Fire District 7	3	
		Vermillion Fire District 9	4	
		Vermillion Fire District 11	3	
		Vermillion Fire District 12	3	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Vermillion Fire District 13	3	
		Vermillion Fire District 14	3	
		Vermillion Fire District 15	3	
		Vermillion Fire District 16	2	
Vernon Parish	35			29
		Vernon Parish Fire District 1	29	
Washington Parish	35		0	
Webster Parish	10			7
		Webster/Evergreen Fire Protection District	1	
		Webster Fire District 2	2	
		Webster Fire District 4	2	
		Webster Fire District 11	2	
West Baton Rouge Parish	0			0
West Carroll Parish	35			4
		West Carroll Ward 2 Fire Protection District	4	
West Feliciana Parish	0			0
Winn Parish	12			10

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Winnfield Fire Department	10	

As of August 30, 1996:

Total Planned Hydrants: *1,975* ***Total Installed Hydrants:*** *848*

Some parishes have declined dry hydrants. All parishes will have an opportunity to requested the declined hydrants to supplement the hydrants installed in their parishes.

This report was prepared by the following USDA/AmeriCorps members:

Tom Morton, Trailblazer RC&D, Ruston, Louisiana
Nancy Dyer, Twin Valley RC&D, Natchitoches, Louisiana
Donna Haydel, Imperial Calcasieu RC&D, Jennings, Louisiana
Robin Torrence, Capital RC&D, Denham Springs, Louisiana

Insurance premium information provided by Pat Harvey, Allstate Insurance Company agent, Alexandria, Louisiana.

APPENDIX A

ALLSTATE INSURANCE COMPANY
PROPERTY INSURANCE QUOTATION
AUGUST 13, 1996

ESPECIALLY PREPARED FOR:

NANCY DYER
MAIN ST
LECOMPTE LA 71346

PREPARED BY:

PAT HARVEY
AGENT
1335 PETERMAN DR
ALEXANDRIA LA 71301
318 442 3496
318 442 3497

LOUISIANA
DELUXE HOMEOWNERS

Thank you for the opportunity to discuss your property insurance needs. I look forward to offering you the service and value that is the standard of Allstate Insurance. I am sure you will see that this quote can affordably enhance your insurance program.

TERRITORY ZONE 034 Town Class 0009

Policy Coverages:	Amount	Premium
Dwelling	50,000	797.00
Other Structures Protection	5,000	
Replacement Cost Guarantee Dwelling/Attached Structures		
Personal Property Protection	25,000	
Additional Living Expense	Up to 12 Months	
Family Liability (each occurrence)	100,000	
Guest Medical (each person)	1,000	
Deductibles Applicable	500	
New/Renovated Building Discount		
Total Annual Premium		797.00

This quote is not a contract, or binder of coverage. All coverages are subject to the terms and conditions contained in the policy and endorsements. The premiums shown are for a 12 month policy period. If you have questions, please contact me at the number listed above.

Allstate
You're in good hands.

APPENDIX A

ALLSTATE INSURANCE COMPANY
PROPERTY INSURANCE QUOTATION
AUGUST 13, 1996

ESPECIALLY PREPARED FOR:

NANCY DYER
A
LECOMPTE LA 71423

PREPARED BY:

PAT HARVEY
AGENT
1335 PETERMAN DR
ALEXANDRIA LA 71301
318 442 3496
318 442 3497

LOUISIANA
DELUXE HOMEOWNERS

Thank you for the opportunity to discuss your property insurance needs. I look forward to offering you the service and value that is the standard of Allstate Insurance. I am sure you will see that this quote can affordably enhance your insurance program.

TERRITORY ZONE 034 Town Class 0008

Policy Coverages:	Amount	Premium
Dwelling	50,000	622.00
Other Structures Protection	5,000	
Replacement Cost Guarantee Dwelling/Attached Structures		
Personal Property Protection	25,000	
Additional Living Expense	Up to 12 Months	
Family Liability (each occurrence)	100,000	
Guest Medical (each person)	1,000	
Deductibles Applicable	500	
New/Renovated Building Discount		
Total Annual Premium		622.00

This quote is not a contract, or binder of coverage. All coverages are subject to the terms and conditions contained in the policy and endorsements. The premiums shown are for a 12 month policy period. If you have questions, please contact me at the number listed above.

Allstate
You're in good hands.

APPENDIX A

ALLSTATE INSURANCE COMPANY
PROPERTY INSURANCE QUOTATION
AUGUST 13, 1996

ESPECIALLY PREPARED FOR:

NANCY DYER
A
LECOMPTE LA 71423

PREPARED BY:

PAT HARVEY
AGENT
1335 PETERMAN DR
ALEXANDRIA LA 71301
318 442 3496
318 442 3497

LOUISIANA
DELUXE HOMEOWNERS

Thank you for the opportunity to discuss your property insurance needs. I look forward to offering you the service and value that is the standard of Allstate Insurance. I am sure you will see that this quote can affordably enhance your insurance program.

