APPENDIX D

Drinking Water and Wastewater Infrastructure Funding Survey

This survey was authorized by the Appalachian Regional Commission. The goal of this survey was to identify needs, practices, and strategies related to financing water and sewer infrastructure projects in the Appalachian region. In particular, we are interested in what is likely to happen in the ARC region in the next 20 years and how that compares to national level studies on infrastructure funding gaps.

For questions regarding this survey, contact Lynn Weller, Program Manager, UNC Environmental Finance Center, 919.966.4199 or weller@iogmail.iog.unc.edu.

Who Responded to the Survey

72 Program Managers from 86 water and sewer funding programs responded to the survey. The following funding programs participated:

AL	Appalachian Regional Commission Grant Program
AL	Clean Water State Revolving Fund (CWSRF)
AL	Drinking Water State Revolving Fund (DWSRF)
AL	USDA RUS Water and Wastewater Disposal Loans and Grants
GA	Equity Fund Program
GA	USDA RUS Water and Wastewater Disposal Loans and Grants
GA	Drinking Water State Revolving Loan Fund
GA	Georgia Fund Loan Program
GA	Appalachian Regional Commission Grant Program
GA	Public Works Program (EDA)
GA	Community Development Block Grant (CDBG)
KY	Waste Water Revolving Loan Fund (Fund A) (SRF-CW)
KY	Community Development Block Grant: Kentucky Small Cities (Public Facilities)
KY	Drinking Water State Revolving Fund (SRF-DW)
KY	USDA RUS Water and Wastewater Disposal Loans and Grants
KY	Interim Finance Program
KY	Flexible Term Finance Program
KY	Public Works Program (EDA)
MD	Appalachian Regional Commission Grant Program
MD	State Revolving Fund Loan Programs: Drinking Water Revolving Loan Fund
MD	State Revolving Fund Loan Programs: Water Quality Revolving Loan Fund
MD	Public Works Program (EDA)
MS	Water Pollution Control (Clean Water) Revolving Loan Fund Program
MS	Community Development Block Grant Program: Public Facilities

MS	Capital Improvements Revolving Loan Program
NC	Public Works Program (EDA)
NC	Community Development Block Grant Program
NC	Supplemental Grants Program
NC	North Carolina Clean Water Management Trust Fund
NC	Unsewered Communities Grants Program
NC	Appalachian Regional Commission Grant Program
NC	Drinking Water State Revolving Fund Program
NC	NC Revolving Loan and Grant Program: High Unit Cost Fund; Drinking Water
NC	CWSRF
NC	Rural Center’s Unsewered Communities, Supplemental Grants, & Capacity Building
NC	Small Cities CDBG
NY	CWSRF
NY	USDA RUS Water and Wastewater Disposal Loans and Grants
NY	Public Works Program (EDA)
NY	Drinking Water State Revolving Fund
OH	Water Supply Revolving Loan Account
OH	USDA Water and Wastewater Disposal Loans and Grants
OH	Small Cities CDBG
OH	Public Works Program (EDA)
OH	Programs under Ohio Water Development Authority
OH	OPWC State Capital Improvements Program
OH	Water and Sanitary Sewer Program (CDBG)
OH	Water Pollution Control Loan Fund Program
OH	OWDA Master Program: Fresh Water Fund
OH	Drinking Water Assistance Fund Program
PA	USDA Water and Wastewater Disposal Loans and Grants
PA	Clean Water State Revolving Fund (Federal Source)
PA	Drinking Water State Revolving Fund (Federal Source)
PA	Appalachian Regional Commission Grant Program
PA	USDA RUS Water and Wastewater Disposal Loans and Grants
SC	Appalachian Regional Commission Grant Program
SC	USDA Water and Wastewater Disposal Loans and Grants
SC	Public Works Program (EDA)
SC	Community Development Block Grant Program
SC	Budget and Control Board Grant Program
SC	Clean Water State Revolving Fund
SC	Drinking Water State Revolving Fund
SC	Drinking Water State Revolving Fund
SC	Clean Water State Revolving Fund
TN	Community Development Block Grant Program
TN	Appalachian Regional Commission Grant Program
TN	Clean Water State Revolving Fund Loan Program

