

Responsiveness Summary on Ohio EPA's Affordability Criteria developed for the Water Pollution Control Loan Fund

On August 1, 2015, Ohio EPA issued its call for 2016 Water Pollution Control Loan Fund (WPCLF) nominations, and simultaneously released the draft "affordability criteria" for public review and comment. Based upon recent changes to the Clean Water Act, Ohio EPA is required to develop affordability criteria and use those criteria to determine what communities or districts qualify for additional financial subsidy (i.e. principal forgiveness). The criteria must include, at a minimum, "...income and unemployment data, population trends, and other data determined relevant by the State...". Further, Ohio EPA was required to establish these criteria (after providing notice and an opportunity for public comment) by September 30, 2015. For Ohio, these criteria will become functionally effective with the beginning of the WPCLF's program year 2016 (January 1, 2016).

During the 30-day comment period, Ohio EPA received comments from five (5) organizations or individuals. These comments, and Ohio EPA's responses, are summarized below.

1. William Brake, P.E. on behalf of Ohio & Lee Water & Sewer Authority

Comment: I have a couple of questions on the 2016 nomination procedure.

- 1) Is there a separate form for principle (sic) forgiveness?
- 2) I looked at the Affordability Criteria list and don't see Ohio & Lee Water & Sewer Authority. How is that used and how do we obtain a determination?

Response:

- 1) We are no longer using a separate principal forgiveness form, as we had in past years.
- 2) Communities must meet all four of the affordability criteria thresholds that we have established in order to be potentially eligible for additional subsidy. Those four criteria are median household income for communities less than 10,000 in population, unemployment rate, per capita income, and population change. Unfortunately, the Ohio & Lee Water & Sewer Authority only meets three out of the four thresholds, and thus does not qualify. The threshold that was not met was unemployment rate – the American Community Survey (ACS) unemployment rate for Monroe County was 6.7% in 2009-2013. The subsidy criteria is 1% or more above the national unemployment rate, or greater than or equal to 10.7%.

2. Ohio Rural Community Assistance Program

Comment 1: Income

Most funding programs, both federal and state, have adopted the Median Household Income as the best method of comparing income disparities and affordability. There are perhaps better methods for gaging wealth among residential customers, however, Per Capita Income may not be the best approach. Per Capita Income is not used by other agencies because it considers the average wealth, which can be significantly influenced by a small number of wealthy individuals in a community. In places where there are a handful of very wealthy families, this figure distorts the true picture of income for the vast majority people residing there. At least with a median, the

bottom half of the income spectrum is represented. Unless it is a requirement of federal law to use per capita, using a median income would be more appropriate. The percentage of poverty may also provide a better measure of income disparity and distress.

Also, the decision to no longer accept income surveys should be reversed for two reasons. First, the American Community Survey performs poorly in many small communities. The ACS does a very good job of capturing timely data in urban areas, but due to the small sample sizes, even with over sampling, the data for a large number of communities in Ohio comes with high margins of error.

For example, an analysis of Median Household Income data from the most recent ACS 5-year data (2009-2013) for 936 incorporated places in Ohio yielded these results:

- 351 or 37.5% of all Local Governments on the list have a Margin of Error (MOE) higher than 20%.
- 173 or 18.5% of all Local Governments have a MOE higher than 30%.
- Only 45, or 4.8%, have MOE less than 5% and they are all cities.

Particularly for unsewered area projects, which are typically found in very small villages or older population centers in townships, the American Community Survey is not designed to gather reliable data for such small populations.

And therefore, secondly, township or census block group data that does have large enough sample sizes for reliable data often do not provide an accurate depiction of income for many unsewered area projects. Most unsewered area projects in townships occur at a crossroads or in a cluster of older homes on smaller lots as compared with the rest of the township. The homes are older and smaller, and because they are on smaller lots, worth less than other homes that are newer or having more acreage. Likewise the people living in these homes are often lower income than surrounding areas. Any RCAP Technical Assistance Provider could identify lots of unincorporated places throughout the state that fit this description. If unsewered area projects are to remain high priority projects for consideration of principal forgiveness, counties and rural sewer districts should be given the opportunity to perform income surveys in places they strongly believe are not reflected in the available income data for townships or census block groups.

Response 1: Income

Thank you for your comment. When we began developing our affordability criteria and establishing the corresponding list of entities meeting them, we started with our list of hardship communities. In that regard, median household income was a major aspect of this approach and was not ignored. You are correct that we also used per capita income. Use of this income component was driven by federal Clean Water Act requirements in the Water Resources Reform and Development Act of 2014 (WRRDA) and the Public Works and Economic Development Act of 1965 (PWEDA). While we did consider using the percent of the population living below poverty level, its use did not significantly alter the results posted in our list. In the end, we chose criteria that appear to best meet our needs and federal requirements.