TERRITORY ZONE 034 Town Class 0007

Policy Coverages:	Amount	Premium
Dwelling	50,000	523.00
Other Structures Protection	5,000	
Replacement Cost Guarantee Dwelling/Attached Structures		
Personal Property Protection	25,000	
Additional Living Expense	Up to 12 Months	
Family Liability (each occurrence)	100,000	
Guest Medical (each person)	1,000	
Deductibles Applicable	500	
New/Renovated Building Discount		
Total Annual Premium		523.00

This quote is not a contract, or binder of coverage. All coverages are subject to the terms and conditions contained in the policy and endorsements. The premiums shown are for a 12 month policy period. If you have questions, please contact me at the number listed above.

USDA/AmeriCorps

Louisiana

FAX

To:	Joel Berg/Dee DiFiore
Fax #:	(202) 720-4614
Subject:	Dry Fire Hydrant Information
Date:	July 26, 1996
Pages:	18, including this cover sheet.

COMMENTS:

As requested, attached is information on the dry fire hydrant program in Louisiana. Please call Holly Martien at (318) 473-7753 if you have any questions.

From the desk of...

Holly L. Martien
Administrative Program Specialist
USDA, Natural Resources Conservation Service
3737 Government Street
Alexandria, Louisiana 71302

(318) 473-7753
Fax: (318) 473-7682

USDA/AmeriCorps Dry Fire Hydrant Project

Louisiana

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

Background

In many rural areas, the lack of an established water system and domestic fire hydrants can impair a fire department's ability to do its job quickly and efficiently. Many fire departments have chosen to develop a water hauling or "shuttle" procedure. Tanker trucks are used to carry large amounts of water to the fire scene to deliver a continuous supply of water. The success of this system is relative to the distance the trucks must travel to refill. A dry hydrant system provides a solution to the problem of distant fill-up points.

USDA/AmeriCorps members are working with the Natural Resources Conservation Service in Louisiana to plan, survey, and coordinate the installation of over 2,000 dry fire hydrants in rural areas.

What is a Dry Hydrant?

A dry hydrant is a non-pressurized pipe system permanently installed in existing bodies of water (lakes, ponds, streams, etc.) to provide a means of suctioning water into a tank truck. One end of the dry hydrant protrudes out of the ground to give tanker trucks a hose connection. The other end is composed of a strainer submerged in the pond or stream to draw water directly through the system. The dry hydrant system gives tanker trucks access to ponds and streams from the main road and ends the necessity of going all the way back to the starting point for a refill.

Water Shuttle

In a water hauling operation, the time it takes to fill the tanker, the distance the tanker has to travel to the fire, and the time it takes to discharge the water from the tanker become critical elements in rural fire protection. Time saved on any one of the above points will increase the amount of water that can be hauled to the fire. Dry hydrants, properly located, can substantially reduce travel time from a water source to the fire.

Some departments are using the system in the following manner: when a fire alarm is received, equipment is dispatched on a pre-planned basis determined by such things as fire flow needs, hazards involved, water supply available, etc. One tanker and one pumper respond to the fire. The pumper begins the fire attack with water from its booster tank. The first responding tanker may act as a "nurse" tanker, or may set up a portable drop tank and begin discharging its load of water into the drop tank. The water in the tanker can be transferred to the portable drop tank at a rate of approximately 1,000 gallons per minute. As soon as the tanker is empty, it immediately heads to the water supply. In the meantime, another fire department pumper has responded to the water supply, connected to the dry hydrant, and primed its pump. When the empty tanker arrives as the water supply, the pumper is ready to fill the tanker. The refilled tanker returns to the fire site, discharges its water, and the cycle is repeated.

Expected Benefits

Fire Classification Rating

The most important benefit of the installation of dry hydrants in rural areas is the increased capability of firefighters to save lives and property. An additional benefit where dry hydrants have been successfully used is in the reduction of fire classifications for fire insurance. Fire insurance premiums for each area are based on a classification by the Property Insurance Association of Louisiana (PIAL). The classification depends on each area's ability to fight fires. Areas with no fire departments are give a class 10 rating. As the fire-fighting capability increases, the rating decreases. Higher training levels and better equipment are among the ways this can be accomplished. For example, if a fire department can demonstrate the ability to pump 250 gallons of water per minute for two hours as a fire scene, the area's fire rating could potentially decrease to a six or seven. Dry fire hydrants play an important role in such a demonstration in rural areas. Department ratings should decrease and residents could see a significant reduction in insurance rates. PIAL makes the final determination regarding the rate.

Insurance Premium Savings

An additional benefit to citizens where dry hydrants have been installed is the possible reduction of fire insurance rates. According to the PAIL, the use of the dry hydrant water delivery system by volunteer fire departments may help decrease an area's rating from a 8 to 5 which could result in a drop of 25 percent in commercial fire rates for that district. For example:

> In Jackson Parish, Louisiana, the Quitman Fire Protection District successfully conducted a water shuttle demonstration using a dry hydrant for Thomas Casissa of PIAL. This shuttle enabled the district to improve their property insurance rating from a 9 to an 8, leading to a 21% drop in commercial insurance premiums.