TN	USDA RUS Water and Wastewater Disposal Loans and Grants
TN	Drinking Water State Revolving Fund Loan Program
TN	Clean Water State Revolving Fund Loan Program
TN	Public Works Program (EDA)
VA	Public Works Program (EDA)
VA	USDA Water and Wastewater Disposal Loans and Grants
VA	VA Pooled Financing Program
VA	Wastewater Revolving Loan Fund Program (CWSRF)
VA	Drinking Water State Revolving Fund Program
VA	Self-Help Virginia Program
WV	CWSRF
WV	Small Cities CDBG
WV	Low Interest Loan Program - Clean Water State Revolving Fund
WV	Appalachian Regional Commission Grant Program
WV	West Virginia Infrastructure & Jobs Development Loan Program
WV	West Virginia Water Development Authority Loan Programs

Definitions and Scope of ARC Region

For the purposes of this survey, **water and sewer infrastructure capital needs** refer to the capital projects and investments needed to provide households in communities with drinking water and wastewater treatment services. Projects include costs related to new facilities and upgrading or replacing outdated facilities. Projects include both centralized facilities (distribution lines, treatment plants, etc.) as well as decentralized facilities (septic tanks).

Many questions in this survey call for answers about communities and counties in the Appalachian Regional Commission (ARC) region. That region and the counties included in it are shown in the ARC map online at: http://www.efc.unc.edu/projects/ARC_project/ARC%20region.pdf

Definitions and Scope of ARC Region

We define "public funding assistance" as grants or below-market loans financed by state or federal revenues. Roughly, what percentage of water/wastewater service providers in your state do you think are able to meet their upcoming needs without public funding assistance? (Click on one choice)

	Response Percent	Response Total
0-20% (most need public assistance funding)	40.3%	29
20-40%	**41.7%**	**30**
41-60%	12.5%	9
61-80%	5.6%	4
80-100% (very few need	0%	0

public funding assistance)	
Total Respondents	**72**
(No Response)	**5**

What percentage of communities within the ARC region in your jurisdiction do you think are able to meet their needs without public funding assistance?

	Response Percent	Response Total
0-20% (most need public assistance funding)	**64.8%**	**46**
20-40%	23.9%	17
41-60%	7%	5
61-80%	4.2%	3
80-100% (very few need public funding assistance)	0%	0
Total Respondents		**71**
(No Response)		**6**

In general, do you think the communities within the ARC region have a higher ratio of needs (infrastructural) to available resources than other communities throughout your state? (For information on which counties in your state are within the ARC region, see map at: http://www.efc.unc.edu/projects/ARC_project/ARC%20region.pdf)

	Response Percent	Response Total
Yes	**53.4%**	**39**
No	46.6%	34
Total Respondents		**73**
(No Response)		**4**

There have been a series of recent national and state-wide reports highlighting water and wastewater infrastructure capital needs and the funding gaps facing communities in paying for those needs. The list below indicates some of the more prominent studies and surveys.
If you are familiar with the survey or study, please give your opinion about the accuracy of their needs estimates for your region:

	0 - Substantially Under-estimates Your Needs	**1 - Somewhat Under-estimates Your Needs**	**2 - Accurately Estimates Your Needs**	**3 - Somewhat Over-estimates Your Needs**	**4 - Substantially Over-estimates Your Needs**	**Familiar, but no opinion**	**Not Familiar With**
EPA Drinking Water Needs Survey	15% (8)	20% (11)	15% (8)	4% (2)	2% (1)	15% (8)	**31% (17)**
EPA Clean Watershed Needs Survey	9% (5)	21% (12)	12% (7)	2% (1)	2% (1)	12% (7)	**41% (23)**
EPA Gap Analysis	6% (3)	9% (5)	8% (4)	6% (3)	0% (0)	19% (10)	**53% (28)**
AWWA Gap Analysis	2% (1)	4% (2)	4% (2)	2% (1)	0% (0)	15% (8)	**73% (38)**
Total Respondents							**56**
(No Response)							**21**

Does your state have a water and wastewater needs survey separate from the EPA needs surveys listed above? If yes, please identify below.