Regarding reinstating the use of income surveys and the concern expressed about the frequently large margins of error in the American Community Survey (ACS) data, we acknowledge that these margins of error can be quite large, especially for small unincorporated areas, as well as small villages. However,

this does not require that we reinstate the use of income surveys, which include their own built-in potential sources of error and bias, and caused us frequent problems in the past. In part to address potential margins of error at these very local levels, as well as data gaps, we have chosen to adapt our practice of using county level data (e.g., for median household income) and apply it to per capita income, unemployment rate, and population change data for unincorporated areas (such as census defined places, census block groups or tracts, and parts of townships).

Comment 2: Unemployment Rates

The proposed Criteria as described in the supplement to the nomination form describes that the unemployment rate over the most recent 24-month period will be used. This is an appropriate period of time to capture unemployment, however, the American Community Survey is a rolling 5-year data set. Using it for a 2-year period will actually compile data over a 6-year period. In addition to that, the American Community Survey does a very poor job of accurately depicting economic conditions in a large number of small villages and older population clusters in townships as described in the section above. These are often the places where principal forgiveness is most needed. This is because the ACS only surveys approximately a very small percentage of the population each year, and there is a high margin of error in the data for many small communities.

Also, many small and rural communities, particularly those with aging populations, may have low workforce participation rates. Those not reflected in unemployment data would include senior citizens, disabled people, single parent households, underemployed individuals and those who have given up trying to find work after many years. These communities can certainly be distressed, even though their unemployment rate is lower.

Perhaps a better source of data would be the Ohio Department of Job and Family Services Ohio Labor Market Information Local Area Unemployment Statistics (LAUS) Program, and to consider the county wide unemployment rates over the past two years rather than attempt to capture individual community data from 5-year rolling data sets through the ACS. LAUS data can be obtained at the following website <http://ohiolmi.com/laus/laus.htm>. This will more accurately reflect the recent local employment conditions.

Response 2: Unemployment Rates

Thank you for your feedback. We did consider this state level unemployment data source during our review of options, but we ultimately selected our current approach because it best conforms to federal requirements (WRRDA and PWEDA require that we use two years' worth of unemployment rate data), and because ACS can best provide the data we need. By using the ACS rolling 5-year data set, we meet the minimum two-year data requirement in federal statute. However, we only plan to use each ACS data set for one year. We would also note that use of ACS data has the benefit of already calculating the unemployment rate for us. Using other sources such as LAUS would require that we take the data and do the calculations for all of our counties and incorporated areas, which is not feasible given our existing resources.

Comment 3: Population Change

It is important to consider what type of population change creates the most distress in an area. A community that has had a high degree of population gain, such as Franklin County and neighboring areas, is likely to be in the least financial distress because business is thriving and therefore populations are increasing. There is more wealth in these communities to fund infrastructure. By contrast, a community that has experienced huge population losses from its peak, is much more likely to be distressed. Although it is understandable that agencies do not want to fund infrastructure in 'dying' communities, these are often the communities with the least financial resources and in need of the most assistance. Perhaps more scrutiny of the proposed projects is due to make sure such communities are reinvesting or building appropriately sized facilities and 'right-sizing' their systems, but denying them funding because they have experienced 'too much' population decline will disenfranchising some of the most financially distressed communities in the state.

Since the population peaks in most incorporated communities with sewer infrastructure occurred between 1950 and 1960, using 1960 as a benchmark for considering population change would be more appropriate in most instances than 1900, or, allow the community to use the census figure from its population peak within the past 100 years. Then, scoring should be based on population loss, without a cap, and those communities with the most population loss, particularly those with existing infrastructure, should receive more points under this criteria for eligibility.

Response 3: Population Change

We appreciate your perspective on this topic and think that we are in general agreement. For example, our population change criteria are designed to capture the worst off (declining) incorporated areas and counties. By using the 50th percentile of the population change figures for the last century, we have selected the communities with the worst conditions. We are not proposing to deny funding to areas that have "too much" population decline. Rather, these are exactly the communities we are trying to reach. If anything, we are not offering subsidy assistance to communities and counties with a population increase over 66.17%. Counties and communities with a population increase between 0% and 66.17% are still in the running for additional subsidy. In addition, we chose the last century for our data set because the population change data was already available from Ohio Development Services Agency and could be fairly readily used without a lot of additional modifications.

Comment 4: General Scoring and Eligibility

Understanding that WRRD now requires states to consider, "...income and unemployment data, population trends, and other data determined relevant by the State", rather than discounting a community's overall distress because it does not meet a 'cut-off' for one of these areas, I suggest having a scoring system within each of the three areas that does not deem a community ineligible if it does not score in one area. For example, a low income community with high population loss and low workforce participation rates would be considered a high distress community. It would not score well for unemployment, but would score high in the other categories and could therefore at least be considered eligible for principal forgiveness. Likewise, a community with the sudden loss of a major employer might score well under unemployment, but data for income and population change might otherwise disqualify it from consideration.

