D. Water Pollution Control Revolving Loan Fund Program Ranking and Funding Rationale

1. Projects will be ranked on one of the following three Priority lists.

- Small/Low Income Communities Priority List – To be ranked on this list a project must meet the definition of projects described in one of the WPCRLF Priority System Categories Three (3) through Eight (8) as outlined in Section IV.E, below; and must serve a community/loan applicant which has a population of 3,000 or less and a median household income of $30,000 or less. Projects on this list will be ranked within their respective categories based on the "affordability criteria" outlined in Part II, Section III.O, below.

  For the purposes of this section, a "community" is generally defined as the entire area within the applicant's political boundaries (incorporated area, certified area, etc.); however, if a county is the applicant, a clearly defined area within the county which is to be served by the proposed project, and which is not within the political boundaries of any other entity within the county, may be considered the community if determined appropriate and reasonable by the Department.

  The median household income used in this determination shall be that defined in the ESRI Business Analyst 2017 Demographics and Income Profile (the same source which previously published the Community Sourcebook of Zip Code Demographics, historically used for such determinations in the WPCRLF Program).

  Projects ranked on this Priority List will be eligible to receive loan subsidy in the form of principal forgiveness equal to 75% of the total loan amount. After bids are received the subsidy amount will be adjusted, to reflect 75% of the amount resulting from subtraction of any included construction contingency from the total as-bid loan amount, provided adequate subsidy remains available for any needed loan increases. Notwithstanding the above-described subsidy percentage, the cumulative subsidy provided to any single recipient for projects ranked on this Small/Low Income priority list shall not exceed $2,000,000.

  To insure that the "small/low income communities" have a dedicated source of loan funds and will not have to compete with larger/higher income communities for funding, the Department is setting aside $2.1 million in available funds for qualifying projects in small/low income communities. However, subsidy fund availability for these projects will be limited as described in Section IV.D.6. Any funds not obligated for small/ low income communities by September 15, 2018 may be released and made available to any eligible loan recipient on the regular or green "project" reserve priority list, or to any project on the FY-19 and After Planning List which is ready for loan award.

  "Green Project Reserve" Priority List – To be ranked on this list a project must meet the definition of projects described in any of the WPCRLF Priority System Categories as outlined in Section IV.E, below; and, at least 25% of the scope of

work must qualify as "green," as determined by EPA's 2012 CWSRF 10% Green Project Reserve: Guidance for Determining Project Eligibility.

To ensure that "green projects" have a dedicated source of loan funds and will not have to compete with "regular" projects for funding, the Department is setting aside $6.7 million in available funds for "green" projects. Any funds not obligated for "green project reserve" projects by September 15, 2018 may be released and made available to any eligible loan recipient on the regular or small/ low income priority list, or to any project on the FY-19 and After Planning List which is ready for loan award.

During its solicitation of projects for FY-18 funding the Department did not receive sufficient eligible applications for green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities to be able to obligate ten percent (10%) of the FY-18 allotment to "green projects." Therefore, in an effort to meet the "Green Project Reserve" objective, the Department intends to continue pursuing "green" projects, and carry these FY-18 funds over into FY-19 to be obligated in the FY-19 Intended Use Plan.

- Regular WPCRLF Priority List – All other ranked projects that do not qualify for the Small/Low Income Communities Priority List or the "Green Project Reserve" Priority List will be placed on the Regular WPCRLF Priority List.

2. Projects will be placed on the applicable priority list according to priority ranking and will be awarded loans based upon each project's readiness to award.

   - The order of project categories in this Priority System reflect the Department's mission statement, "... to safeguard the health, safety and welfare of present and future generations of Mississippians by conserving and improving our environment and fostering wise economic growth through focused research and responsible regulation." The Department's intent in developing this priority system is to fund projects in the order of greatest benefit to the public health and the environment, and within certain categories to assist those communities that are least able to afford the needed environmental facilities without a low interest loan available through this program.