Total Respondents 51

•Not yet, but we are in the process of developing one just for the drinking water systems.
•Yes. Wastewater needs survey conducted by EFC.
•NYS Department of Health produced a Needs survey, but the last I saw included the needs of existing systems. A big gap is in assessing the needs to create new water systems, and extensions to existing systems, in rural hamlets and villages.
•Yes - Prepared by the NYSDOH with input from other Agencies
•NC Rural Economic Development Center
•The annual Project Priority is a better gage of the short term need assessment. It typically provides a realistic 5 to 7 year view of what the real capital needs are.

•West Virginia Infrastructure and Jobs Development Council Public Water/Wastewater Inventory and Needs Assessment Report - 2002
•Virginia Regional Coalfields Water Study. A separate Regional Coalfields Sewer Study is in the process of funding and the study should begin within the next 8 months.
•Yes. The TN Advisory Commission on Intergovernmental Relations conducts an infrastructure needs survey.
•Yes can be found at www.state.tn.us/tacir/publications.htm
•Maryland Department of Planning Infrastructure Survey
•One is currently being developed and should be done later this year.
•Kentucky Infrastructure Authority $ 1.7 billion for 0 to 2 year projects
•One survey, performed in 1996, by the NC Rural Center
•Yes. Infrastructure & Jobs Development Council Has an assessment study completed once every three years.
•Rural Center did a study some years ago.
•Yes, NC Rural Economic Development Center's Water 2030 Initiative (now underway)
•Ohio Public Works Commission's Capital Improvement Reports
•Every three years the WV Infrastructure Council conducts an inventory and needs assessment of all the water and sewer utilities in the state. These have been issued 1996, 1999, 2002 and the next in 2005.
•Multiple local/regional assessments, some by government and others by interest organizations. I've not seen a comprehensive state survey in some time.
•No; the Mississippi State Department of Health is currently developing a survey instrument.
•WRIS (Water Resource Information System) database populated by Area Water Management Councils (geographically based with Area Development District (ADD). Councils are responsible for coordinating with local constituents to determine local need. Fifteen ADD's combine information to create state's need for both water and wastewater.

(No Response) **26**

For the state program above (if you listed one in question 10), please give your opinion about the accuracy of their needs estimates for your region:

	0 - Substantially Under-estimates Your Needs	**1 - Somewhat Under-estimates Your Needs**	**2 - Accurately Estimates Your Needs**	**3 - Somewhat Over-estimates Your Needs**	**4 - Substantially Over-estimates Your Needs**
State Survey	0% (0)	26% (5)	**58% (11)**	16% (3)	0% (0)

Total Respondents **19**

(No Response) **58**

Is your funding program/organization involved in documenting capital needs in the ARC region?

	Response Percent	Response Total
Yes	**50.8%**	**33**
No	49.2%	32
Total Respondents		**65**
(No Response)		**12**

Please rate the following factors in terms of their impact on preventing communities from accessing funds to meet their capital needs.

	0 - No Impact on Accessing Funds	1 - Minor Impact on Accessing Funds	2 - Major Impact on Accessing Funds	No Opinion	Do Not Know	Response Average
Inability of customers to pay rates that would be needed to cover full cost of their service	2% (1)	20% (13)	**68% (45)**	5% (3)	6% (4)	**2.94**
Lack of willingness to charge customers more	0% (0)	31% (21)	**61% (41)**	3% (2)	4% (3)	**2.81**
Too small a customer base	2% (1)	21% (14)	**64% (42)**	9% (6)	5% (3)	**2.94**
Lack of grant assistance	3% (2)	18% (12)	**73% (48)**	3% (2)	3% (2)	**2.85**
Lack of capital funds in general	3% (2)	40% (27)	**48% (32)**	3% (2)	6% (4)	**2.69**
Communities do not know about existing public assistance programs	18% (12)	**62% (41)**	9% (6)	6% (4)	5% (3)	**2.17**
Total Respondents						**68**
(No Response)						**9**

Are there other obstacles (not listed in question 13) that prevent communities from accessing funds to meet their capital needs? If so, please specify.