If federal law does not require that these areas of consideration for eligibility have to be weighted equally, it may also make sense to consider median wealth and poverty as more important criteria, and assign more points to this area than the others.

The following is an example of a scoring system that could be used, and projects asking for consideration of principal forgiveness could then be ranked based on their score. Scoring a 'zero' under one of the areas would not exclude a community from consideration.

Median Household Income or Median Per Capita Income

- <5% below statewide 0 points
- 5-10% below statewide 3 points
- 10-20% below statewide 6 points
- 20-30% below statewide 9 points
- 30-40% below statewide 12 points
- >40% statewide 15 points

Unemployment Rate Using 2-Years of County-Wide Ohio Labor Market Data

- <1% above statewide 0 points
- 1-2% above statewide 1 point
- 2-3% above statewide 2 points
- 3-4% above statewide 3 points
- 4-5% above statewide 4 points
- >5% above statewide 5 points

Negative % Population Change Since 1960

- <20% reduction 0 points
- 20-30% reduction 1 point
- 30-40% reduction 2 points
- 40-50% reductions 3 points
- 50-60% reductions 4 points
- >60% reduction 5 points

Additionally, the program may want to consider the financial impact of a new project. For example, a small \$500,000 rehabilitation project for a community of 5,000 people will certainly have a much smaller impact than a \$5,000,000 project serving 500 people. The impact of a project on rate affordability should also be taken into account. For example:

Sewer Rate Affordability After the Project (using annual rate for 4,500 GPM)

- <1% MHI 0 points
- Each 0.1% over 1.0% MHI = 1 point

Recognizing that no scoring system will be perfect, it is understandably difficult to develop a new scoring methodology for any funding program. However, if the goal is to provide the most financial assistance to most financially distressed communities, the current methodology as it is proposed will disqualify many of the most critically distressed communities in the state. Given that millions of dollars are at stake, I hope that these recommendations will be useful in crafting an application scoring system to achieve that goal.

Response 4: General Scoring and Eligibility

Thank you for your comment and the time you took to develop a point system proposal. This, and your preceding comments, reflects the level of expertise and commitment to community assistance that we've come to expect and appreciate in our dealings with RCAP.

As with other states in the Midwest that have proposed a point system, we did consider this approach, but saw some serious drawbacks. Foremost is the complexity of a point system. Our goal was to keep our approach as simple and understandable as possible. By using percentiles and the federal cutoffs for unemployment rate and per capita income, we have a system that does not require a lot of additional calculations. Instead, we simply have a list that everyone can quickly and easily reference, which still incorporates key economic data.

We would note two other important points. First, RCAP's point system proposal appears to be based on statewide figures, not federal or national figures, which would make it inconsistent with federal Clean Water Act requirements. Second, we previously used sewer rates in our principal forgiveness (affordability) criteria. However, it became too unwieldy and hard to verify independently, especially for unsewered areas, so it was discontinued.

3. City of Toledo

Comment:

The City of Toledo has reviewed the proposed affordability criteria presented by the Ohio EPA as outlined in the 2016 Request for Nominations. We offer the following comments in regards to these criteria.

The proposed criteria are shown in the table below along with the City of Toledo rankings:

Proposed Criteria	Program Value for 2016	City of Toledo
1b. Median Household Income with populations greater than 2,500	Equal to or less than \$49,432	\$33,317
2. Unemployment Rate	Greater than 1% over national average (10.7%)	17%
3. Per Capita Income	80% or less of national average, or \$22,524	\$18,760
4. Percent population change since 1900.	Less than or equal to 66.17% change	113.18%

The City of Toledo substantially meets the proposed affordability criteria for median household income, unemployment and per capita income with the exception of "population change since 1900."

Historical population		
Census	Pop.	%±
1840	1,222	—
1850	3,829	213.3%
1860	13,768	259.6%
1870	31,584	129.4%
1880	50,137	58.7%
1890	81,434	62.4%
1900	131,822	61.9%
1910	168,497	27.8%
1920	243,164	44.3%
1930	290,718	19.6%
1940	282,349	-2.9%
1950	303,616	7.5%
1960	318,003	4.7%
1970	383,818	20.7%
1980	354,635	-7.6%
1990	332,943	-6.1%
2000	313,619	-5.8%
2010	287,208	-8.4%
Est. 2014	281,031 ⁽²⁰⁾	-2.2%

The City of Toledo’s historical population trends are listed in the table to the left.

In 1900, the City of Toledo ranked 49th in the nation based on population. In 2014, the City of Toledo’s population was ranked 68th in the nation.

In 1900, the incorporated boundaries for the City of Toledo were significantly less than its current boundaries, thus distorting the percent of population change since 1900.