   - The term "ready to award" means that all loan application requirements established in the program regulations are met, and all documents necessary for loan award are approved. If a project cannot reasonably be expected to meet the Priority System deadlines, then the project will not be placed on the current year priority list, but rather will be placed on the planning list. Loans will be awarded for projects within the available funds in the following order:

     a. Projects on the current year priority lists that meet all Priority System deadlines will be funded when they are ready to award.

     b. Should any project on the current year priority lists fail to comply with any of the deadlines in this Priority System, the funds reserved for said project will

be released and made available to projects on the current year priority list that are ready to award, on a first-come first-served basis.

c. If it becomes apparent that the projects on the current year's priority lists will not utilize all assumed available funds by the end of the current fiscal year, projects on the planning list that are ready to award will be funded from these remaining funds on a first-come, first-served basis.

d. Should less than the assumed funds become available, projects shown for funding in the current fiscal year that are ready to award will be funded as described above within the available funds.

e. Should more than the assumed funds become available from loan decreases, early loan payoffs, or other sources, these funds may be used for loan increases, to increase project amounts shown for funding in the current fiscal year, and/or to fund projects on the planning list that are ready to award, as determined appropriate by the Department.

f. Subsidy funds will be awarded as described in Section IV.D.6.

3. Coordination With Mississippi Basin Management Approach

Recognizing that the health and welfare of Mississippians, wildlife, fish and other aquatic life are directly affected by the quality of Mississippi's waters, the Department began implementing the Basin Management Approach (BMA) in 1998. The BMA is a collaborative, interagency initiative designed to improve and maintain the quality of our water resources through comprehensive long-range water quality planning and management strategies. The BMA includes planning, data gathering, data assessment, Total Maximum Daily Load (TMDL) development, development of watershed management plans, and watershed project implementation.

In order to support the worthwhile goals of the BMA, higher ranking will be given to projects identified by the Basin Management Branch that implement watershed management plans to address water body impairments. These high priority BMA projects will be ranked at the beginning of each Priority Category beginning with the Raw Discharge Category through the Existing Facilities Upgrade (Meeting Final Limits) Category. If a Priority Category is divided into various subcategories, these projects will be ranked at the beginning of each subcategory.

If more than one high priority BMA project is ranked in a priority category, these projects will be moved to the beginning of that category and or subcategory and will be ranked in accordance with the Priority System.

4. WPCRLF Loans to Match EPA Special Appropriations Projects (SPAPs)

On August 16, 2001 EPA issued a class deviation from the provisions of 40 CFR 35.3125(b)(1). This class deviation will allow the non-federal, non-state match WPCRLF funds to be used to provide loans that can be used as local match for SPAP grants awarded to construct water pollution control projects.

These non-federal, non-state match WPCRLF loan funds will be made available to eligible SPAP grant recipients that are on the current year priority list for use as local match funds for their SPAP grants, provided the SPAP grant is for WPCRLF loan eligible work. Such projects will be funded in accordance with the Priority System, and until all non-federal, non-state match monies have been obligated or demand for such funds has been met.

5. Loan Increase Reserve

Beginning in FY-2001 the Department began making loan awards after approval of the facilities plan and loan application rather than after completion of design. This change in the loan award sequence increases the likelihood that bid overruns may be greater than the construction contingency included in the loan agreement, and that additional loan funds may be needed to ensure that these projects are completed. In order to provide needed loan increases to existing loans, the Commission intends to set aside the amounts identified in Appendix A for such loan increases to be awarded on a first-come, first-served basis. Any funds not obligated for this purpose by the end of the fiscal year may be made available for new loans ready for award on a first-come, first-served basis from either the Priority List or the Planning List.

If these loan increase reserve funds are exhausted during the year, and additional funds are needed for loan increases to cover bid overruns or other project cost increases to ensure that on-going projects are completed, the Department may use funds recovered from loan decreases or other sources during the year to fund such needed loan increases.

E. Priority System Categories

1. The first category of projects on the Priority List will be the Segmented Projects. These projects include any remaining segments of projects that previously received funding for an integral portion of that project, and are necessary for the entire project to be functional. Projects will be funded under this category in order of their regular priority ranking provided they meet the deadlines established in Section F.