> Fire District 7 installed dry fire hydrants contributing to a fire insurance rating reduction from a class 10 to a class 7. A homeowner in Natchitoches Fire District 7 has a brick house worth $100,000. The insurance premium with a class 10 fire rating was $1,940/year; the premium with a class 7 rating was significantly reduced to $1,086/year, with a savings of $854/year for the homeowner. This is a 44% reduction from the original premium.

The following data was provided by Allstate Insurance on classification rates and estimated premiums for privately owned dwellings:

> Insurance premium for a $100,000 brick home located in a Rapides Parish fire district with a class 7 fire rating: $654/yr.
>
> Insurance premium for a $100,000 brick home located in a Rapides Parish fire district with a class 5 fire rating: $584/yr.
>
> *Resulting in a savings of $70 a year for the homeowner; an 11% reduction.*

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Insurance premium for a $100,000 brick home located in a Rapides Parish fire district with a class 3 fire rating: $426
Insurance premium for a $100,000 brick home located in a Rapides Parish fire district with a class 2 fire rating: $409
Resulting in a savings of $17 a year for the homeowner; a 4% reduction.

The above examples are for homes in different insurance rating zones. As the data indicates, the premium rates for the Rapides Parish zone are lower than the premium rates for Natchitoches Parish zone, therefore, a general premium rate for a $100,000 brick home cannot be determined for "Any Parish", Louisiana. Also, the premium quoted will differ from insurance company to insurance company.

Other benefits of dry fire hydrants include conservation of limited water storage for drinking water and the use of natural, unprocessed water for road maintenance.

Structures Saved Because of Installed Dry Fire Hydrants

Six structures have been directly saved because a dry hydrant was near the fire or because no pressurized hydrants were in the area. Ten structures were indirectly saved when grass fires and forest fires were contained with the use of dry hydrants.

During a hard freeze in February of this year, Concordia Parish (Vidalia and Ferriday, Louisiana) lost electricity so pressurized hydrants were not accessible for fire protection. Dry hydrants were used for the three fires encountered throughout the power failure. The Concordia Parish Fire District was thankful for the use of the dry hydrants, as well as neighboring fire districts.

In DeSoto Parish, Louisiana, dry hydrants were used to save two saw mills.

In Iberia Parish, Louisiana, a dry hydrant was used to contain a structure fire.

In February 1996, Ward 4 Fire Protection District in Jackson Parish, Louisiana, used water drawn from a dry hydrant to extinguish an approximately ten-acre grass fire, which was endangering a nearby dwelling. Due to the proximity of the hydrant to the fire, the fire did not harm the building.

In April 1997, Ward 4 Fire Protection District in Jackson Parish, Louisiana, got another chance to utilize their dry hydrants to extinguish a woods fire. They were able to save three homes from destruction.

In Beauregard Parish, Louisiana, a dry hydrant was used to contain a forest fire that was threatening to endanger surrounding homes.

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Numerous brush fires and woods fires throughout Louisiana were contained with the use of dry hydrants before the fires caused destruction to surrounding homes and buildings.

Progress Report of Dry Hydrant Installations by Parish

Following is a progress report of dry hydrant installations in Louisiana:

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Acadia Parish	35			20
		Acadia Fire District 1	6	
		Acadia Fire District 8	2	
		Acadia Fire Protection District 3	3	
		Acadia Parish Fire District 5	4	
		Eunice Fire Department	2	
		Fire Protection District 6	3	
Allen Parish	35			34
		Elton Volunteer Fire Department	8	
		Oberlin Volunteer Fire Department	2	
		Elizabeth Volunteer Fire Department	1	
		Fire Protection District 4	1	
		Oakdale Fire Department	7	
		Allen Fire Protection District 2, Ward 3	12	
		Grant Volunteer Fire Department	3	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Ascension Parish	35			0
Assumption Parish	35			0
Avoyelles Parish	35			6
		Avoyelles Fire Protection District 2, Subdistrict 8	6	
Beauregard Parish	35			35
		Beauregard Fire District 1	6	
		Beauregard Fire District 2	3	
		Beauregard Fire District 3	7	
		Beauregard Fire District 3A	5	
		Beauregard Fire District 4	8	
		Merryville Volunteer Fire Department	6	
Bienville Parish	10			8
		Bienville Fire District 6	4	
		Bienville Ward 1 & 2 Fire District	1	
		Bienville Ward 7 Fire Protection District	3	
Bossier Parish	10			7
		Benton Fire District 4	1	
		Bossier Fire District 2	1	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Bossier Fire District 6	3	
		East Central Bossier Fire Protection District 1	2	
Caddo Parish	39			38
		Caddo Parish Fire District 2	10	
		Caddo Parish Fire District 4	9	
		Caddo Parish Fire District 7	8	
		Caddo Parish Fire District 8	11	
Calcasieu Parish	35			35
		Carlyss Volunteer Fire Department	2	
		DeQuincy Volunteer Fire Department	2	
		Hayes Volunteer Fire Department	3	
		Houston River Volunteer Fire Department	5	
		Iowa Volunteer Fire Department	1	
		Lake Charles Fire Department	6	
		Starks Volunteer Fire Department	8	
		Vinton Volunteer Fire Department	3	
		Westlake Volunteer Fire Department	5	
Caldwell Parish	35			30