Total Respondents **24**

- Board members of public water systems are complacent in their thinking. They believe that everything is fine and that periodic/needed improvements are not necessary. In reality, most of those systems have possible problems with treatment, source, and/or distribution.

- Meeting different state and federal agency program and policy requirements in "packaging" joint assistance from those sources.
- Most communities have no budgets to plan, hire engineers to design, or hire grant writers to apply for assistance. Therefore it takes them a long time to get off the ground. Their governing boards tend to be very conservative about spending public money, and therefore will not opt for a solution that does not include a great percentage of grant funds.
- Lack of institutional capacity, lack of strategic planning capacity, need major technical assistance to expedite application processes
- Lack of capital reserve funds
- In some cases, local politics prevent communities from coming together to solve water and wastewater needs on a more regional basis. This would help to provide economies of scale to expensive projects and help to keep rates more affordable.
- Our state has a large number of small communities that each have their own systems. More cooperation and consolidation would help.
- Most grant programs require job creation or retention, and many counties need infrastructure for development, but don't have documented jobs, so they cannot access federal grant programs.
- Competition from other communities political favoritism general topography increasing costs
- Lack of competent technical assistance to help some areas of local government.
- Unwilling to raise rates by cities or towns. Last option for most and wait for State or Funding Agency to force rate increase.
- Debt levels incurred to serve large water-using industries that have closed and left significant gaps in the cash flow from the user base--debt levels are higher than supportable with remaining users and restrict ability to incur additional debt to meet mandated improvements
- Some communities simply lack capacity development (FMIT expertise)
- Unwillingness to take on debt.
- Insufficient knowledge at community level of available sources of funding. Some public officials unwilling to undertake major improvement projects that place a financial burden on community.
- Difficulty in understanding all of the required documentation and federal and state rules for obtaining the money. "Too many hoops to jump through."
- Lack of up front local funds needed to prepare the initial planning documents and loan/grant applications required to obtain loans or grants.
- Don't know how to access funds, documenting needs, preparing applications that can be complicated. Also, don't do adequate long range planning of operation and maintenance needs.

(No Response)	**53**

Views On Capital Financial Management Strategies

How much effect do you think each of the following strategies would have in helping communities in the ARC region meet their infrastructure capital needs?

	0 - No Effect At All	1 - A Small Effect	2 - A Moderate Effect	3 - A Large Effect	Response Total
Consolidation/regionalization of utilities	0% (0)	9% (6)	**59% (40)**	32% (22)	**68**
Increasing amount of available subsidized loans (rates/terms below market rate)	3% (2)	25% (17)	34% (23)	**38% (26)**	**68**
Increasing amount of available grant funds	3% (2)	3% (2)	13% (9)	**81% (55)**	**68**
Increasing access to commercial capital funds	17% (11)	**49% (32)**	29% (19)	5% (3)	**65**
Financial assistance to help low income customers pay bills	6% (4)	33% (22)	**36% (24)**	25% (17)	**67**
Easier pairing of multiple financing sources	3% (2)	32% (22)	**35% (24)**	29% (20)	**68**
Setting rates to reflect full cost of service	5% (3)	31% (20)	29% (19)	**35% (23)**	**65**
Technical assistance to help communities reduce their costs	1% (1)	**44% (30)**	31% (21)	24% (16)	**68**
Improved asset management	3% (2)	32% (22)	**40% (27)**	25% (17)	**68**
Increase economic status of communities	0% (0)	14% (9)	41% (27)	**45% (30)**	**66**
Reduce the environmental regulations and standards communities are required to meet	8% (5)	**48% (32)**	27% (18)	17% (11)	**66**
Total Respondents					**68**
(No Response)					**9**

If you think there are other strategies that can help communities in the ARC region meet their infrastructure capital needs, please describe below.