For the last 35 years, the City of Toledo experienced significant population decreases making it increasingly more difficult for its residents to afford sewer rate increases.

In order to meet the requirements of the City’s Consent Decree and Long Term Control Plan, sewer rate increases began back in 2003 with annual increases of 9.75% for four years. Passage of another additional annual increase

occurred in 2007 with a 9.9% rate increase for four years, and yet another occurred in 2011 with a 3% additional annual increase plus an ongoing fixed fee.

Just last year, another sewer rate increase was approved to continue to meet the City’s Consent Decree and Long Term Control Plan requirements. With this, the average homeowner in the city (defined as those who use 3,000 cubic feet of sewage per quarter) will pay \$912.56

annually in 2020 for sewage, up from the current 2015 rate of \$642.80 or a 42% increase.

Table 1: Annual Residential Sewer Rate and CPI Change 1987-2013

Year	Average Rate	% Rate Increase	CPI
1987	\$180	10.4%	3.6%
1988	\$200	11.1%	3.8%
1989	\$217	8.5%	4.7%
1990	\$232	6.9%	4.9%
1991	\$247	6.5%	3.9%
1992	\$259	4.9%	2.8%
1993	\$276	6.6%	2.9%
1994	\$286	3.6%	2.9%
1995	\$297	3.8%	3.1%
1996	\$311	4.7%	3.1%
1997	\$324	4.2%	2.4%
1998	\$335	3.4%	1.7%
1999	\$343	2.4%	2.1%
2000	\$354	3.2%	3.4%
2001	\$371	4.8%	2.7%
2002	\$382	3.0%	1.2%
2003	\$397	3.9%	1.9%
2004	\$414	4.3%	2.4%
2005	\$427	2.9%	3.2%
2006	\$444	4.0%	2.4%
2007	\$466	5.0%	2.7%
2008	\$492	5.6%	3.7%
2009	\$514	4.5%	-0.6%
2010	\$536	4.3%	2.0%
2011	\$557	3.9%	3.2%
2012	\$581	4.3%	2.0%
2013	\$606	4.3%	1.4%

In reviewing sewer rate increase trends for the last five years as taken from the 2013 Ohio EPA Sewer and Water Rate Survey, sewer rates in Ohio communities have increased 21.3%. Using this five year trend, the City of Toledo residents will be increasingly challenged and continue to endure economic hardship.

The City of Toledo’s median household income also decreased from 2010 levels. Median household income was \$34,260 in

2010 according to the U.S. Census Bureau (factfinder.census.gov.).

The City of Toledo's current median household income is \$33,317 for 2009-2013 (according to the Census Bureau Quickfacts) compared to the median household income for Ohio of \$48,308. The City of Toledo's median household income falls in the 0% Hardship range for "Program Year 2016 Affordability Criteria Determinations."

The Clean Water Act requires Ohio EPA to consider at a minimum, income and unemployment data, population trends, and other data determined relevant by the State to determine hardship communities.

We respectfully request that you take into consideration recent population trends (i.e. over the last twenty to thirty years) and the above information when establishing the final affordability criteria for principal forgiveness. Thank you.

Response:

Thank you for the comment. We appreciate Toledo's proactive – and successful – approach to addressing its Consent Decree and Long-term Control Plan responsibilities, and are glad to have been able to assist you through our below-market WPCLF financing program.

While we certainly recognize the economic challenges facing the city, as reflected in the information you provided, we also have to deal with the realities of a very large need for financial subsidy assistance in Ohio's wastewater infrastructure that vastly exceeds the limited amount of principal forgiveness we have to offer. So, one of our first cut-off points for providing such assistance has been, and will continue to be, population size (i.e., more people, including outside customers, equals greater economies of scale). The proposed affordability criteria include two population ranges, as depicted in the criteria table: less than or equal to 2500 people (Line 1a) and between 2501 and 10,000 people (Line 1b). This population cap helps us to target our limited principal forgiveness funds to the smallest communities with the fewest available resources for making their needed wastewater improvements, which is good, but, unfortunately, there's not enough funding left to assist mid-to-large-sized entities, like Toledo.

4. Trumbull County Sanitary Engineer's Office

Trumbull County is in disagreement with the new affordability criteria established by Ohio EPA in response to the Clean Water Act changes passed by Congress in June 2014. After reviewing 33 USC 1383 that went into effect August 19, 2015, it appears the thresholds established for Ohio communities by Ohio EPA are in conflict with the intent of the Clean Water Act to provide subsidization to ratepayers that will experience a significant hardship from the increase in rates necessary (or other appropriate method) to finance a sanitary sewer extension project. The proposed criteria are in conflict for the following reasons:

Comment 1: Ohio EPA is using County-wide demographic data to determine eligibility for Principal Forgiveness (PF). The long term debt of all Trumbull County sanitary sewer extension projects is retired on a project-by-project basis through special assessments attached to real estate taxes or capital charges attached to sanitary sewer bills. Some of the projects have been built or are planned in areas where the median household income (MHI) is lower than \$35,000/year and in some cases as low as \$30,000/year. Because the Ohio EPA is using County-wide demographics to determine PF eligibility, the rate payers in low income areas of the County will experience a significant hardship in the form of

increased assessments and capital charges with no relief, which is in conflict with the recent Congressional action.