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Caldwell Parish Rural Fire Protection District	30	
Cameron Parish	35			34
		Cameron Fire District 1	4	
		Cameron Fire District 7	3	
		Cameron Fire District 9	9	
		Cameron Fire District 11	3	
		Cameron Fire District 14	11	
		Klondike Volunteer Fire Department	4	
Catahoula Parish	35			10
		Maitland Volunteer Fire Department	7	
		Manifest Volunteer Fire Department	3	
Claiborne Parish	10			1
		Claiborne Fire Protection District 4	1	
Concordia Parish	35			1
		Concordia Parish Rural Fire Protection District	1	
DeSoto Parish	50			34
		DeSoto Fire District 1	9	
		DeSoto Fire District 5	6	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		DeSoto Fire District 8	19	
East Baton Rouge Parish	35			0
East Carroll Parish	12			0
East Feliciana Parish	35			0
Evangeline Parish	20			17
		Mamou Fire Protection District 1	4	
		Pine Prairie Area Fire Protection District	7	
		Ville Platte Volunteer Fire Department	2	
		Ward 5 Fire Protection District	4	
Franklin Parish	59			15
		Liddieville Volunteer Fire Department	6	
		Fort Necessity Volunteer Fire Department	4	
		Turkey Creek Volunteer Fire Department	5	
Grant Parish	35			20
		District 5 VFD	5	
		Grant Fire District 1	4	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Grant Fire District 3	3	
		Grant Fire District 7	5	
		Tullos Volunteer Fire Department	3	
Iberia Parish	35			35
		Iberia Parish Fire District 1	35	
Iberville Parish	35			0
Jackson Parish	10			10
		Hodge Volunteer Fire Department	2	
		Jackson Fire District 6	1	
		Quitman Fire Protection District 1	1	
		Ward 4 Fire Protection District	6	
Jefferson Davis Parish	35			35
		Jefferson Davis Fire District 1	1	
		Jefferson Davis Fire District 2	8	
		Jefferson Davis Fire District 3	2	
		Jefferson Davis Fire District 4	10	
		Jefferson Davis Fire District 5	3	
		Jefferson Davis Fire District 6	9	
		Jefferson Davis Fire District 7	2	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Lafayette Parish	27			2
		Duson Volunteer Fire Department	1	
		Judice Volunteer Fire Department	1	
Lafourche Parish	35			14
		Lafourche Fire District 1	6	
		Lafourche Fire District 2	4	
		Lafourche Fire District 6	1	
		Lafourche Fire District 7	3	
LaSalle Parish	0			0
Lincoln Parish	10			0
Livingston Parish	35			18
		Livingston Fire District 1	9	
		Livingston Parish Fire District 8	2	
		Livingston Parish Fire District 10	2	
		Livingston Parish Fire District 11	4	
		Livingston Volunteer Fire Department	1	
Madison Parish	35			35
		Madison Parish Rural Fire Protection District	35	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Morehouse Parish	12			0
Natchitoches Parish	21			19
		Natchitoches Fire District 1	3	
		Natchitoches Fire District 2	3	
		Natchitoches Fire District 6	4	
		Natchitoches Fire District 7	4	
		Natchitoches Fire District 8	2	
		Natchitoches Fire District 9	3	
Ouachita Parish	35			0
Plaquemines Parish	35			0
Pointe Coupee Parish	35			1
		Pointe Coupee Fire District 1	1	
Rapides Parish	62			35
		Rapides Fire Protection District 2	6	
		Rapides Fire District 3	4	
		Rapides Fire District 4	2	
		Rapides Fire District 5	4	
		Rapides Fire District 6	9	
		Rapides Fire District 10	5	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Rapides Fire District 14	6	
Red River Parish	25			12
		Red River Fire Protection District	12	
Richland Parish	57			13
		Delhi Volunteer Fire Department	1	
		Mangham Fire Protection District 4	4	
		Rayville Volunteer Fire Department	1	
		Start-Girard Fire Protection District	7	
Sabine Parish	44			38
		Sabine Fire District 1, Wards 1 & 2	9	
		Sabine Fire District 1, Wards 3 & 4	14	
		North Sabine Fire Protection District	15	
St. Bernard Parish	35			0
St. Charles Parish	0			0
St. James Parish	10			0