Total Respondents 15

- Increased use of alternative and experimental infrastructure systems
- Environmental Management Systems Tax credits for investors that provide funds to communities that demonstrate excellence in water sustainability. More access to private activity tax exempt financing.
- Additional training & technical assistance.
- Encourage self-help with major federal grant programs.
- Long term capital improvement planning. Too many communities don't know or have a vision for the future of their communities
- Alternative ways to meet discharge requirements i.e., cluster system, package plants
- Generally speaking, water rates in the ARC areas are the highest in the state. They have maxed out on their potential to incur debt. Other areas have not - lack of leadership, understanding and political will are reasons why.
- Operating grants to allow local government to contract for the necessary expertise to meet capacity development standards
- 1. Decreasing water loss 2. Better billing system technology 3. 100% metering of customers 4. Higher tap-on fees
- Electronic application process which would serve as the "pre-application" for all state/federal grant and loan dollars within a state. Additional information needed by individual funding sources could be asked for after initial pre-screening of pre-application.

(No Response) 62

Do any of your programs provide incentives or otherwise foster any of the following strategies?

	Yes	No	Do Not Know	Response Total
Consolidation/regionalization of utilities	**75% (51)**	24% (16)	1% (1)	**68**
Setting rates to reflect full cost of service	**50% (33)**	41% (27)	9% (6)	**66**
Technical assistance to help communities reduce their costs	**65% (44)**	28% (19)	7% (5)	**68**
Total Respondents				**68**
(No Response)				**9**

What do you think a funding program's role should be in promoting or providing incentives to encourage specific capital financial management strategies?

	Response Percent	Response Total
Funding programs should strongly promote specific strategies	41.8%	28
Funding programs should do some promotion of specific strategies	**50.7%**	**34**
Funding programs have no role in promoting specific strategies. It's "not our business"	7.5%	5
Total Respondents		**67**
(No Response)		**10**

What methods do you use to work with other funding programs? Please select all applicable choices.

	Response Percent	Response Total
Informal discussions	**94.1%**	**64**
Shared databases or information	55.9%	38
Part of an infrastructure coordination organization	52.9%	36
Rely on shared application forms	17.6%	12
Total Respondents		**68**
(No Response)		**9**

What are your thoughts about the current level of funding coordination between different funding programs?

	Response Percent	Response Total
I would like to see funding coordination increase	47.1%	32
Funding coordination is sufficient	**52.9%**	**36**
There is too much funding coordination	0%	0
Total Respondents		**68**
(No Response)		**9**

Program Specific Information

Name of funding program.

86 programs responded to this section - 64 answered the first program section, and 22 answered the second.

Total Respondents	**86**
(No Response)	**13**

Compared to other available public funding assistance programs, how important do you think this program is to communities within the ARC counties?

	Response Percent	Response Total
0 - Not At All Important	1%	1
What are your thoughts about the current level of funding coordination between different funding programs?	27%	24
1 - Somewhat Important		
2 - Very Important	**72%**	**62**
Total Respondents		**87**
(No Response)		**12**

Does your program specifically target assistance to distressed or financially disadvantaged communities over non-distressed communities?

	Response Percent	Response Total
Yes	**70%**	**59**
No	30%	27
Total Respondents		**86**
(No Response)		**13**

Please rate how the following obstacles impact the ability of your program to provide funding to the most distressed/disadvantaged communities in your region.

	0 - Not An Obstacle	1 - A Minor Obstacle	2 - A Major Obstacle	No Opinion	Do Not Know
Difficulty completing application process	38% (32)	**53% (47)**	7% (5)	2% (2)	0% (0)
Inability to offer	40% (33)	10% (9)	**48% (41)**	3% (5)	0% (0)

communities grants						
Timing constraints (application deadlines, funding deadlines)	**51% (44)**	41% (36)	6% (4)	2% (2)	0% (0)	
Eligibility criteria	44% (38)	**39% (33)**	13% (11)	4% (3)	0% (0)	
Total Respondents						**88**
(No Response)						**12**

Does your program have other obstacles (not listed in previous question) to providing funding to the most distressed/ disadvantaged communities in your region? Please specify.