Response 1: Thank you for your feedback on this Ohio EPA proposal. We understand your perspective. With its median household income of \$42,880, Trumbull County continues to meet one of the two criteria for 0% and 1% hardship loans available through the WPCLF program. Assuming that the county's projects have complete service area populations less than or equal to 2500 people, or between 2501 and 10,000 people, the county will still qualify for these very low interest rates for its projects, as well as more affordable assessments and capital charges. This use of county-wide demographic data is consistent with the recent pattern of interest rates awarded to the county, so using this county-wide approach for affordability criteria (additional subsidy) determinations should also be consistent with our earlier interest rate determinations. We do not see an inherent conflict. Also, please note that the data we chose for the different criteria (e.g., per capita income and unemployment rate) are based on what appears in federal statute.

Comment 2: Ohio EPA has issued a draft list of communities eligible for PF under the new criteria. There could be an isolated wealthy project population in one of the communities on your list with an MHI of \$100,000 that will qualify for PF but a project population in Trumbull County with an MHI of \$30,000 will not qualify.

Response: This example is hypothetical, but yes, this could occur under our current interest rate determinations procedure, as well as the new affordability criteria. The bottom line remains the condition of the community or service area population as a whole, not an isolated part. Splitting out a very low-income portion of a population and assigning them a subsidy would be very difficult to administer and for that reason was not chosen for the WPCLF's criteria.

Comment 3: According to census data, the combined population of the counties, cities and villages that currently meet your criteria is 808,003. Using Ohio's current census population of 11,590,000, this means only 6.97% of the entire state population lives in an area that may qualify for PF. Furthermore, a significant portion of the villages on the list have no current wastewater infrastructure or the means available to establish a sewer district for the purpose of building wastewater infrastructure. The only community in Trumbull County that is on the list is the Village of Orangeville with a population of 195. The Village has never established a sewer district and the County knows of no plans for the Village to submit a financial application to the Ohio EPA Water Pollution Control Loan Fund (WPCLF) for a project. The numerous small villages on the list that don't have the means to actually use WPCLF funds for a project further reduces the percentage of Ohio's population that will benefit from PF.

Response: While we don't dispute your figures, we do take issue with the premise in your concluding sentence. As we noted in response to the Toledo comments, the intent of our Principal Forgiveness program is to target these very limited funds for use by the smallest communities with the fewest available resources (financial, administrative, etc.) for making their needed wastewater improvements, which would not be possible without these funds. A number of very small communities have nominated projects for additional subsidy in response to our Affordability Criteria Determinations list, supporting the goal described above.

Comment 4: The use of population changes from 1900 to 2015 as a basis for one of the criteria is irrelevant when determining economic hardship. This criteria gives the appearance there are other interests being considered for PF determination other than economic hardship. Through deductive

reasoning, agriculture must be the primary industry in communities in the State that experienced low population growth since 1900. The US Department of Agriculture/Rural Development Division (USDA/RD) and the Ohio Rural Communities Assistance Program (RCAP) have already been established to financially assist these communities. The proposed criteria would also funnel the WPCLF PF funds into these communities to the detriment of low income areas that desperately need these funds.

Response: By law (Clean Water Act Amendments), we are required to include population trends in our affordability criteria. We believe we did so in a way that it was not a major factor in excluding communities from meeting the affordability criteria.

Comment 5: Population trends that indicate a severe loss of jobs and a dwindling population as experienced by Trumbull County since the closure of the steel mills in 1980 are a far better indicator of economic hardship than the proposed criteria. We have experienced a 15% population decline since 1980 due to the lack of good paying jobs resulting in the relocation of a significant portion of our population to other areas of the country.

Response: When we set up our criteria, we did so to provide a system to compare communities and counties across the state. Understanding that Trumbull County and the Mahoning Valley's situation may be unique, our goal was to have a simple, uniform set of criteria. Again, the recent Clean Water Act amendments set the basic criteria we need to consider in developing our process.

5. Trumbull County Commissioners

Trumbull County has a number of questions, comments and concerns' regarding the State of Ohio EPA's proposed affordability criteria developed for use in determining which communities or districts qualify for additional financial subsidy (i.e. Principal Forgiveness) as part of the Water Pollution Control Loan Fund.

Comment 1: OEPA produced a draft list of potential beneficiaries of Principal Forgiveness funds including 15 Counties (out of 88) (17%), 6 Cities (out of 251) (less than 1%) and 172 Villages (out of 681) (25%) in Ohio that meet all four affordability criteria. The 195 identified villages, cities and counties combined population (808,003) equates to less than 6% of the entire State of Ohio's population of 11.6 million people.