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
St. Helena Parish	35			0
St. John the Baptist Parish	13			0
St. Landry Parish	35			0
St. Martin Parish	45			38
		Arnaudville Volunteer Fire Department	2	
		Belle River Volunteer Fire Department	4	
		Breaux Bridge Volunteer Fire Department	4	
		Butte LaRose Volunteer Fire Department	2	
		Cade Volunteer Fire Department	2	
		Catahoula Volunteer Fire Department	4	
		Cecilia Volunteer Fire Department	3	
		Coteau Holmes Volunteer Fire Department	4	
		Henderson Fire Service Area	3	
		Parks Volunteer Fire Department	4	
		St. Martinville Volunteer Fire Department	3	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Stephensville Volunteer Fire Department	3	
St. Mary Parish	35			15
		St. Mary Fire District 4	2	
		St. Mary Fire District 5	4	
		St. Mary Fire District 9	0	
		St. Mary Fire District 11	7	
		St. Mary Fire District 12	2	
St. Tammany Parish	35			8
		St. Tammany Fire District 1	8	
Tangipahoe Parish	35			0
Tensas Parish	35			6
		Tensas Parish Rural Fire Protection District	6	
Terrebonne Parish	35			6
		Terrebonne Fire District 1, 2, & 3, Zone B	6	
Union Parish	10			7
		Bernice Volunteer Fire Department	1	
		Marion Volunteer Fire Department	0	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Sardis Ward 4 Volunteer Fire Department	3	
		Spencer/West Sterlington Volunteer Fire Department	1	
		Ward 5 Volunteer Fire Department	2	
Vermillion Parish	35			38
		Vermillion Fire District 1	3	
		Vermillion Fire District 3	3	
		Vermillion Fire District 4	3	
		Vermillion Fire District 5	3	
		Vermillion Fire District 6	3	
		Vermillion Fire District 7	3	
		Vermillion Fire District 9	4	
		Vermillion Fire District 11	3	
		Vermillion Fire District 12	2	
		Vermillion Fire District 13	3	
		Vermillion Fire District 14	3	
		Vermillion Fire District 15	3	
		Vermillion Fire District 16	2	
Vernon Parish	35			9
		Vernon Parish Fire District 1	9	
Washington Parish	35		0	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Webster Parish	10			6
		Webster/Evergreen Fire Protection District	1	
		Webster Fire District 2	2	
		Webster Fire District 4	1	
		Webster Fire District 11	2	
West Baton Rouge Parish	0			0
West Carroll Parish	35			4
		West Carroll Ward 2 Fire Protection District	4	
West Feliciana Parish	0			0
Winn Parish	10			10
		Winnfield Fire Department		

As of July 26, 1996
Total Planned Hydrants: 1,661* Total Installed Hydrants: 764

* Some parishes have declined hydrants. All parishes will have an opportunity to requested the declined hydrants to supplement the hydrants installed in their parishes.

Building Community

Police juries and volunteer fire departments work with USDA/AmeriCorps members to plan, survey and install dry fire hydrants. This local volunteer effort is reflected by 40,919 hours of community time donated to this effort at a value of $1,529,002.40.

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

This report was prepared by the following USDA/AmeriCorps members:

Tom Morton, Trailblazer RC&D, Ruston, Louisiana
Nancy Dyer, Twin Valley RC&D, Natchitoches, Louisiana
Donna Haydel, Imperial Calcasieu RC&D, Jennings, Louisiana
Robin Torrence, Capital RC&D, Denham Springs, Louisiana

USDA/AmeriCorps

Louisiana

FAX

To:	Joel Berg/Dee DiFiore
Fax #:	(202) 720-4614
Subject:	Dry Fire Hydrant Information
Date:	July 26, 1996
Pages:	18, including this cover sheet.

COMMENTS:

As requested, attached is information on the dry fire hydrant program in Louisiana. Please call Holly Martien at (318) 473-7753 if you have any questions.

From the desk of...

Holly L. Martien
Administrative Program Specialist
USDA, Natural Resources Conservation Service
3737 Government Street
Alexandria, Louisiana 71302

(318) 473-7753
Fax: (318) 473-7682

USDA/AmeriCorps Dry Fire Hydrant Project

Louisiana

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

Background

In many rural areas, the lack of an established water system and domestic fire hydrants can impair a fire department's ability to do its job quickly and efficiently. Many fire departments have chosen to develop a water hauling or "shuttle" procedure. Tanker trucks are used to carry large amounts of water to the fire scene to deliver a continuous supply of water. The success of this system is relative to the distance the trucks must travel to refill. A dry hydrant system provides a solution to the problem of distant fill-up points.

USDA/AmeriCorps members are working with the Natural Resources Conservation Service in Louisiana to plan, survey, and coordinate the installation of over 2,000 dry fire hydrants in rural areas.

What Is a Dry Hydrant?

A dry hydrant is a non-pressurized pipe system permanently installed in existing bodies of water (lakes, ponds, streams, etc.) to provide a means of suctioning water into a tank truck. One end of the dry hydrant protrudes out of the ground to give tanker trucks a hose connection. The other end is composed of a strainer submerged in the pond or stream to draw water directly through the system. The dry hydrant system gives tanker trucks access to ponds and streams from the main road and ends the necessity of going all the way back to the starting point for a refill.

Water Shuttle

In a water hauling operation, the time it takes to fill the tanker, the distance the tanker has to travel to the fire, and the time it takes to discharge the water from the tanker become critical elements in rural fire protection. Time saved on any one of the above points will increase the amount of water that can be hauled to the fire. Dry hydrants, properly located, can substantially reduce travel time from a water source to the fire.