Total Respondents 40

- Program is only available to systems having a major emergency thereby having a major effect on the public health of the community.
- For our program, the area served must be at least 51 % low and moderate income
- Always more demand than available resources provided.
- Inadequate grant allocation to meet "affordability" to user.
- THE NEED TO DEMONSTRATE ECONOMIC IMPACT (JOB CREATION AND PRIVATE INVESTMENT)
- The 1.15x Debt Service Coverage Ratio Guideline for Bonds Issued with a Revenue Pledge as Security for the Loan. This excess coverage ratio may be a challenge to the most distressed communities.
- Our Agency does have a comprehensive set of guidelines, regulations, and policies that sometimes hamper the level of assistance we are able to offer, also there are specific criteria for professional services and construction as related documents required.
- There are no real obstacles over all. However, the program is not set up specifically to assist distressed/disadvantages communities.
- These communities tend to have volunteer boards who lack the sophistication to adequately deal with these types of projects/funding programs.
- There are not enough funds to do what needs to be done.
- Current critical need - community must have a current problem; we cannot fund proactive projects meant to prevent a problem, under the bond language
- Demonstrated ability to repay loan willingness to incur debt for project
- Public Service Commission (Regulates Utilities User rates and issues certificates of approval for new construction) allowed 270 days to give final approval for projects.
- Lack of grant funds to provide the level they need.
- Application requires that 70% of beneficiaries or households must be low and moderate-income (80% or less of the median income of the county)
- Inability of communities to meet minimum matching requirements. ARC &

state distressed criteria are different

- We have been trying since 1995 to have Congress authorize principal subsidy (e.g., blended grants and loans) from the Clean Water SRFs in much the same way that the Drinking Water SRFs can do.
- Lack of willingness to increase user rates if necessary.
- In order for any community in our state to receive subsidized loan from the DWSRF program, the system must be charging 1.25% of the community's 2000 MHI for 6000 gallons of water per month. Many communities are very reluctant to increase their water rates high enough to meet this criteria.
- To clarify #24 - we can offer grants, but we have limited grant funding, so some communities get less grant than we would like to see, or no grants even though they are eligible because they are not as disadvantaged as other competing communities.
- Grant funds are limited
- Must show economic impact of the project.
- Our grants are exclusively tied to private sector job creation and investment.
- The project must create a significant number of jobs and result in significant private sector investment in order to be competitive. Local share must be available and on-hand.
- Program is only available to systems having a major emergency thereby having a major effect on the public health of the community.
- DOCUMENTING THE ECONOMIC IMPACT (JOBS CREATION AND PRIVATE INVESTMENT) FOR INVESTMENT TO BE COMPETITIVE FOR FAVORABLE FUNDING CONSIDERATION
- These communities tend to have volunteer boards who lack the sophistication to adequately deal with these types of projects/funding programs.
- The ability of the community to access other funds to complete project funding.
- Our CWSRF program does not loan money to distressed/disadvantaged communities.

(No Response) **46**

Is affordability factored into funding decisions for your program?

	Response Percent	Response Total
Yes	**76%**	**67**
No	24%	21
Total Respondents		**88**
(No Response)		**12**

Do you have a definition of "affordable rates" that you use in making funding decisions?	Response Percent	Response Total
Yes	**54%**	**48**
No	46%	39
Total Respondents		**87**
(No Response)		**12**

Does your program include a condition that would require rates to be increased or set at a certain level in order to qualify for funds?	Response Percent	Response Total
Yes	**52%**	**46**
No	48%	41
Total Respondents		**87**
(No Response)		**13**

How well do you believe your system of addressing affordability actually works to target funding to most disadvantaged/distressed communities?	Response Percent	Response Total
0 - Does Not Work At All	3%	2
1 - Works Somewhat Well	**54%**	**41**
2 - Works Very Well	43%	31
Total Respondents		**74**
(No Response)		**17**