All but one (Columbiana County) of the benefiting communities has a population of less than 56,000 persons with the average benefiting population of just over 3,600 persons; an average population for a village.

As the affordability criteria primarily benefit villages within the State of Ohio, Trumbull County is requesting that the State of Ohio identify how many of the 172 villages and 6 cities operate and maintain their own public sanitary sewer system? If few or any do not currently operate a public utility, does the new affordability criteria promote the establishment and construction of new centralized sewer systems in areas of sparse settlements and low population?

It is hypothesized that the majority of the eligible cities and villages do not operate a public sanitary sewer of their own and therefore the primary beneficiaries of the proposed affordability criteria for principal forgiveness will likely be the 15 eligible counties below. See attached map also.

Entity Name	Entity Type	2013/2014 Population
Noble	County	14,363
Meigs	County	23,341
Adams	County	28,129
Pike	County	28,256
Fayette	County	28,800
Hardin	County	31,796
Jackson	County	32,748
Perry	County	35,812
Williams	County	37,291
Guernsey	County	39,590
Crawford	County	42,480
Highland	County	43,050
Brown	County	44,116
Seneca	County	55,669
Columbiana	County	105,686

The overwhelming majority (10/15) of the counties that will benefit from Principal Forgiveness as a result of the proposed affordability criteria are all located in southern Ohio (not shaded) with a combined population of 318,205 persons spread out over a much larger geographic area than the densely, populated, urbanized, culturally diverse 635 square miles that houses Trumbull County’s population of 205,000+ persons.

Response: We will need time to research this question regarding the status of public sanitary sewer systems in the identified cities and villages, and at this time do not have an answer to provide. We will provide an answer by the completion of the program management plan for PY 2016. We would note, however, that in our recent experience, your hypothesis about counties ending up being the beneficiaries of Principal Forgiveness that is offered to qualifying small villages has not been the case. Rather, the villages themselves have generally taken on the primary responsibility for their projects.

Comment 2: Trumbull County, Ohio offers that the proposed affordability criteria which does not allow for larger, more populous, densely settled counties to apply for or qualify for Principal Forgiveness funding for low-income neighborhoods within its boundaries is in direct conflict with the United States Environmental Protection Agency’s (and by association the State of Ohio EPA) own livability principles as defined in 2009 in conjunction with the United States Department of

Housing and Urban Development and the United States Department of Transportation. The limitation that the new affordability criteria place on urban areas is contrary to at least three if not all six of the defined livability principles which are as follows:

Promote equitable, affordable housing.

Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.

Enhance economic competitiveness.

Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.

Support existing communities.

Target federal funding toward existing communities—through strategies like transit-oriented, mixed-use development and land recycling—to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.

Coordinate and leverage federal policies and investment.

Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.

Value communities and neighborhoods.

Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

Response: Federal statute defines the criteria we need to include in our additional subsidy determinations. The criteria you identify (i.e., livability principles) are not included among them. More to the point, however, as noted in a previous response to the Trumbull County Sanitary Engineer’s Office comments, the intent of our Principal Forgiveness program is to target these very limited funds for use by the smallest communities with the fewest available resources (financial, administrative, etc.) for making their needed wastewater improvements, which would not otherwise be possible without these funds. Other considerations, while they may be important, are still secondary to this goal.

Comment 3: Trumbull County is under a legal mandate to construct over \$100,000,000 in sanitary sewers through a Consent Decree entered into in 2007 with the State of Ohio. Many of the “unsewered areas of concern” being addressed through the Consent Decree are low-and-moderate-income neighborhoods where the number of benefiting households, up to three hundred in some places, exceeds the number of households located within over half of the villages you have identified as being eligible for Principal Forgiveness through the State of Ohio’s Water Pollution Control Loan Fund program. The State of Ohio’s decision to not allow Trumbull County to carry out an income survey to qualify a project area or neighborhood for Principal Forgiveness is disastrous for the low-and-moderate-income households being affected and also for meeting the goals set forth in the Consent Decree mentioned herein.

Response: We are certainly aware of – and applaud – the proactive approach that Trumbull County has taken to addressing its widespread unsewered area problems in recent years, and are glad to have been able to assist you through our below-market WPCLF financing program, often with 0% interest rates and even some Principal Forgiveness and extended-term financing. We hope to continue partnering with the county in a similar manner as you proceed to address more of your “unsewered areas of concern”.