Some departments are using the system in the following manner: when a fire alarm is received, equipment is dispatched on a pre-planned basis determined by such things as fire flow needs, hazards involved, water supply available, etc. One tanker and one pumper respond to the fire. The pumper begins the fire attack with water from its booster tank. The first responding tanker may act as a "nurse" tanker, or may set up a portable drop tank and begin discharging its load of water into the drop tank. The water in the tanker can be transferred to the portable drop tank at a rate of approximately 1,000 gallons per minute. As soon as the tanker is empty, it immediately heads to the water supply. In the meantime, another fire department pumper has responded to the water supply, connected to the dry hydrant, and primed its pump. When the empty tanker arrives as the water supply, the pumper is ready to fill the tanker. The refilled tanker returns to the fire site, discharges its water, and the cycle is repeated.

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Expected Benefits

Fire Classification Rating

The most important benefit of the installation of dry hydrants in rural areas is the increased capability of firefighters to save lives and property. An additional benefit where dry hydrants have been successfully used is in the reduction of fire classifications for fire insurance. Fire insurance premiums for each area are based on a classification by the Property Insurance Association of Louisiana (PIAL). The classification depends on each area's ability to fight fires. Areas with no fire departments are give a class 10 rating. As the fire-fighting capability increases, the rating decreases. Higher training levels and better equipment are among the ways this can be accomplished. For example, if a fire department can demonstrate the ability to pump 250 gallons of water per minute for two hours as a fire scene, the area's fire rating could potentially decrease to a six or seven. Dry fire hydrants play an important role in such a demonstration in rural areas. Department ratings should decrease and residents could see a significant reduction in insurance rates. PIAL makes the final determination regarding the rate.

Insurance Premium Savings

An additional benefit to citizens where dry hydrants have been installed is the possible reduction of fire insurance rates. According to the PAIL, the use of the dry hydrant water delivery system by volunteer fire departments may help decrease an area's rating from a 8 to 5 which could result in a drop of 25 percent in commercial fire rates for that district. For example:

> In Jackson Parish, Louisiana, the Quitman Fire Protection District successfully conducted a water shuttle demonstration using a dry hydrant for Thomas Casissa of PIAL. This shuttle enabled the district to improve their property insurance rating from a 9 to an 8, leading to a **21% drop in commercial insurance premiums.**

> Fire District 7 installed dry fire hydrants contributing to a fire insurance rating reduction from a class 10 to a class 7. A homeowner in Natchitoches Fire District 7 has a brick house worth $100,000. The insurance premium with a class 10 fire rating was $1,940/year; the premium with a class 7 rating was significantly reduced to $1,086/year, with a savings of $854/year for the homeowner. **This is a 44% reduction from the original premium.**

The following data was provided by Allstate Insurance on classification rates and **estimated premiums** for privately owned dwellings:

> Insurance premium for a $100,000 brick home located in a Rapides Parish fire district with a class 7 fire rating: $654/yr.
> Insurance premium for a $100,000 brick home located in a Rapides Parish fire district with a class 5 fire rating: $584/yr.
> *Resulting in a savings of $70 a year for the homeowner; an 11% reduction.*

Insurance premium for a $100,000 brick home located in a Rapides Parish fire district with a class 3 fire rating: $426

Insurance premium for a $100,000 brick home located in a Rapides Parish fire district with a class 2 fire rating: $409

Resulting in a savings of $17 a year for the homeowner; a 4% reduction.

The above examples are for homes in different insurance rating zones. As the data indicates, the premium rates for the Rapides Parish zone are lower than the premium rates for Natchitoches Parish zone, therefore, a general premium rate for a $100,000 brick home cannot be determined for "Any Parish", Louisiana. Also, the premium quoted will differ from insurance company to insurance company.

Other benefits of dry fire hydrants include conservation of limited water storage for drinking water and the use of natural, unprocessed water for road maintenance.

Structures Saved Because of Installed Dry Fire Hydrants

Six structures have been directly saved because a dry hydrant was near the fire or because no pressurized hydrants were in the area. Ten structures were indirectly saved when grass fires and forest fires were contained with the use of dry hydrants.

During a hard freeze in February of this year, Concordia Parish (Vidalia and Ferriday, Louisiana) lost electricity so pressurized hydrants were not accessible for fire protection. Dry hydrants were used for the three fires encountered throughout the power failure. The Concordia Parish Fire District was thankful for the use of the dry hydrants, as well as neighboring fire districts.

In DeSoto Parish, Louisiana, dry hydrants were used to save two saw mills.

In Iberia Parish, Louisiana, a dry hydrant was used to contain a structure fire.

In February 1996, Ward 4 Fire Protection District in Jackson Parish, Louisiana, used water drawn from a dry hydrant to extinguish an approximately ten-acre grass fire, which was endangering a nearby dwelling. Due to the proximity of the hydrant to the fire, the fire did not harm the building.

In April 1997, Ward 4 Fire Protection District in Jackson Parish, Louisiana, got another chance to utilize their dry hydrants to extinguish a woods fire. They were able to save three homes from destruction.

In Beauregard Parish, Louisiana, a dry hydrant was used to contain a forest fire that was threatening to endanger surrounding homes.

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Numerous brush fires and woods fires throughout Louisiana were contained with the use of dry hydrants before the fires caused destruction to surrounding homes and buildings.