Do you have any general comments on affordability? **32**

- Affordability in our programs is reflected in a distressed generated maximum grant rate, not utility rate. Policy wise, the intent is not to exceed 50% of total cost but can go to max of 80% by law. This is a discretionary program targeted to creating jobs not fixing infrastructure.
- Sometimes based upon how badly the community wants "service"
- Affordability is way down on the list of important project evaluation criteria. The first hurdles should be severity of the threat to public health, water quality impact, and effectiveness of the proposed project to solve the problem. Once it is clear what those priorities are then seeking the most affordable financing mechanism is used to fund every project.
- Although we have a well documented set of water and sewer rates to use as a

guide to help communities not only establish a rate structure but also allow the Agency to provide grant assistance, these are the communities that are the most economically challenged. Their citizens are faced with lower wage jobs than urbanized areas and unemployment is typically higher...these are the people that pay the most for water and sewer. The more dense the population, the greater the economies of scale and the lower the utility bills for customers. Citizens of the coalfields don't have the same abilities to have vast economies of scale.

- This is a hard issue to consider when reviewing applications. Each project has different needs or issues involved which will affect rates/affordability. Our program is a grant program and therefore, rates are driven by other funding sources that provide loan funds.
- We calculate an affordable rate based on a lot of demographic criteria at the county level based on census data. From there we calculate where the project cost would put them relative to that rate. We lower the interest rate from a county cap rate (3/4 of the state GO Bond rate) down to 1% minimum, until they meet the target rate. If they still need additional help, we target state grant funds (limited) to those areas with 250 Households or less (where the $$s will have the most impact). If needed, we will extend the term from 240 months up to 360 months.
- Affordability is based on projections. If the true "flow" is not met, then revenues will not be forthcoming that may impair the system's ability to pay debts.
- 1.5% of MHI is the benchmark used for water and sewer systems as an upper limit for affordability If rates are higher on average bill (4500 gallon usage per month) Community is considered for low interest loans and/or grant funding.
- Grant monies should not be used to subsidize rates for localities lacking the political will to raise rates when others have. Grant monies should only be used after the ability to incur debt has been maximized.
- We look at similar systems to assure they have rates at reasonable level as compared to other systems in area.
- Our SRF program has specific provisions for reduced interest rates and loan forgiveness and our grant programs are integrated with SRF - same agency administers
- We do not specifically target disadvantaged communities. However, it we do have criteria for disadvantaged communities that, if met, allows for a lower interest rate.
- In our state, the rate structure is based on usage. The usage has declined to an average of about 4000 gallons / household; therefore we are looking at the rate for 4000 gallons and the affordability criteria is set to that rate. Also a community cannot artificially raise rates to the "target" just to qualify - we prefer a cash flow based on their financial report and consider "remaining cash" and coverage requirements.
- Affordability also encompasses the cost of facilities, i.e., appropriate technology.
- Our affordability target user rate/yr is 1% of Median Household Income, which is on the lower end. Communities with user rates exceeding the target rate qualify for additional subsidies.
- We have seen that those communities who increase their rates to get a subsidized or 0% loan, generate enough revenue to get the system out of the hole

and often times generate enough funds to afford a market rate loan in the future.

- Our programs are to create economic development....not affordable rates.
- We calculate an affordable rate based on a lot of demographic criteria at the county level based on census data. From there we calculate where the project cost would put them relative to that rate. We lower the interest rate from a county cap rate (3/4 of the state GO Bond rate) down to 1% minimum, until they meet the target rate. If they still need additional help, we target state grant funds (limited) to those areas with 250 Households or less (where the $$s will have the most impact). If needed we will extend the term from 240 months up to 360 months.
- Our program does not factor in the rates and fees for a water or sewer system. We target distressed communities by giving points for economic condition, and for job creation or retention
- Communities with user rates higher than the affordability target are eligible to receive additional subsidies including loan forgiveness.
- As long as a community can afford the debt, they will be offered a CWSRF loan at 3%.

(No Response) **52**

If your organization decided it wanted to enact policies that would increase public funding assistance to distressed communities, how difficult would it be to make the administrative changes needed?