Comment 4: OEPA is proposing that the only consideration for Principal Forgiveness be given to the 195 villages, cities and counties that meet the affordability criteria **determined by readily available data.**

Trumbull County submitted a question to OEPA several weeks ago regarding the proposed Principal Forgiveness Criteria and asked how using population change for an area from 1900 to present day is relevant? Trumbull County’s population in 1900 was 46,591. The steel industry helped to increase our population substantially to a peak of 241,863 in 1980, according to census data. The closure of the steel mills since 1980 has contributed to a steady decline of our population to the current 205,175. The County has lost over 15% of our population since 1980. Wouldn’t a population decrease as experienced by Trumbull County since 1980 be more of an indicator of economic need than using population figures from 1900 to 2015?

OEPA staff writes “It is relevant and meaningful because 20% of the communities across Ohio meet all four affordability criteria and 17% of all counties in Ohio meet all four affordability criteria. In addition, county population count trend data from 1880-2010 was **readily available from the Ohio Development Services Agency on their web site**”

Utilizing the criteria Percent Population Change since 1900 ($\leq 66.17\%$ change) disproportionately affects the more populous counties in Ohio. The result of utilizing these four criteria is that favorable ratings are assigned to very small counties, cities and villages. Not a single city or village within Trumbull County, except Orangeville Village with less than 200 people, meets your favorable rating criteria due to the use of the population data between 1900 and 2010. The only counties in Ohio that do not fall within the + or – 66.17% change in population between 1900 and 2010 with a population greater than 140,000 are Licking, Delaware and Hamilton Counties.

To reiterate what was stated above, as the affordability criteria primarily benefit villages within the State of Ohio, Trumbull County is requesting that the State of Ohio identify how many of the 172 villages and 6 cities operate and maintain their own public sanitary sewer system? If few or any do not currently operate a public utility, does the new affordability criteria promote the establishment and construction of new centralized sewer systems in areas of sparse settlements and low population?

Readily available data is not a valid basis for use in determining which areas of the state are in economic distress and will receive the much needed Principal Forgiveness funds for maintaining or improving public sanitary sewer systems, thereby meeting your own livability principles by supporting existing communities and coordinating and leveraging federal policies and investments.

Trumbull County gathered historical population data from the census website in less than an hour for all counties in Ohio. Utilizing the county population trend data for a 130 year period because it is readily available is not a valid reason for including it as part of the affordability criteria. Is the State of Ohio looking to identify areas with drastic population losses or gains or stagnant growth? Typically, population loss (both in numbers and in percentage of population) is an indicator utilized by social scientists/demographers to determine areas of economic distress, however they arrive at their determinations through analysis of the recent past - a generation of people - versus the entire history of population loss or gain for the State of Ohio.

The United States Code Section 33; 1383: Water pollution control revolving loan funds describes the Clean Water Act requirements for developing affordability criteria and using those criteria to determine what communities or districts qualify for additional financial subsidy. 33 USC §1383 (1)(A)(ii) states that additional subsidization may be used to benefit an area that does not meet the affordability criteria set by the State of Ohio and 42 USC §3161 (b) states that an area that meets 1 or more of the criteria of subsection (a) of this section, including a small area of poverty or high unemployment within a larger community in less economic distress, shall be eligible for assistance under section 3141 or 3149 of this title without regard to political or other subdivisions or boundaries.

Trumbull County interprets 42 USC §3161 (b) to allow for the continued delineation and qualification of “unsewered areas of concern” for additional Principal Forgiveness subsidies through a household income survey or supported by other relevant census block level or tract level data to be submitted by the county with each nomination package.

Accuracy of American Community Survey Data

Trumbull County offers that the margin of error reported for the small areas of population within the State of Ohio are extremely high under the American Community Survey (ACS) and do not provide an accurate demographic picture of the most economically distressed areas of the state.

The United States Census Bureau recognizes the level of accuracy for ACS data is not the same as it was under the census long form survey and recommends that if a user is looking to compare estimates of the number and percentage of people in poverty for counties or school districts or the median household income for counties should use the Small Area Income and Poverty Estimates (SAIPE) program especially if the population is less than 65,000 persons.

Spielman, et al explains in their Applied Geography Journal article that American Community Survey data is the best available resource for geographers seeking to study small area social and demographic variation. However, ACS small area estimates are plagued by attribute uncertainty. For some variables the uncertainty (margin of error) is so large that the data are difficult to use.

This is especially evident when comparing the margin of error reported for Trumbull County’s unemployment rate (+/-0.6) against the reported rates of smaller villages in the State of Ohio (+/- 12.6 and 45.8%). See table herein.

The authors of the study further state that the margins of error are troubling from a geographic perspective because of the inverse relationship between geographic and attribute resolution. One of the authors argues that a fundamental philosophical shift is necessary within both federal

statistical agencies and among data users, “we should see the traditional survey as one of an array of data sources, including administrative records, and other information gleaned from cyberspace. Tying this information together to yield cost-effective and reliable estimates...”