Progress Report of Dry Hydrant Installations by Parish

Following is a progress report of dry hydrant installations in Louisiana:

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Acadia Parish	35			20
		Acadia Fire District 1	6	
		Acadia Fire District 8	2	
		Acadia Fire Protection District 3	3	
		Acadia Parish Fire District 5	4	
		Eunice Fire Department	2	
		Fire Protection District 6	3	
Allen Parish	35			34
		Elton Volunteer Fire Department	8	
		Oberlin Volunteer Fire Department	2	
		Elizabeth Volunteer Fire Department	1	
		Fire Protection District 4	1	
		Oakdale Fire Department	7	
		Allen Fire Protection District 2, Ward 3	12	
		Grant Volunteer Fire Department	3	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Ascension Parish	35			0
Assumption Parish	35			0
Avoyelles Parish	35			6
		Avoyelles Fire Protection District 2, Subdistrict 8	6	
Beauregard Parish	35			35
		Beauregard Fire District 1	6	
		Beauregard Fire District 2	3	
		Beauregard Fire District 3	7	
		Beauregard Fire District 3A	5	
		Beauregard Fire District 4	8	
		Merryville Volunteer Fire Department	6	
Bienville Parish	10			8
		Bienville Fire District 6	4	
		Bienville Ward 1 & 2 Fire District	1	
		Bienville Ward 7 Fire Protection District	3	
Bossier Parish	10			7
		Benton Fire District 4	1	
		Bossier Fire District 2	1	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Bossier Fire District 6	3	
		East Central Bossier Fire Protection District 1	2	
Caddo Parish	39			38
		Caddo Parish Fire District 2	10	
		Caddo Parish Fire District 4	9	
		Caddo Parish Fire District 7	8	
		Caddo Parish Fire District 8	11	
Calcasieu Parish	35			35
		Carlyss Volunteer Fire Department	2	
		DeQuincy Volunteer Fire Department	2	
		Hayes Volunteer Fire Department	3	
		Houston River Volunteer Fire Department	5	
		Iowa Volunteer Fire Department	1	
		Lake Charles Fire Department	6	
		Starks Volunteer Fire Department	8	
		Vinton Volunteer Fire Department	3	
		Westlake Volunteer Fire Department	5	
Caldwell Parish	35			30

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Caldwell Parish Rural Fire Protection District	30	
Cameron Parish	35			34
		Cameron Fire District 1	4	
		Cameron Fire District 7	3	
		Cameron Fire District 9	9	
		Cameron Fire District 11	3	
		Cameron Fire District 14	11	
		Klondike Volunteer Fire Department	4	
Catahoula Parish	35			10
		Maitland Volunteer Fire Department	7	
		Manifest Volunteer Fire Department	3	
Claiborne Parish	10			1
		Claiborne Fire Protection District 4	1	
Concordia Parish	35			1
		Concordia Parish Rural Fire Protection District	1	
DeSoto Parish	50			34
		DeSoto Fire District 1	9	
		DeSoto Fire District 5	6	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		DeSoto Fire District 8	19	
East Baton Rouge Parish	35			0
East Carroll Parish	12			0
East Feliciana Parish	35			0
Evangeline Parish	20			17
		Mamou Fire Protection District 1	4	
		Pine Prairie Area Fire Protection District	7	
		Ville Platte Volunteer Fire Department	2	
		Ward 5 Fire Protection District	4	
Franklin Parish	59			15
		Liddieville Volunteer Fire Department	6	
		Fort Necessity Volunteer Fire Department	4	
		Turkey Creek Volunteer Fire Department	5	
Grant Parish	35			20
		District 5 VFD	5	
		Grant Fire District 1	4	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Grant Fire District 3	3	
		Grant Fire District 7	5	
		Tullos Volunteer Fire Department	3	
Iberia Parish	35			35
		Iberia Parish Fire District 1	35	
Iberville Parish	35			0
Jackson Parish	10			10
		Hodge Volunteer Fire Department	2	
		Jackson Fire District 6	1	
		Quitman Fire Protection District 1	1	
		Ward 4 Fire Protection District	6	
Jefferson Davis Parish	35			35
		Jefferson Davis Fire District 1	1	
		Jefferson Davis Fire District 2	8	
		Jefferson Davis Fire District 3	2	
		Jefferson Davis Fire District 4	10	
		Jefferson Davis Fire District 5	3	
		Jefferson Davis Fire District 6	9	
		Jefferson Davis Fire District 7	2	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Lafayette Parish	27			2
		Duson Volunteer Fire Department	1	
		Judice Volunteer Fire Department	1	
Lafourche Parish	35			14
		Lafourche Fire District 1	6	
		Lafourche Fire District 2	4	
		Lafourche Fire District 6	1	
		Lafourche Fire District 7	3	
LaSalle Parish	0			0
Lincoln Parish	10			0
Livingston Parish	35			18
		Livingston Fire District 1	9	
		Livingston Parish Fire District 8	2	
		Livingston Parish Fire District 10	2	
		Livingston Parish Fire District 11	4	
		Livingston Volunteer Fire Department	1	
Madison Parish	35			35
		Madison Parish Rural Fire Protection District	35	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Morehouse Parish	12			0
Natchitoches Parish	21			19
		Natchitoches Fire District 1	3	
		Natchitoches Fire District 2	3	
		Natchitoches Fire District 6	4	
		Natchitoches Fire District 7	4	
		Natchitoches Fire District 8	2	
		Natchitoches Fire District 9	3	
Ouachita Parish	35			0
Plaquemines Parish	35			0
Pointe Coupee Parish	35			1
		Pointe Coupee Fire District 1	1	
Rapides Parish	62			35
		Rapides Fire Protection District 2	6	
		Rapides Fire District 3	4	
		Rapides Fire District 4	2	
		Rapides Fire District 5	4	
		Rapides Fire District 6	9	
		Rapides Fire District 10	5	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Rapides Fire District 14	6	
Red River Parish	25			12
		Red River Fire Protection District	12	
Richland Parish	57			13
		Delhi Volunteer Fire Department	1	
		Mangham Fire Protection District 4	4	
		Rayville Volunteer Fire Department	1	
		Start-Girard Fire Protection District	7	
Sabine Parish	44			38
		Sabine Fire District 1, Wards 1 & 2	9	
		Sabine Fire District 1, Wards 3 & 4	14	
		North Sabine Fire Protection District	15	
St. Bernard Parish	35			0
St. Charles Parish	0			0
St. James Parish	10			0