In order to maintain continuity, the Commission intends to make some amount of funds available for each ongoing-segmented project. Preference in the amount of funds to be provided will be given to the projects that received the earliest loan award

for their initial segment.

2. The second category of projects will be the Previous Year Standby Projects. This category of projects includes projects that 1) were listed on the previous year's Planning List within an amount of approximately 25% of that year's total available funds, 2) met all applicable Priority System deadlines in the previous fiscal year, and 3) were not funded because of a lack of WPCRLF funds or did not receive an assurance of CDBG, ARC, RUS, CIAP or other match funding in the previous fiscal year. Within this category, these projects will be ranked according to the current Priority System.

3. The third category of projects will be the Raw Discharge Correction Projects for communities with sewage collection systems but no treatment facilities. This is necessary to ensure that the water quality problems associated with continuous discharges of untreated sewage from these systems are addressed as required by the federal Clean Water Act. Projects within this category will be ranked in order of the highest estimated discharge flow rate.

   If a project in this category is identified as a high priority BMA project, that project will be ranked at the beginning of the list within this category.

4. The fourth category of projects will be the Existing Facilities Upgrade (Not Meeting Final Limits) Projects. The scope of these projects may include only the upgrade, expansion, replacement, rehabilitation, and repair (including infiltration/inflow removal) of existing wastewater transportation and treatment facilities, or drinking water sludge discharge treatment facilities, necessary to bring the existing treatment facility into compliance with final effluent limitations, or to eliminate existing facilities not meeting final limits. Projects will be funded under this category in order of priority points, provided they meet the deadlines established in the Priority System. The priority points will be determined as established in Section G of this Priority System. These projects will not be considered for funding if a Commission Order schedule requires construction of these projects substantially prior to the Priority System deadlines

   If a project in this category is identified as a high priority BMA project, that project will be ranked at the beginning of the list within this category.

5. The fifth category will be Non-Point Source and Storm Water Pollution Correction Projects which may include program costs, conservation easements, sedimentation basins, levees, canals and other structures for the purpose of correcting non-point and storm water sources of pollution.

   These projects must be consistent with any applicable Section 319 Management Programs approved by the Department of Environmental Quality. The projects within this category will be ranked in order of the highest receiving stream classification that is being negatively impacted by these sources of pollution.

   Receiving stream classifications will be ranked in the following order: Public Water Supply; Shellfish Harvesting; Recreation; Fish & Wildlife; and Ephemeral. Within

each stream classification, projects will be ranked by the highest acreage of runoff that is contributing to the non-point and/or storm water sewer pollution problem, and that will be addressed by the project.

If a project in this category is identified as a high priority BMA project, that project will be ranked at the beginning of the list within the subcategory where the project is currently ranked.

6. The sixth category will be the New Collection – Existing Buildings Projects that are necessary to construct eligible sewers and treatment facilities for existing (at the time of facilities plan submittal) residences, businesses and public buildings. Projects in this category may not include the construction of wastewater treatment or transportation facilities to serve areas that are not developed at the time of facilities plan submittal.

   The system for ranking collection systems is designed to give highest ranking to those projects serving an individual drainage basin within the loan recipient's political boundaries that: 1) will correct the most potential health problems (this is described below by the term "Residences Served") and 2) are most cost effective (this is described below by the term "Residences Served/Total Eligible Cost for Entire Project"). Priority points will then be calculated as follows:

$$\text{Priority Pts.} = \frac{(\text{Residences Served}) \times (\text{Residences Served}) \times 1000}{(\text{Total Eligible Cost for Entire Project})}$$

   If ties occur in priority points those projects will be ranked according to the highest number of residences served. The term "residences served" includes businesses and public buildings.

   The term "Total Eligible Cost for Entire Project" means the total eligible cost to construct the collection and interceptor system for an individual drainage basin within the loan recipient's political boundaries and to cause the wastewater treatment facility to meet final effluent limits at the time the collection project is predicted for funding.

   Except as allowed in Section IV.E.11, collection sewers will not be funded prior to funding of the treatment portion of a project necessary to cause the wastewater treatment facility to meet final effluent limits.

   If a project in this category is identified as a high priority BMA project, that project will be ranked at the beginning of the list within this category.