Trumbull County is proposing that based on the fact that American Community Survey data is not perceived by the U.S. Census Bureau nor published social scientists as the most appropriate or accurate source for measuring income and unemployment rates across diverse populations that the State of Ohio consider incorporating sustainability measures as relevant data to develop the Affordability Criteria as allowed for under 33 USC 1383 (i)(2)(A)(ii) - (Contents - The criteria under clause (i) shall be based on income and unemployment data, population trends, and other data determined relevant by the State, including whether the project or activity is to be carried out in an economically distressed area, as described in section 3161 of title 42)

AND to allow Trumbull County to submit requests for Principal Forgiveness to benefit an area that does not meet the affordability criteria as set by the State of Ohio including delineated “unsewered areas of concern” for consideration of additional subsidies and qualified through household income surveys or supported by other relevant census block level or tract level data to be submitted by the county with each nomination package requesting principal forgiveness. 42 USC §3161 (b) states that an area that meets 1 or more of the criteria of subsection (a) of this section, including a small area of poverty or high unemployment within a larger community in less economic distress, shall be eligible for assistance under section 3141 or 3149 of this title without regard to political or other subdivisions or boundaries.

Examples of sustainability measures include measuring the percent of households that have housing costs greater than 35 percent of their income or the percentage of single-family parcels developed inside urbanized areas on an acre or less of land promoting redevelopment versus greenfield development and urban sprawl.

Please consider adopting our comments and suggestions as part of EPA’s proposed affordability criteria for use in determining which communities or districts qualify for additional financial subsidy (i.e. Principal Forgiveness) as part of the Water Pollution Control Loan Fund.

Response: Thanks for the extensive comments. Being as wide-ranging as the questions and recommendations are, we would offer to meet with anyone in your office who might like to discuss these suggestions further to see if there are items we could potentially incorporate in future program years.

Follow-up Response: During early October 2015, we reviewed the sewerage communities on Ohio EPA’s 2014 Sewer and Water Rate Survey list available on-line at:

[http://epa.ohio.gov/Portals/43/rate%20reports/Ohio EPA 2014 Sewer and Water Rate Survey.pdf](http://epa.ohio.gov/Portals/43/rate%20reports/Ohio_EPA_2014_Sewer_and_Water_Rate_Survey.pdf).

Using this data set, we determined that there are at least 82 communities (75 villages and 7 cities) out of the 195 entities (15 are counties; 180 are villages and cities) on our entire affordability criteria determination list that appear to be sewerage based on the 2009 and latest (2014) Ohio EPA sewer rate study. The list of these communities is presented below:

Addyston village, Ohio
Andover village, Ohio
Attica village, Ohio
Barnhill village, Ohio
Beallsville village, Ohio
Bellaire village, Ohio
Bettsville village, Ohio
Bridgeport village, Ohio
Campbell city, Ohio
Cardington village, Ohio
Catawba village, Ohio
Cecil village, Ohio
Chauncey village, Ohio
Clarksburg village, Ohio
Clarksville village, Ohio
Coalton village, Ohio
De Graff village, Ohio
Deshler village, Ohio
Dresden village, Ohio
Edison village, Ohio
Fayette village, Ohio
Flushing village, Ohio
Forest village, Ohio
Greenfield village, Ohio
Grover Hill village, Ohio
Harbor View village, Ohio
Hicksville village, Ohio
Higginsport village, Ohio
Hillsboro city, Ohio
Hoytville village, Ohio
Jeffersonville village, Ohio
Jewett village, Ohio
Kenton city, Ohio
Laurelville village, Ohio
Lisbon village, Ohio
Lockland village, Ohio
Lowellville village, Ohio
Lynchburg village, Ohio
Malta village, Ohio
Manchester village, Ohio
Mantua village, Ohio
Matamoras village, Ohio
McClure village, Ohio
McConnelsville village, Ohio
McGuffey village, Ohio
Mechanicsburg village, Ohio
Middle Point village, Ohio
Middleport village, Ohio

Midvale village, Ohio
Mineral City village, Ohio
Mingo Junction village, Ohio
Nelsonville city, Ohio
New Boston village, Ohio
New Holland village, Ohio
Newcomerstown village, Ohio
Oakwood village (Paulding County), Ohio
Pomeroy village, Ohio
Port Washington village, Ohio
Quaker City village, Ohio
Quincy village, Ohio
Ripley village, Ohio
Roseville village, Ohio
Rutland village, Ohio
Salineville village, Ohio
Seaman village, Ohio
Shreve village, Ohio
South Solon village, Ohio
Spencerville village, Ohio
Stockport village, Ohio
Stryker village, Ohio
Sugar Grove village, Ohio
Uhrichsville city, Ohio
Union City village, Ohio
Washingtonville village, Ohio
Wayne village, Ohio
Wellston city, Ohio
Wellsville village, Ohio
West Manchester village, Ohio
Weston village, Ohio
Willard city, Ohio
Willshire village, Ohio
Winchester village, Ohio