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
St. Helena Parish	35			0
St. John the Baptist Parish	13			0
St. Landry Parish	35			0
St. Martin Parish	45			38
		Arnaudville Volunteer Fire Department	2	
		Belle River Volunteer Fire Department	4	
		Breaux Bridge Volunteer Fire Department	4	
		Butte LaRose Volunteer Fire Department	2	
		Cade Volunteer Fire Department	2	
		Catahoula Volunteer Fire Department	4	
		Cecilia Volunteer Fire Department	3	
		Coteau Holmes Volunteer Fire Department	4	
		Henderson Fire Service Area	3	
		Parks Volunteer Fire Department	4	
		St. Martinville Volunteer Fire Department	3	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Stephensville Volunteer Fire Department	3	
St. Mary Parish	35			15
		St. Mary Fire District 4	2	
		St. Mary Fire District 5	4	
		St. Mary Fire District 9	0	
		St. Mary Fire District 11	7	
		St. Mary Fire District 12	2	
St. Tammany Parish	35			8
		St. Tammany Fire District 1	8	
Tangipahoa Parish	35			0
Tensas Parish	35			6
		Tensas Parish Rural Fire Protection District	6	
Terrebonne Parish	35			6
		Terrebonne Fire District 1, 2, & 3, Zone B	6	
Union Parish	10			7
		Bernice Volunteer Fire Department	1	
		Marion Volunteer Fire Department	0	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
		Sardis Ward 4 Volunteer Fire Department	3	
		Spencer/West Sterlington Volunteer Fire Department	1	
		Ward 5 Volunteer Fire Department	2	
Vermillion Parish	35			38
		Vermillion Fire District 1	3	
		Vermillion Fire District 3	3	
		Vermillion Fire District 4	3	
		Vermillion Fire District 5	3	
		Vermillion Fire District 6	3	
		Vermillion Fire District 7	3	
		Vermillion Fire District 9	4	
		Vermillion Fire District 11	3	
		Vermillion Fire District 12	2	
		Vermillion Fire District 13	3	
		Vermillion Fire District 14	3	
		Vermillion Fire District 15	3	
		Vermillion Fire District 16	2	
Vernon Parish	35			9
		Vernon Parish Fire District 1	9	
Washington Parish	35		0	

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

Parish	Hydrants Planned for Parish	Fire Protection Districts Within Parishes	Hydrants Installed by District	Total Hydrants Installed in Parish
Webster Parish	10			6
		Webster/Evergreen Fire Protection District	1	
		Webster Fire District 2	2	
		Webster Fire District 4	1	
		Webster Fire District 11	2	
West Baton Rouge Parish	0			0
West Carroll Parish	35			4
		West Carroll Ward 2 Fire Protection District	4	
West Feliciana Parish	0			0
Winn Parish	10			10
		Winnfield Fire Department		

As of July 26, 1996
Total Planned Hydrants: 1,661* Total Installed Hydrants: 764

* Some parishes have declined hydrants. All parishes will have an opportunity to requested the declined hydrants to supplement the hydrants installed in their parishes.

Building Community

Police juries and volunteer fire departments work with USDA/AmeriCorps members to plan, survey and install dry fire hydrants. This local volunteer effort is reflected by 40,919 hours of community time donated to this effort at a value of $1,529,002.40.

USDA/AmeriCorps Dry Fire Hydrant Project
Louisiana

This report was prepared by the following USDA/AmeriCorps members:

Tom Morton, Trailblazer RC&D, Ruston, Louisiana
Nancy Dyer, Twin Valley RC&D, Natchitoches, Louisiana
Donna Haydel, Imperial Calcasieu RC&D, Jennings, Louisiana
Robin Torrence, Capital RC&D, Denham Springs, Louisiana

PHOTOCOPY
PRESERVATION