7. The seventh category of projects will be the Wastewater Overflow/Bypass Elimination Projects. The scope of these projects may include only the replacement, rehabilitation, and/or repair of existing transportation facilities that are necessary to eliminate documented bypasses and/or overflows of raw sewage from these transportation facilities for a 2 year, 24-hour rainfall event, as documented in the facilities plan for the project and approved by the Department.

   To be eligible for this category the bypasses and/or overflows documented in the

facilities plan must have been reported, by the deadline for submission of the facilities plan, to the Department in accordance with the requirements of the loan applicant's NPDES permit.

These projects will be ranked in order of the highest receiving stream classification that will be negatively impacted by the bypass and/or overflow. Receiving stream classifications will be ranked in the following order:

Public Water Supply, Shellfish Harvesting, Recreation, Fish & Wildlife, and Ephemeral. Within each stream classification above, projects will be ranked from the lowest to the highest 2017 median household income as displayed in the publication "ESRI Business Analyst Demographic and Income Profile Report".

If a project in this category is identified as a high priority BMA project, that project will be ranked at the beginning of the list within the subcategory the project is currently ranked.

8. The eighth category of projects will be the Existing Facilities Upgrade (Meeting Final Limits) Projects. Included within the scope of these projects may be the upgrade, expansion, replacement, rehabilitation, and repair of existing wastewater treatment and transportation facilities, including the removal of infiltration/inflow. The scope of these projects may not include the construction of new wastewater treatment or transportation facilities if none now exists.

   These projects will be ranked first in order of the highest receiving stream classification that would be negatively impacted by wastewater should the facilities to be upgraded fail. Receiving stream classifications will be ranked in the following order:

   Public Water Supply, Shellfish Harvesting, Recreation, Fish & Wildlife, and Ephemeral. Within each stream classification above, projects will be ranked from the lowest to the highest 2017 median household income as displayed in the publication "ESRI Business Analyst Demographic and Income Profile Report".

   If a project in this category is identified as a high priority BMA project, that project will be ranked at the beginning of the list within the subcategory the project is currently ranked.

9. The ninth category will be New Facilities (Developmental) Projects. These projects may include the expansion or upgrade of existing wastewater treatment and transportation facilities and the construction of new wastewater treatment and transportation facilities to accommodate future growth within the design flow for the planning area to be served. Transportation facilities may include interceptors, pump stations, force mains, and collector lines. The projects within this category will be ranked from the lowest to the highest 2017 median household income for the community, as displayed in the publication "ERSI Business Analyst Demographic and Income Profile Report".

10. The tenth and final category will be Industrial Projects. The facilities to be built or

upgraded under this category must be owned and constructed by a WPCRLF loan eligible public entity and may include industrial wastewater treatment and transportation facilities. The projects within this category will be ranked from the lowest to the highest 2017 median household income for the community, or nearest community, as displayed in the publication "ERSI Business Analyst Demographic and Income Profile Report".

11. New collection sewer projects will be funded only under the New Collection – Existing Buildings category or the New Facilities (Developmental Projects) category.

12. The complete treatment portion of a project, as necessary to cause the wastewater treatment facility to meet final limits, must be funded prior to or along with any other project portion, except in the case of a recently acquired facility that has or will be given interim limits with a schedule to meet the final limits. In such case other project portions may be funded first provided the facility complies with the schedule to meet final limits.

F. Priority System Deadlines

1. By October 15, 2017*, the loan applicant must submit to MDEQ the complete WPCRLF facilities plan, prepared in accordance with the WPCRLF loan program regulations and the "Guidance For Water Pollution Control Revolving Loan Fund Projects Funded Beginning Federal FY 2016 (October 1, 2015 and After)." A complete WPCRLF facilities plan includes all IGR agency comments; a copy of the public notice for the proposed project; copies of any comments received from the public; and, a summary of how each comment was addressed. The loan applicant should also submit one copy of the facilities plan to the Rural Utilities Service (formerly Farmers Home Administration) if the loan applicant has existing debt with Rural Utilities Service, along with a request for their approval to incur this additional debt.