	Response Percent	Response Total
0 - Very Difficult	13%	13
1 - Somewhat Difficult	41%	34
2 - Not at all Difficult	**46%**	**38**
Total Respondents		**85**
(No Response)		**14**

Please indicate the importance of the following decision factors in awarding public funds from your program.

	0 - Not At All Important	**1 - Somewhat Important**	**2 - Very Important**
Economic development impact	29% (27)	32% (28)	**39% (34)**
Public health	2% (2)	28% (24)	**70% (63)**
Environmental quality	2% (2)	34% (31)	**64% (56)**
Regulatory compliance	3% (3)	28% (24)	**69% (62)**
Regional cooperation	12% (10)	**54% (49)**	34% (30)
Inability to access capital from private sources	36% (31)	**36% (33)**	28% (24)
Total Respondents			**89**

(No Response)	**11**

At the time of your last funding cycle, what was the general ratio of requests (completed applications) for your funding versus what is available?

	Response Percent	Response Total
Requested amount was below available funds	7%	7
Requested amount equaled available funds	12%	12
Requested amount was twice available funds	**29%**	**25**
Requested amount was three times available funds	21%	13
Requested amount was more than three times available funds	21%	18
Do not know	6%	5
Not Applicable	10%	9
Total Respondents		**89**
(No Response)		**11**

Special Sub-section for Drinking Water SRF Program Managers

Do you have a program for disadvantaged communities within your Drinking Water SRF Program?

	Response Percent	Response Total	
Yes	43%	23	
No	**57%**	**30**	
Total Respondents			**53**
(No Response)			**24**

Yes, have a Program for Disadvantaged Communities.

How important do you think your program for disadvantaged communities is to helping communities within the ARC region?

	Response Percent	Response Total
0 - Not at all important	0%	0

		Total
0 - Not at all important	0%	0
1 - Somewhat Important	38%	11
2 - Very Important	**62%**	**18**
Total Respondents		**29**
(No Response)		**48**

No Program for Disadvantaged Communities

Are you now considering establishing such a program?

	Response Percent	Response Total
Yes	3%	1
No	**97%**	**29**
Total Respondents		**30**
(No Response)		**47**

If there any specific reasons why you have not set up a program, please describe them below.

Total Respondents **17**

- 1. Maintenance of the fund corpus 2. The availability of a state grant program and other state and federal programs focused on these communities 3. Our ability to assist these communities through other entities 4. Capacity Development objectives.
- Lack of resources to create & maintain.
- Currently drafting rules, program will go into effect by 7/1/05.
- Not covered in enabling legislation.
- In our regular program, we prioritize based on a number of factors, including community size and median household income. The smallest and poorest communities get priority.
- Program funds are grant funds

(No Response) **60**

- Households that did not have a charge for water and sewer in 1999 (records with an entry of 1 for WATER)

Vacant housing units and group quarters were given a missing value for WATER by the Census Bureau in the microdata samples. The UNCEFC research team dropped these records before further analysis.

Using the housing-unit weights, the research team determined the total number and the proportions of housing units not paying for water and sewer services, paying for them directly and paying for them through rent, for all housing units in each of the thirteen Appalachian states as a whole, as well as in their Appalachian and non-Appalachian regions. For housing units paying directly for water and sewer services, the percentage of household income spent on these services in 1999 was calculated by dividing the cost of water and sewer services by the household income. Using the housing-unit weights again, the team determined the mean, the median, the standard deviation, the minimum and maximum cost of and percentage of household income spent on water and sewer services for each PUMA, for the Appalachian and non-Appalachian regions of each state, for each state as a whole, and for the entire Appalachian region.

Finally, the research team assigned households that paid directly for water and sewer services two dichotomous variables according to whether or not they spent more than 2.5 percent and 5 percent of their income on water and sewer services in 1999. The team then calculated the percentages of households that spent more than 2.5 percent and more than 5 percent of their income on water and sewer services for the Appalachian and non-Appalachian regions of each state, for each state as a whole, and for the entire Appalachian region.

The results of the analysis and their implications are discussed in chapter 6.