   Any significant changes made to the facilities plan (i.e., changes in the chosen alternative, location of the facility, cost increases that substantially affect the financial capability of the loan recipient, etc.) after this date will be considered as a first submittal of the facilities plan. The loan applicant will then be considered to be in violation of this Priority System deadline and the project will be placed on the planning portion of the Priority List, or if the change is made after adoption of the Intended Use Plan, funds reserved for this project may be released and made available to other projects.

2. By March 1, 2018*, a completed WPCRLF loan application and all associated documents required by the WPCRLF regulations and the "Guidance For Water Pollution Control Revolving Loan Fund Projects Funded Beginning Federal FY 2016 (October 1, 2015 and After)" must be submitted to MDEQ. Prior to preparing these documents the loan recipient and/or consulting engineer should request and attend a pre-application conference. This deadline must be met to be able to qualify for the Previous Year Standby Category in the FY-19 IUP.

3. By August 1, 2018 all approvable documents and responses to Department comments necessary for loan award must be submitted to the Department for review and approval. This deadline must be met to be able to qualify for the Previous Year Standby Category in the FY-19 IUP. Projects on the Planning List or projects on the current year list that had their funds released should also meet this deadline in order to allow for Department reviews/approvals necessary for loan award prior to the end of the fiscal year.

4. By September 15, 2018 any "Small/Low Income" or "Green Project Reserve" funds that have not been awarded to a project may be released and made available to any project that is ready for loan award on a first-come, first-served basis.

(*Note: Due to unavoidable delays in preparation of the FY-2018 IUP, and adequate funds availability, all projects currently pursuing FY-18 funding, but for which this deadline was not met, have also been included on the FY-18 Priority List, provided that their inclusion did not adversely impact funding for any projects which met the deadline.)

G. Priority Point Formula for Existing Facilities (Not Meeting Final Limits) Category Projects.

1. Priority points for these projects will be calculated using the following formula for each stream classification impacted:

Priority Points = (Stream Classification Factor)
X
(Existing Water Quality Problem Factor)
X
(Achievement of Stream Use Factor)

Calculation of Factors:

a. Stream Classification Factor - Factors will be assigned as follows based on the type of stream that the present wastewater discharge impacts:

Stream Classification	Factor
Ephemeral	1
Fish & Wildlife ($Q_{10/7} > 0$)	5
Recreation	15
Shellfish Harvesting	25
Public Water Supply	30

Stream classifications for all bodies of water within the State have been established and adopted by the Commission on Environmental Quality as part of the State Water Quality Standards.

Recreational waters are those which have been classified as such by the Commission.

b. Existing Water Quality Problem Factor - Factors will be assigned based on the extent of the water quality problem presently caused by the existing wastewater discharge. The Dissolved Oxygen Problem Factor, the Public Health/ Bacteria Problem Factor, the Ammonia Toxicity Problem Factor, and the Chlorine Toxicity Problem Factor will be added to arrive at the total Existing Water Quality Problem Factor.

Water Quality Problem Factor = D. O. Problem Factor + Public Health/Bacteria Problem Factor + Ammonia Toxicity Problem Factor + Chlorine Toxicity Problem Factor + 1 (if a minimum of secondary treatment is not presently provided).

i. Dissolved Oxygen Problem Factor - This factor will be determined by use of the BOD, and flow values specified in the present limitations of the NPDES permit, unless significantly different from present effluent characteristics. These limitations will be entered into the standard wasteload allocation formula and a minimum dissolved oxygen concentration in the stream will be predicted for the existing wastewater discharge. The dissolved oxygen deficit is the difference between the dissolved oxygen standard, which is normally 5.0 mg/l, and the predicted minimum dissolved oxygen in the stream.

This dissolved oxygen deficit is then multiplied by the stream miles (or equivalent stream miles) which presently have a dissolved oxygen concentration below the designated standard to obtain the Dissolved Oxygen Problem Factor as shown below:

Dissolved Oxygen Problem Factor = (D.O. deficit) x (Stream or Equivalent Stream miles below standard)

In order to rank all projects (on both inland and estuary waters) together, it is necessary to develop a relationship between stream miles impacted and estuary waters impacted. The term "equivalent stream miles" has been developed for estuaries based on the premise that the surface area of a body of water most directly represents the value of the water body in terms of a fisheries resource, recreational use, etc. In calculation of "equivalent stream miles" it is assumed that a typical stream width is 50 feet. The area (in square feet) of the estuary impacted, as determined by the math model, is then divided by {50 feet x 5,280 feet/mile} to give the "equivalent stream miles". Equivalent stream miles will only be calculated for bay-like estuary segments. All other estuary segments will be measured in actual miles like freshwater streams.

For streams impacted by more than one discharge, the D.O. problem factor will be determined by using the difference between the D.O. factor with all discharges and the D.O. factor considering the discharge in question removed. If there is more than one discharge

from the same project on the same stream, miles impacted will only be counted once.

ii. Public Health/Bacteria Problem Factor - This factor will be determined based on whether or not the existing discharge has a bacterial impact on Recreational, Water Supply, Shellfish Harvesting or Fish & Wildlife waters. Discharges into Ephemeral waters are considered to have no bacterial impact, unless a public health problem can be documented in the receiving stream.

A discharge into Recreational, Water Supply, or Fish & Wildlife waters is considered to have a bacterial impact on such waters if the discharge is not disinfected, or if present disinfection facilities are inadequate. A discharge is considered to have a bacterial impact on Shellfish harvesting waters if the National Shellfish Sanitation Program Criteria are not met in the waters impacted by the discharge or if present disinfection facilities are inadequate.

Factors will be assigned for the bacteria problem as follows:

No Impact - 0
Bacteria Impact - 20

iii. Ammonia Toxicity Problem Factor - This factor will be determined by use of the NH_3, and flow values specified in the present limitations of the NPDES permit, unless significantly different from the present effluent characteristics. If an NH_3 limit is not present in the permit, an NH_3 concentration typical of the effluent from the current facility will be selected. As with the Dissolved Oxygen Problem Factor, these limitations will be entered into the standard wasteload allocation formula and an in-stream NH_3 concentration will be predicted for the existing wastewater discharge. The NH_3 exceedance is the difference between the predicted maximum NH_3 in the stream and the acceptable concentration (EPA Gold Book) protective of aquatic life.

This ammonia exceedance is then multiplied by the stream miles (or equivalent stream miles) which presently have an NH_3 concentration above the acceptable level to obtain the Ammonia Toxicity Problem Factor as shown below:

Ammonia Toxicity Problem Factor = (NH_3 exceedance) X (stream or equivalent Stream miles above acceptable concentration)

iv. Chlorine Toxicity Problem Factor - This factor will be determined by the difference in the previously allowed chlorine concentration in the NPDES permit (usually 1.0 mg/l) and the new maximum chlorine concentration allowed in the NPDES permit which will be multiplied by a factor of 20.

Chlorine Toxicity Problem Factor = (1.0 mg/l - the new maximum chlorine concentration allowed in the NPDES permit in mg/l) X (20)

c. Achievement of Stream Use Factor - If the proposed project, along with other proposed projects in the planning area, will cause achievement of all water quality criteria then a factor of 2 will be assigned; except that if a stream exception has been granted a factor of 1 will be assigned. Also, a factor of 1 will be assigned when all water quality criteria will not be met.

2. The projects in this category which eliminate existing discharges will receive the sum of the priority points assigned to the discharges to be eliminated.

3. All portions of these projects (such as pump stations, force mains, sewer rehabilitation, and interceptors) that are necessary to cause the environmental problem to be eliminated will receive the same number of priority points as that calculated for the existing discharge(s), to which the project portion is connected.

4. Project ties in priority points, which are calculated in accordance with Section B., will be broken by ranking in order of the following ratio:

$$\frac{\text{lbs. BOD Removed by Project}}{\text{Total Eligible Cost for Project}}$$

5. Projects in this category that are not meeting final limits, but for which zero priority points are calculated (i.e., suspended solids violations, percent removal, BOD violations, etc.), will receive a minimum of 1.0 priority point, and will then be ranked in order of the stream classification of the receiving stream.